EADV SYMPOSIUM 2022

INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY

ABSTRACTS BOOK

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Abstract N°: 18

Title: post acne scar split face study : A comparative study between long pulsed and Q-switched Nd YAG

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Introduction Laser is a more promising option for post-acne scar treatment than other modalities. The process involved stimulating fibroblasts to fill and finish the scar defect, replacing the lost collagen and elastin dermal components.

Materials and methods A total of 25 patients with different skin types suffering from mild, moderate and severe facial acne scars, were split face group: (Rt side with Long pulsed 1064nm Nd-YAG laser and Lt side with Q-switched 1064nm Nd-YAG laser)

Results There was statistical significance differences in number of sessions among Rt side compared to Lt side. Also there was decrease in frequency of inflammation among Lt side compared to other side, and decrease in frequency of bleeding and edema among Rt side compared to other side and finally increase in frequency of hyperpigmentation Lt side compared to Rt side

Discussion Q-switched and long-pulsed 1064 nm Nd-YAG lasers are considered an efficient and safe modality for the treatment of mild to moderate post-acne facial scars, particularly in elderly patients (30-40 years of age) with type 4 skin without the need for downtime, and in this study their daily activity was not disturbed, but we found that Q-switched is more effective and satisfied.

Abstract N°: 19

Title: Efficacy of intradermal injection of botulinum toxin type A in patients with acne vulgaris

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Introduction The pilosebaceous unit is affected by acne vulgaris, a common inflammatory condition. A powerful neurotoxic protein produced from the bacteria Clostridium botulinum, botulinum toxin (BoNT). Acne and rosacea symptoms can be reduced with BoNT-A injections, according to research. It's possible that botulinum toxin can be utilized to stop the progression of acne.

Materials and methods This was an interventional clinical study was conducted in Dermatology, Venereology and Andrology Department, Faculty of Medicine, Zagazig University Hospitals, on 11 patients from January 2020 to August 2020, a total of 11 patients with different skin types suffering from mild, moderate and severe acne vulgaris; The face was divided into two equal sides (split face): the right side treated by intradermal injection of botulinum toxin into comedones, papules and pustules, the left side injected by 0.9% normal saline. Evaluations were performed for baseline and after treatment, performing acne lesion counts, grades lesions, evaluation for erythema and complication. Photographs were taken before, and after treatment.

Results No cases had Post acne scarring or Bleeding, Hypersensitivity, Diffusion or Bruises and only 3 cases had inflammation and just one case had edema. Studied group were free regard other dermatological disease and also with no co-morbidity or previous surgery, 27.3% (3 cases) had family history and 45.5% (5 cases) had previous treatment for Acne. In the present study, Grade was distributed as 3.0 (2-5) and majority were in grade III and IV (36.4% each) Regard skin type 63.6% were grade IV and 36.4% were grade III. Majority were improved at treatment side 81.85% and 54.5% respectively for Wide pores and Wrinkle respectively with no improvement detected at control side.

Discussion : Intradermal injection of botulinum toxin considered an effective and safe modality for treatment of mild to moderate facial post acne vulgaris, Intradermal injection of botulinum toxin significantly reduces signs and symptoms of acne vulgaris including papules, pustules, comedones, and provided a high degree of satisfaction.

Abstract N°: 88

Title: Synthetic SREBP and PPAR oligodeoxynucleotide attenuated lipogenesis through suppression of SREBP and PPAR signaling pathway

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Synthetic SREBP and PPAR oligodeoxynucleotide attenuated lipogenesis through suppression of SREBP and PPAR signaling pathway

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Introduction

Acne vulgaris is the most common disease of the pilosebaceous unit. The pathogenesis of this inflammatory disease is complex, involving increased sebum production and perifollicular inflammation. Sebum production relies on de novo lipogenesis, and sebaceous lipogenesis is regulated by various physiological factors, such as hormones and nuclear receptors. Insulin-like growth factor (IGF-1) increases expression of sterol regulatory element-binding protein-1 (SREBP-1) and peroxisome proliferator activated receptor-γ (PPAR-γ), transcription factors that regulates numerous genes involved in lipid biosynthesis. SREBP-1 and PPAR-γ expression in turn stimulates lipogenesis in sebocytes. To improve a new therapeutic approach, we designed the SREBP/PPAR oligodeoxynucleotide (ODN), a synthetic short DNA containing complementary sequence for SREBP and PPAR transcription factor. Therefore, in this study investigated the anti-lipogenic effect of synthetic SREBP/PPAR decoy ODN on acne vulgaris model.

Materials and methods

The mice were put under brief anesthesia and *C. acnes* was intradermally injected 1.0×10^7 colony forming unit (CFU)/20 µl in phosphate buffered saline (PBS). The synthetic SREBP/PPAR decoy ODN or scrambled decoy ODN (10 µg) was transferred via the mouse tail vein injection, using a Trans IT in vivo gene delivery system.

SZ95 cells were transfected with 2 µg of synthetic ODNs for 6 h, using Lipofectamine 2000. After transfection, the SZ95 cells were cultured in serum-free medium containing 20 ng/mL of IGF-1 for 24 h.

Results

Our studies using *C. acnes*- and IGF-1-induced lipogenic model revealed that SREBP/PPAR decoy ODN inhibited the increased expression of fatty acid synthetic pathway, such as SREBP-1c, PPAR-γ, FAS, ACC, SCD-1, CD-36, and HMGCR. In addition, SREBP/PPAR decoy ODN decreased pro-inflammatory cytokines, including TNF-α, IL-1β, IL-8, and IL-6 expression.

Discussion

This study showed that *C. acnes*-injected mice and IGF-1-stimulated SZ95 cells exhibited increased expression of SREBP-1 and PPAR-γ compared to the normal controls. In contrast, the administration of the SREBP/PPAR chimeric decoy ODN significantly suppressed the upregulation of lipogenic genes. Furthermore, the levels of lipogenic factors and plasma cytokines in *C. acnes*-injected mice and the cytokine levels of total protein in IGF-1-stimulated SZ95 cells were reduced. These results demonstrated that the SREBP-1 and PPAR-γ pathways independently and cooperatively contribute to acne lesions, and that the SREBP/PPAR chimeric decoy ODN reversed metabolic abnormalities by regulating the SREBP-1 and PPAR-γ signaling pathways. Thus, the results suggest that the SREBP/PPAR chimeric decoy ODN could potentially serve as an additional therapeutic intervention for lipogenesis-related acne.

Abstract N°: 116

Title: Acne in medical students, Morroco : A prospective Across study

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Introduction

Acne is a common chronic inflammatory disease of the pilosebaceous follicle that affect about 9.4% of the world's population. Several risk factors are implicated, including genetic and hormonal role as well as the lifestyle. The psycho-social impact should not be neglected. However, owing to the frequency of this disease, only a limited number of epidemiological studies are available in medical students.

Materials and methods

We performed a multicenter cross-sectional study including medical students of the seven faculties of medicine and pharmacy in Morocco during the period from June 2021 to August 2021.

Patient inclusion criteria comprised a medical student from first to seventh academic year and aged 18 to 30 years. The Perceived Stress Scale was used to measure the participants' stress levels. Data collection was done through an online survey on Google Form and analysis by SPSS

Results

242 medical students were included with a mean age of 22.55 years +/- 2,662. The prevalence of acne among medical students in Morocco is 67.4%. Acne is more common in females (P = 0.04). Wearing a mask, smoking, sleeping hours, BMI and diet were not significantly associated with acne in medical students. Water intake of at least 1.5 L/day is significantly associated with acne free (p = 0.000) as well as physical activity (p = 0.004). Wearing sunscreen and using cleansing gel are significantly associated with acne (p = 0.04 ; p = 0.021). The level of stress by PSS was greater than 27 in 89.7% of the students and was not significantly associated with acne in our study. The impact of acne on self-confidence was reported in 60.6%

Discussion

The prevalence of acne among medical students all over the world ranges from 34.38% to 97.9%. However, in Morocco, the prevalence of acne has not been estimated yet. Nevertheless, the high number of patients included in our study suggests a relatively high prevalence. There was a female predominance in our study, which was in accordance with most studies. The Link between diet and acne has been a hot topic especially over the past 2 decades, which was not the case in our study.

Moreover with the arrival of covid 19 pandemic, the link between wearing mask and acne has been reported in several publications. The synthetic mask and the long wearing time were more associated with the onset of acne.

In our case only 6.2% wore a cloth masks and the duration was less than 8 h/day for most. Concerning the cleansing gel effect, most publications in the literature are inconclusive, as since they differ according on the formulation of each product. However, the role of sunscreen in preventing acne and its scars is indisputable. Our results are not in agreement with the literature, since the prevalence of acne was high among students using the cleansing gel and sunscreen, which can be explained by their prescription which is done mainly in acne patients.

The stress level, was very high in most of the students in our study with a score> 27 in 89.7%, so the link could not be established, this may be due to the psychic repercussions of the current pandemic situation.

Regular sports activity was significantly associated with the absence of acne, this is not often investigated in the literature except in the context of polycystic ovary syndrome. Finally, the other particularity of our results was water intake and its significant link with the absence of acne. This association has not been investigated before. Increasing daily water intake could provide several health benefits and should be advised anyway.

Abstract N°: 128

Title: How diverse is the microbiome of hidradenitis suppurativa? Case series.

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Introduction & Objective

Hidradenitis suppurativa (HS) is a chronic inflammatory disease that affects intertriginous areas of young patients. Its raising incidence requires further studies of this condition pathogenesis. The bacterial load has been cited as a cofactor in the development of chronic HS lesions. Data on influencing the disease's evolution after modification of the skin microbiome is lacking. The study aims to identify bacterial species colonizing the lesions of two HS patients.

Materials and methods

Both patients are males. The first one is 24-year-old, has only right axillary disease characterized by inflammatory nodules and an erosive plaque with erithemato-violaceous rim and purulent secretion, Hurley stage I. The second one is 53-year-old and has severe inguinal and gluteal disease with nodules, abscesses with sinus tracts and palpable inguinal lymphadenopathy, staged Hurley III.

The patients did not receive topical or systemic antibiotic treatment 1 month before sample collection. Microbiology samples were collected with sterile swabs from two depth sites and transported in Schaedler broth with Vitamin K3 (bioMérieux, France). The first probe was taken from the erosion surface, without previous cutaneous asepsy. After that, the skin was cleaned with 10% povidone-iodine solution and using local anesthesia, a 4 mm punch was used for deroofing technique. Therefore, the second sample was collected to examine the dermal microbiome.

Results

The microbiological analysis releaved for the first patient *Staphylococcus aureus* in both surface and profound lesions. *Anaerococcus octavius* was also isolated from the surface of the erosion and *Staphylococcus epidermidis*, *Staphylococcus lugdunensis* and *Cutibacterium acnes* were found in the sample collected from the depth of an inflammatory nodule.

In the second case, *Streptococcus constellatus*, *Streptococcus oralis*, *Enterococcus faecalis*, *Porphyromonas asaccharolytica*, *Finegoldia magna* colonized both superficial and deep lesions, probably due to large fistulae that facilitated bacterial dislocation. *Staphylococcus aureus* covered the surface of the skin while *Corynebacterium simulans* was present in deep lesions.

Discussion

Differences in these bacteriology results arise not only from the intertriginous area affected, but also from HS chronicity. There is ample evidence that certain bacterial species predispose to persistent skin lesions. Further research is needed to elucidate whether the evolution of the disease could be influenced by the modification of the skin microbiome.

Abstract N°: 161

Title: The effects of bacteriophages, pro- and prebiotics topical application as skin microbiome modulation therapies in acne treatment - will we win this time?

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Introduction

Cutibacterium acnes has long been implicated in the pathogenesis of acne. As the molecular anti-microbal mechanisms of anti-acne agents affecting *C. acnes* are known, but not always sufficient in fighting acne, a light should be put some novel possible therapies.

Materials and methods

A search of PubMed (MEDLINE) and EMBASE databases on topic of the effect of topical application of prebiotics, probiotics or bacteriophages use in the treatment of acne vulgaris was conducted, using MeSH and Emtree methods. The results were then manually identified based on abstracts, including English-language original papers or conference reports in case of bacteriophages therapies.

Results

From 165 records on acne, pre- and probiotics, 11 studies were included in the final analysis; from 36 studies concerning the use of bacteriophages, 5 were included in the final analysis.

Discussion

Two RCT including 428 patients and one interventional study on 20 patients were conducted in human model, concerning topical application of pre- or probiotics. Topical application of *E. faecalis SL-5* lotion twice a day for 8 weeks caused significant reduction in the number of inflammatory acne lesions; *N. eutropha* spray used for 12 weeks twice daily on face resulted in 2-point reduction in IGA of acne severity compared to vehicle control. Topical application of *L. acidophilus* decreased the population of *C. acnes*. In other four *in vitro* studies the synbiotic ability of probiotic bacteria and konjac glucomannan hydrolysates to inhibit *C. acnes* growth was found. *L. Reuteri* strains (KCTC 3594, KCTC 3678, KCTC 3679), *Bifidobacterium spp.*, two *Str. salivarius* strains and one *L. plantarum* reduced the growth of *C. acnes*.

Two studies in animal model showed that intradermal injection with *C. acnes* bacteriophages into skin with inflammation induced by multi-drug-resistant *C. acnes* resulted in statistically significant decrease in inflammatory nodule size compared to controls; also, one study showed significant decrease in IL-1β and caspase-3 expression (inflammatory and apoptotic markers). Human monocytes cultured with phage-killed bacteria secreted lower levels of TNFα, IL-1β and IL-12p40, as compared to those infected with live bacteria. *C. acnes* lysing phages

isolated from human skin were used to create a phage cream ($2.5x10^8$ Plaque Forming Units per gram), that lysed *C. acnes* cells in agar lawn culture plates without affecting other bacteria of the *Cutibacterium* family. Also, a gel containg *C. acnes* phages was investigated on the human skin model surface: over 96% of the *C. acnes* clinical strains were sensitive to the topical gel, including multiple antibiotic resistant strains.

Skin microbiome modulation therapies may be a promising perspective in acne treatment. However, all of this methods need further investigation, especially in human models, to prove their efficacy and safety.

Abstract N°: 208

Title: Acne, the usefulness of using a dermo-cosmetic

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Introduction

Acne is a very common chronic inflammatory skin disease that mainly affects adolescents and young adults of both sexes. Several studies have confirmed that acne also affects adults, 7% according to the Objectifs Peau project recently published by the SFD; however, few studies have focused on the impact of acne on this population.

Materials and methods

To evaluate the impact of using a DermoCosmetique [skincare containing APF, salicylic acid and panthenol], we administered the AI-ADL burden questionnaire [Dreno B, JEADV 2021] at D zero and D 30 to adults whose acne diagnosis and severity had been confirmed by a dermatologist during a spontaneous consultation.

Results

A total of 524 respondents were aged 18 years and older, with a sex ratio in favor of women [74%, n = 361]. The mean age was 24.5 years, and the median was 21. Of these, 92% [N=484] reported using the DermoCosmetique, which we will refer to as the exposed group. Three severity groups were identified: 57.3% were identified as mild [n = 297], 34.9% as moderate [n = 181], and 7.7% as severe [n = 40]. In terms of burden, on day 30, the prevalence of improvement in the exposed group was 79.9%. The mean burden score evolved from 19.4 to 12.8 between day zero and day 30. P<0.001 In the unexposed group, the prevalence of improvement was 64.1%. The mean burden score evolved from 19 to 14.7 between day zero and day 30. p=0.2 Beyond these results after 30 days of use, 95% were satisfied with the product, and 91% said that the product had helped to reduce their imperfections.

Discussion

Adherence to acne treatments is often a barrier to successful treatment. The fact that patients are satisfied with the product or that their blemishes have improved allows us to hope for better compliance. Improved burden after 30 days of use also improves compliance.

Abstract N°: 228

Title: Influence of moisturizer containing licochalcone A, 1,2-decanediol, L-carnitine, and salicylic acid on facial skin lipidome among seborrhea participants

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Introduction

Seborrhea is a common dermatological condition affecting patients' psychosocial well-being. Due to the lack of clear etiopathogenesis, well-established effective treatments are limited. A better understanding of skin lipidomics and its alteration under treatment administration might offer important therapeutic solutions for this condition. In this study, we quantitatively and qualitatively explored the lipid-modifying effect of the moisturizer containing licochalcone A, 1,2-decanediol, L-carnitine, and salicylic acid (LDCS) in seborrhea participants with and without acne vulgaris (AV).

Materials and methods

We conducted an 8-week open-label explorative study on 20 seborrhea participants (10 AV and 10 non-AV). All participants applied LDCS twice daily for 8 weeks with the addition of benzoyl peroxide 2.5% gel and adapalene 0.1%/benzoyl peroxide 2.5% gel in AV participants. We performed quantitative and qualitative skin surface lipid (SSL) assessments at weeks 0, 2, 4, 6 and 8, using Sebumeter® to measure SSL amount on mid-forehead and glabella and lipid-absorbent Sebutapes® to collect SSL from participant's forehead for subsequent lipid extraction and lipid profile analysis by gas chromatography-mass spectrometry (GC-MS). Other outcome measures included participant-rated skin oiliness score and evaluation of safety and tolerability.

Results

From clinical evaluation, SSL amount significantly decreased since week 2 of treatment in AV participants (*P*-value=0.0124) and week 6 in non-AV participants (*P*-value=0.0098), respectively. The results corresponded with a significant reduction in participant-rated skin oiliness scores in both groups. Twenty-two important SSLs were annotated from GC-MS analysis, comprising 19 free fatty acids, cholesterol, squalene, and glycerol. In AV and non-AV groups, there was a significant reduction in 5 and 13 lipid components, respectively. Minor adverse effects, including erythema, pruritus, dryness, scaling and burning sensation, were reported.

Discussion

LDCS, either used alone or with topical acne treatment, demonstrated substantial sebusuppressive and lipid-modifying effects with a good safety and tolerability profile among seborrhea participants. This preliminary study could serve as the basis for future research on developing anti-sebum treatments that could balance optimal skin lipids and effectively deal with seborrhea condition in both AV and non-AV patients.

Abstract N°: 250

Title: A case of alopecia on scalp rosacea with atypical clinical, trichoscopic and pathological findings

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Introduction

Rosacea is increasingly considered a systemic disease because of its extrafacial manifestations. Although there are few reports of scalp rosacea (SR) in the literature, it is most likely not uncommon. Lichen planopilaris (LPP) has been more commonly found in women with rosacea. Here in, we report an unusual bilateral alopecic rosacea patches sharing trichoscopic features with LPP.

Results

A healthy 29-year-old woman presented to our department with recurrent flushing and erythema of her cheeks that had started a year before. Exacerbating causes included sun exposure, spicy foods, and emotions. She also had pruritic alopecic bitemporal plaques on her scalp that had got worse over the past month. She denied having chronic habitual conditions as traction alopecia or trichotillomania. On physical examination, erythematotelangiectatic facial rosacea was evident clinically. Furthermore, two 5 cm diameter non-scarring bitemporal alopecia patches with an erythematous background were found (Figure 1). Follicular plugs, dilated follicles, white scales and orange-yellowish patches were visible on trichoscopy, however polygonal vessels and linear branching vessels were not. Peripilar scaling was mild (Figure 2). Histopathology revealed a superficial perifollicular tuberculoid granulomatous dermatitis with scattered multinucleated Langerhans giant cells. The underlying epidermis and dermis were unremarkable. PAS, Grocott and acid-fast stains were negative for microorganisms (Figure 2). After a normal angiotensin-converting enzyme level and an uneventful chest x-ray, the diagnosis of sarcoidosis was unlikely. The diagnosis of SR was made based on the clinical picture and its correlation with the pathological features. The patient was treated with doxycycline 100 mg daily, as well as a daily topical application of metronidazole and 1% ivermectine on the face and scalp. After two months of treatment, the facial flushes and erythema had partially improved. On trichoscopy, there was a significant improvement after therapy with less erythema, less pruritis, and greater hair density.

Discussion

SR can cause persistent inflammation around the isthmus, which can lead to peripilar scaling similar to LPP. Scalp involvement is usually observed in the granulomatous variant of rosacea. SR is a rare condition, with only a few occurrences documented in the medical literature. No scarring alopecia was reported as a result of rosacea, and the prevalence of peripilar scaling is a result of the disease's location of inflammation. The possibility of scarring alopecia from persistent SR due to inflammation surrounding the upper portion of the hair follicle could been raised. The most common clinical manifestations of SR were scalp erythema and, less frequently, patterned alopecia. On trichoscopy, most of the described cases reported hair shaft variability, peripilar scaling, and dilated arborizing blood vessels. On pathology, most of the reported cases presented an inflammatory nonscarring alopecia with the presence of Demodex spp. in the follicular infundibula. Our reported case stands out because of the bilateral and symmetrical alopecia, the absence of vascular abnormalities on trichoscopy, and the presence of granuloma on histology. Further studies are needed in order to better define the trichoscopic features of SR and

its nosological borders with LPP. Conventional rosacea treatments appear to be effective in treating SR related alopecia.

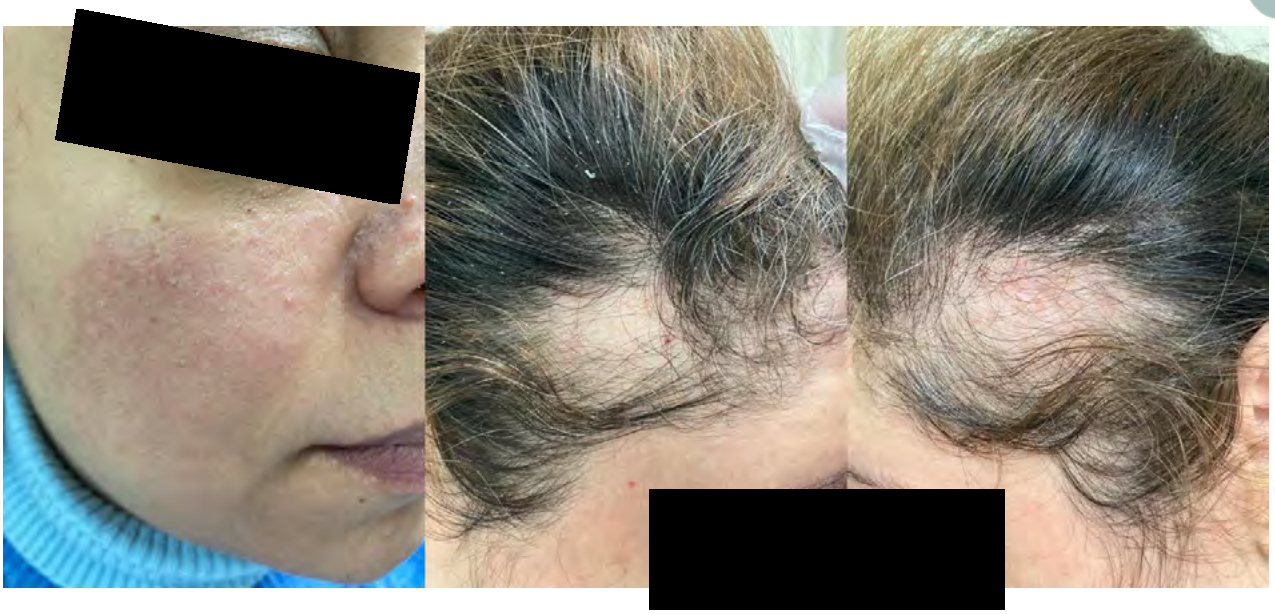

Figure 1

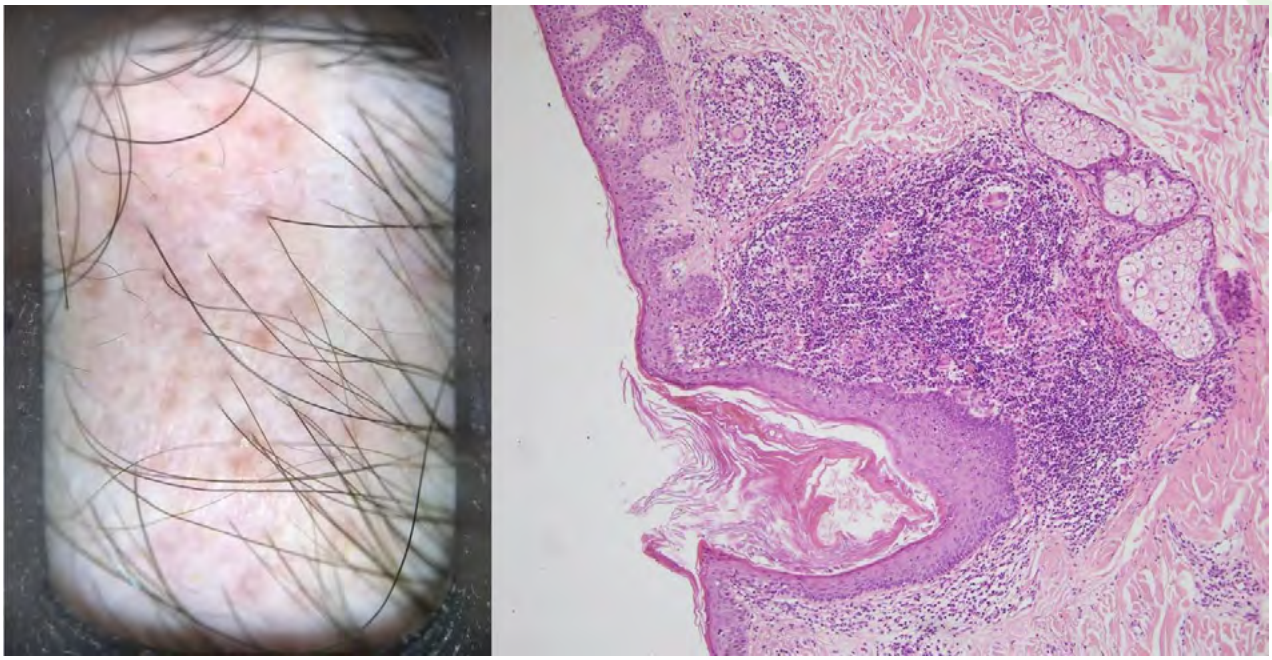

Figure 2

Abstract N°: 255

Title: Efficacy and safety of once-daily 7.5% Dapsone gel monotherapy for mild to moderate acne vulgaris: A comparative study with .1% adapalene gel monotherapy. monotherapy

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Introduction: Acne vulgaris is a common chronic inflammatory disease of the pilosebaceous gland that mostly affects teenagers irrespective of gender. Though acne is not a life-threatening disease causing only a few minor features including itching, stinging, pain and rashes; it imposes a significant psychological burden due to scarring and pigmentation. It creates a negative impact on the relationship, friendships and job; reduces self-esteem; initiate shame, anger, concern, withdrawal and feeling stigmatized. The study was conducted to see the efficacy and safety of once daily dapsone 7.5% gel as monotherapy for mild to moderate acne vulgaris compared with adapalene 0.1% gel monotherapy.

Materials and methods: Materials & Methods: This was a randomized, open-label, comparative study, conducted over 47 patients with mild to moderate acne (lesion count 3-30). Patients were randomly enrolled into two treatment groups (A and B). Patients were instructed to apply a thin layer of dapsone 7.5% gel (group A, n=23) adapalene 0.1% gel (group B (n=24) on face. Inflammatory, non-inflammatory and total lesions were counted and adverse effects were assessed at weeks 0, 4, 8 and 12.

Results: All forms of acne lesions were reduced from baseline to onwards in both groups. Percent reduction of total lesions and non-inflammatory acne lesions were statistically similar in both groups ($p>0.05$) but for inflammatory lesions, dapsone 7.5% gel is less effective than adapalene 0.1% gel ($p<0.05$). Adverse effects were also indifferent between the two groups ($p>0.05$).

Discussion: Dapsone 7.5% gel is effective and safe in the treatment of mild to moderate acne vulgaris. Its efficacy on acne vulgaris especially non-inflammatory lesions is similar to adapalene 0.1% gel, but on inflammatory acne, dapsone gel is less effective than adapalene.

Abstract N°: 304

Title: A Patient with Unusual Localisation of Hidradenitis Suppurativa and Colitis Ulcerosa Successfully Treated with Adalimumab

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Introduction

A 20-year-old male was referred to our Dermatologic Clinic by a practical dermatologist because of manifestations of hidradenitis suppurativa (HS) in underarms and groins worsening during last 3 years and severe defects under both ears lasting for 4 months. The patient had been suffering from a moderate form of colitis ulcerosa (CU) for 1,5 years. A treatment with sulfasalazine was not sufficient. Higher values of hepatic tests were detected repeatedly, antibiotics recommended with the diagnosis of HS as the first line treatment could not be administered. Objectively nodules, abscesses and scars in both underarms and groins were noticeable. Under both ears atypical lesions with a purulent secretion and infiltrated reddish borders were present, 3x4 cm in a diameter on the right, within 1 cm on the left, both with deformable scars in surroundings. A biopsy from the ulcers´ border on the right side, microbiologic examination of the pus and all tests usual before starting of biologic therapy were done.

Materials and methods

All blood tests and X-ray were within normal limits. In the pus cultivation Escherichia coli and Klebsiella oxytoca were detected. A histological examination revealed a deep purulent granulomatous dermatitis together with a presence of enlarged and distorted hair follicles- a finding consistent with the diagnosis of HS. Pyoderma gangrenosum and extraintestinal manifestaion of CU were excluded. A biological therapy with adalimumab in a regimen recommended for HS was started. Topical therapy consisting first of gentamycin ointment, later of ichtoxyl for both defects was recommended.

Results

A rapid therapeutic response was noted, all signs started to heal. The lesion under the left ear healed within 4.5 months, abscesses and nodules in underarms and groins within 7 and the defect under the right ear within 7.5 months. Only cribriform scars are left now. No problems according to CU were mentioned, a dose of salazopyrin was first decreased, later (after 1 month of adalimumab treatment) a treatment with salazopyrin was finished by a gastroenterologist. The patient currently continues with adalimumab therapy, local treatment is not necessary. A plastic improvement of scars under both ears is planned.

Discussion

Our case describes an atypical manifestation of hidradenitis suppurativa successfully treated with adalimumab. We want to point this atypical localisation and a necessity to exclude all other potential diagnoses. According to our knowledge this is an extremely rare manifestation of HS. A positive effect for colitis ulcerosa was another benefit of adalimumab treatment.

Abstract N°: 314

Title: Deficit of omega-3 fatty acids in acne patients

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Introduction

Recently, there has been growing interest in identifying nutrients which might alleviate acne severity and omega-3 (ω-3) fatty acids (FA) have sparked special interest due to their properties in anti-inflammatory signalling pathways. ω-3 FA (e.g. eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA)) reduce inflammation by stimulating the production of anti-inflammatory prostaglandin E1 (PGE1) and E3 (PGE3) as well as leukotriene B5 (LTB5). Furthermore, they lower levels of insulin-like growth factor (IFG)-1, the central nutritive acne-inducer. IGF-1 activates the nutrient-sensitive kinase mammalian target of rapamycin complex-1 (mTORC1), which triggers anabolic pathways, including an increase in seborrhoea and follicular hyperkeratosis. Both key factors in the pathogenesis of acne vulgaris. Thus, ω-3 FA can potentially lead to a decreased sebum production and keratinization of the pilosebaceous unit to alleviate the clinical severity of acne as an adjunctive treatment.

However, data on ω-3-FA blood serum levels in patients suffering from acne vulgaris are currently missing. Therefore, a cross sectional study was conducted to explore acne patients' ω-3 FA levels in correlation with self-reported dietary preferences and the clinical severity.

Materials and methods

A single-center, cross-sectional study with 100 acne patients was conducted. Patients' serum nutritive parameters were assessed, including IGF-1 as well as a percentage value, that accurately reflected the ω-3-FA status of a human individual by combining EPA and DHA in relation to the sum of 26 FA in the cell membranes of erythrocytes (target range 8-11%). Dietary preferences were evaluated according to a standardized protocol. Clinical assessment was performed by an independent dermatologist. Inclusion criteria comprised acne patients with all clinical stages starting from their 12th year of age. Exclusion criteria were pregnancy and breastfeeding and patients/parents not giving their consent.

Results

ω-3 FA levels were outside the recommended range in 94 patients (mean 5.15%), with no significant differences regarding clinical severity or affected anatomic sites. Patients with ω-3-FA lower than 8% showed higher IGF-1 levels, compared to patients without a deficit. (311.9 ng/ml vs. 278.25 ng/ml, p=.424) Interestingly, when further subdividing patients into a group with severe deficit (< 4%, n=20), levels of IGF-1 increased even further (316.48 ng/ml), however non significantly (r=.135, p=.181). Regular legumes consumption was significantly associated with higher ω-3 FA levels (p=.003), as well as abstention from sunflower oil (p=.008). Higher ω-3 FA values were also seen in patients with regular oral ω-3 FA supplementation (p=.006).

Discussion

Acne patients showed a deficit of ω-3-FA. This novel finding might therefore open an opportunity for future

dietary intervention for affected patients. Interestingly, our data shows a trend towards lower mean ω-3-FA levels and higher mean IGF-1 levels in acne patients, which might illustrate the inverse effects of ω-3-FA on IGF-1 and fuel the hypothesis, that an oral supplementation of ω-3-FA may directly affect pathophysiologic pathways of acne. Future interventional, controlled trials are needed to investigate the potentials of an oral supplementation in acne patients, according to blood serum levels.

Abstract N°: 340

Title: The efficacy and safety of a facial serum containing snail secretion filtrate, Calendula officinalis and glycyrrhiza glaba root extract in the treatment of maskne: A randomized placebo-controlled study

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Introduction : In the ongoing COVID-19 outbreak, face mask use has increased and become a part of our daily lives. During the wearing, prolonged contact time and microenvironmental change profoundly lead to an acne flare-up, newly defined as "maskne." We assessed the efficacy and safety of snail secretion filtrate, Calendula officinalis, and glycyrrhiza glaba root extract combination serum in treating maskne.

Materials and methods : This was a randomized, double-blind, placebo-controlled trial study. This study enrolled 66 patients aged 18-40 years with mask-related-acne. The serum and placebo products were randomly assigned to be applied twice daily for 12 weeks. Acne lesion count, acne grading by Investigator Global Assessment (IGA), sebum level, corneometry, transepidermal water loss (TEWL), erythema score by Visia®, and adverse events were evaluated at baseline, and every 4 weeks thereafter until week 12.

Results : In the mask-covered area, reductions in inflammatory acne lesions from the treatment group were significantly greater than the placebo group at all time points (coefficient of percentage change of inflammatory lesions = -33.89 [95% CI -65.24, -2.53]; p = 0.03). Also, we detected in the similar results in concurrent acne treatment subgroup (12 patients, coefficient = -50.30 [95% -88.65, -11.95]; p = 0.01). However, there were no significant difference of non-inflammatory lesions between groups. Other skin biophysics did not differ between the two groups. Adverse events were mostly mild and occurred in a few cases.

Discussion : This combination serum can significantly improve inflammatory acne lesions and has a favorable tolerability profile, suggesting its role as an adjunctive treatment of maskne.

Abstract N°: 381

Title: Combined techniques for treating acne scars: how much can we fix? - personal experience with case series presentation

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Introduction

Atrophic scars are a common complication of various forms of acne, causing an aesthetic defect of the facial skin, which significantly reduces the patient's quality of life. The authors wanted to present a procedure for undercutting acne scars with the simultaneous administration of a preparation with hyaluronic acid or own fat and the use of Nd-YAG and thulium lasers during one session as an effective alternative for laser-only methods.

Materials and methods

Three adult patients with acne scars were treated with the combined therapy of scar cutting and lasers. Inclusion criteria: common acne, no treatment with oral and topical retinoids for 6 months before the procedure, informed consent for the procedure. The treatment procedure is a combination of recognized methods in reducing acne scars. The first stage of the procedure involves subcutaneuos cutting of the scars with a special 18G 70mm cannula (accession point: anteriorly to the tragus just below the zygomatic arch) and simultaneous administration of 18mg/ml hyaluronic acid or autologous fat. In the second stage, we perform a combined laser treatment, first the Nd-Yag laser (1500J/cm2) in ablative parameters, then the thulium laser (10W, 1000ms) parameters. The effects were evaluated after 30 days and 3 months from the procedures.

Results

Satisfactory results, visible clinical improvement and reduction of acne scars were obtained. The effects of the presented treatment method are presented in the poster in the form of photographic documentation of patients before, one and three months after the procedure.

Discussion

Until now, it has been mainly for the laser treatments that have been used in the scars' management. Unfortunately, laser treatments are not fully effective, and they have to be repeated. .The aim of the work is to present the effects of the above-mentioned method of treatment, showing case series from our own clinical practice. The use of a combination of various acne scar treatment techniques in the correct sequence and quantity allows you to achieve a satisfactory aesthetic effect in patients.

Abstract N°: 522

Title: Hidradenitis suppurativa: The implact of sex on clinical features

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Introduction

Hidradenitis suppurativa (HS) is a chronic, recurring inflammatory disorder that affects friction prone areas, mainly the intertriginous areas. It affects both males and females. There is not a sex-specific clinical profile. The aim of our study was to compare the features of HS between sexes.

Materials and methods

We conducted a monocentric descriptive study. We used patients' records to retrospectively collect data. We included all patients that presented at our dermatology department for HS, between January 2019 and December 2021. Records with more than two missing data were excluded from the study.

Results

We collected 43 files, among them 34 were usable. Our study included eight women (23%) and 26 men (77%). The mean age at consultation was 24.88 ± 8.526 for females (age range: 15 – 44) and 35.12 ± 13.252 for males (age range: 13 – 60). Among patients, 40% had family history of HS (60% males and 40 % females). Active smokers were at 88% men (P = 0.031). The mean evolution time of the disease was 1.29 ± 0.488 for women and 2 ± 1.794 for men. Half of the women had one affected area while 70% of men had two affected areas or more. The axillary was The most affected fold in both sexes (8 women and 18 men). Involvement of the inter-mammary folds was found only in women (n = 2; P = 0.049). The most common lesions were inflammatory and non-inflammatory nodules in men (n = 21) and women (n = 7) respectively. Non-inflammatory nodules were most common in women (7 women Vs. 12 men; P = 0.046). Most females (n = 5) were at Hurley I stage while most males (n = 10) were at Hurley II. Obesity was the most observed comorbidity in both sexes, noticed in 24% of patients (88% males and 12% females). Severe acne was exclusively seen in male patients. Amoxicillin-clavulanic acid combination and tetracycline were mostly used in both sexes (74% and 65% respectively). Surgery was indicated in 9 men and 4 women.

Discussion

Our study included more men than females. This male predominance was rarely reported in European studies. In line with the literature, our results showed that the smoking rate was significantly higher in males than in females. The mean evolution time was longer in men than in females but the difference was not significant. As reported in many studies, HS affected inter-mammary folds significantly more in females than in males. There was a significant difference between both sexes in the outbreak of non-inflammatory nodules, with a male predominance. Severe HS was mostly noticed in males but the difference between both sexes was not significant. Obesity and severe acne were most common among men with no significant difference. In conclusion, our study showed that HS mostly affected male smokers. More studies should be carried out on biggest samples with the aim of better understanding the impact of sex on the features of HS.

Abstract N°: 527

Title: Follicular occlusion tetrad with urological complications

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Introduction

Follicular occlusion stands for several conditions that share similar pathophysiology and includes hidradenitis suppurativa, dissecting cellulitis of the scalp, acne conglobata, and pilonidal sinus. They can develop independently or as a component of a syndrome in different combinations. Among the variants of those combinations, follicular occlusion tetrad is the most severe and rare condition.

Materials and methods

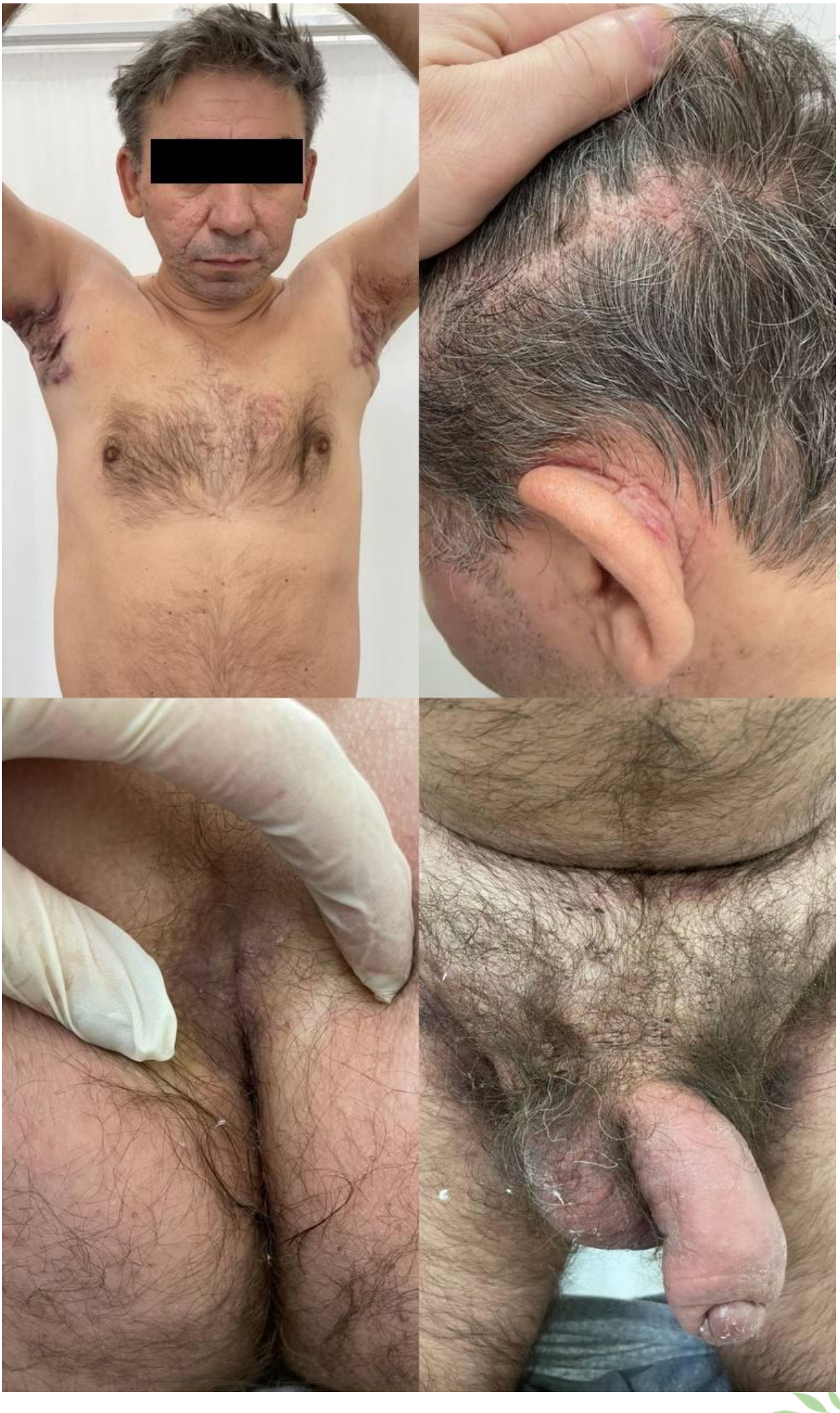
We present a 50-year-old man with a history of nodulocystic acne on the back, chest and face persisting for 25 years and progressing over time. Simultaneously similar lesions appeared on the scalp with cicatrial alopecia formation as an outcome. 10 years ago the patient also complained about the appearance of boils in the armpits and for the last 3 years the process has spread to the groin, where the severity of inflammation predominates now. At the same time pilonidal disease was diagnosed with subsequent surgical excision. There was no history of any other chronic diseases. The patient was treated with multiple courses of antibiotics, 2 full successive courses of isotretinoin 0,5 mg/kg daily with a cumulative dose of 150 mg/kg. Significant improvement of acne conglobata and dissecting cellulitis had been registered whereas the effect on hidradenitis suppurativa lesions was minimal. Taking into account no marked improvement several attempts of short course oral prednisolone 50 mg/day had been tried in combination with isotretinoin with positive effect on hidradenitis suppurativa, however when the daily dosage was reduced to 20 mg per day exacerbations occurred. Due to financial issues and the lack of effect from available therapies patient has not received therapy for the last year and noticed that the condition was worsening. Since November 2021 there has been a severe exacerbation of the condition, full inability to work and urological complications with penile and scrotum edema.

Results

The diagnose of follicular occlusion tetrad was revised based on the clinical course and persistence of typical lesions. The patient was recommended adalimumab with the standard dosing schedule. Patient follow-up is being continued.

Discussion

Due to the severity of the condition, the duration of the course and the disease burden in patients with follicular occlusion syndrome, the earliest possible therapy with biological agents is indicated. Prolongation of isotretinoin, combination therapy and dose increase is ineffective.



Abstract N°: 579

Title: Verneuil's disease: when diagnostic delay impacts quality of life and management

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Introduction

Verneuil's disease or hidradenitis suppurativa is a suppurative and scarring inflammatory disease affecting the folds, which can be associated with several comorbidities. The physiopathology remains multifactorial including the genetic, bacteriological, immune, hormonal, metabolic and smoking background. The diagnosis is clinical, and yet this condition remains poorly understood. This diagnostic delay can be responsible for therapeutic difficulty and impaired quality of life, which we will raise through these 3 cases.

Results:

Observation 1:

50-year-old patient, chronic smoker at 64 pack-year. Who presents for 22 years, polyfistulized lesions of the gluteal region, inguinal, axillary folds, with hypertrophic scars, and multiple communicating fistulas, evolving by flares/remissions. The case was suggestive of Hurley's Verneuil stage III disease, associated with a metabolic syndrome. The Sartorius score (severity) was 154 with a significant deterioration in the quality of sexual, social and professional life (DLQI: 20). The patient received several courses of antibiotics without any improvement.

Observation 2:

61-year-old patient, diabetic, chronic smoker at 15 pack-year, with a history of acne. The beginning of the symptomatology dates back to 24 years, made up of abscessed, nodular lesions of the gluteal region, with notion of aggravation and extension towards the other inguinal and axillary folds, complicated by large fissures and fistula. Making his disease a Hurley stage III, and a Sartorius score of 116 and a DLQI of 21. In addition, the patient presented an evocative picture of associated Crohn's disease. The patient had received several treatments (corticosteroid and antibiotics) without real improvement.

Observation 3:

66-year-old patient, diabetic under metformin, hypertensive, and smoker at 40 Pack-year.

His disease began 10 years ago, involving only the gluteal and perianal region. On examination, we find a large nodular plaque, fistulized and ulcerated evolving by flare / remission associated with hyperpigmentation of the entire region. His Hurley stage was III, Sartorius score was 82 and a DLQI was 20. MICI's workup was negative. The patient was put on antibiotics + corticosteroids with slight clinical improvement.

Discussion

We underline through these 3 cases the impact of the diagnostic delay on the advancement of the stages as well as on the mediocrity of the quality of life.

In the early stages (Hurley I) medical treatment is sufficient. On the other hand, in the advanced stages, the management is medico-surgical, which several failures have been reported with current therapies (retinoids, clindamycin, rifampicin).

The use of biological treatments and multidisciplinary care seems to be promising.

Abstract N°: 703

Title: The Evaluation of a Gentle, Multi-Acid Facial Gel for the Treatment of Mild-to-Moderate Acne

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Introduction

Skin with acne is associated with impaired skin barrier function which can be further damaged by harsh acne treatment products, both prescription and non-prescription. These harsh treatments often lead to dry, flakey, and irritated skin, which can impact patient compliance and require additional adjunctive skin care to mitigate these side effects. A once-daily facial gel with a blend of alpha- and beta-hydroxy acids and ceramides was developed to treat mild-to-moderate acne without disrupting the skin barrier.

Materials and methods

A clinical evaluation study included 52 men and women ages 13-45 years with mild-to-moderate acne (IGA score 2 or 3), appearance of pores, skin texture, skin tone evenness, and visible redness (50% of subjects) and self-perceived oily, acne-prone skin. Clinical efficacy was evaluated by lesion counting and clinical scoring for global facial attributes at baseline and weeks 2, 4 and 8. A single inflammatory lesion was evaluated for height, diameter, redness at baseline and day 3. Additional subject self-assessment questionnaires were completed at weeks 2, 4 and 8. Images were captured at each time point. Objective and subjective tolerance assessments were also performed at each study visit. An additional bioinstrumental study was conducted to measure skin hydration after a single product use.

Results

A statistically significant reduction in the height, width, and redness of the tracked inflammatory lesion was observed at day 3. At week 2, total lesion count was significantly less than at baseline; this improvement was maintained over the 8-week study. A significant reduction in pore size and skin redness was also visible at week 2 and skin was more even toned and smoother by week 4. At the end of the study, over 85% of subjects agreed the overall appearance of their skin looked more improved and were satisfied with the facial gel. Global tolerance evaluations showed the once-daily facial gel was well tolerated. After a single usage, the facial gel showed a statistically significant improvement of hydration over 8-hours.

Discussion

The once-daily facial gel reduced the appearance of acne lesions both quickly and over time, while also improving the visual quality of skin. The multi-acid formulation was both efficacious, hydrating and well-tolerated by subjects, contributing to high patient satisfaction.

Abstract N°: 733

Title: Significance of the distribution frequeency of gene polymorphism in association with demodex folliculorum in patients with rosacea

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Introduction Rosacea is a common chronic inflammatory skin condition characterized by erythema, papules, telangiectasia, edema, pustules, or a combination of these symptoms.

A number of works have been devoted to the study of the genetic polymorphism of genes (IL-1β, IL-4, TNF-α, IL-10, VEGF, VDR) involved in the formation of rosacea. However, the association of the genetic marker of the MMP-9 gene polymorphism involved in the development of rosacea with the presence or absence of Demodex folliculorum has not been studied.

The aim of this work was to study the association of the genetic marker of the rs11697325 polymorphism of the MMP-9 gene with Demodex folliculorum.

Materials and methods Under our clinical observation were 106 patients with rosacea aged 22 to 78 years. The rs11697325 polymorphism of the MMP-9 gene was studied by the molecular genetic method, Demodex folliculorum was determined by the microbiological method.

Results The results of the study showed that the genotypic variant A/A polymorphism rs11697325 of the MMP-9 gene in relation to the development of Demodex folliculorum in patients with rosacea plays a protective role and, according to the odds ratio, the risk of developing Demodex folliculorum-positive rosacea in carriers of this genotype is reduced to 0.1 times ($\chi 2 = 3.8$; $p=0.05$).

Discussion Thus, in rosacea patients with the presence of Demodex folliculorum, compared with the control group, a significant trend towards a decrease in the frequency of the A/A genotype is revealed.

Abstract N°: 781

Title: The prevalence of polycystic ovary syndrome in women consulting for acne: Prospective study of 206 cases

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Introduction

Acne is a chronic inflammatory dermatosis of the pilosebaceous follicle constituting a frequent reason for consultation, particularly in women of childbearing age. Its presence should lead to a search for signs of hyper androgenism, in particular polycystic ovary syndrome (PCOS).

The aim of this study is to evaluate the prevalence of PCOS in women consulting for acne, to detect this endocrinopathy early in order to prevent its complications.

Materials and methods

This study focuses on the prospective analysis of 206 women who consulted for acne during a two-year period from June 2019 to June 2021. We included all women during their genital activity who consulted the Dermatology Department of Ibn Rochd University Hospital in Casablanca, Morocco

In all our patients, an ovarian ultrasound was systematically requested, and a hormonal assessment made of testosteronemia, SDHEA, LH, FSH, prolactinemia and 8h cortisolemia was requested in case of clinical signs of hyper androgenism.

Results

We counted 206 patients, 148 of whom (72%) were over 25 years of age, and 114 (55.6%) had a history of cycle disorders.

Acne was inflammatory in 182 women (88.6%), moderate in 200 patients (97.4%) and severe in 5 patients (2.5%). The lesions were located on the face in 156 women (75.7%), of which 61.7% on the cheeks, 11.7% on the chin and 26.6% on the forehead. Associated hirsutism was noted in 96 patients.

In our study, 80 patients (39.2%) were found to have polycystic ovarian syndrome by ovarian ultrasound. Of these, 63 patients (78%) were over 25 years of age and 59 patients (73%) had cycle disorders. A hormonal assessment was performed in 39 patients (18.9%), it was correct in 26 patients (12.6%) and disturbed in 13 patients (6.3%).

Topical treatment was indicated in all cases. Isotretinoin was prescribed in 104 patients (50.6%), and cyclins in 54 patients (26.5%).All patients diagnosed with PCOS were put on oral contraception

Discussion

In our study, acne was indicative of PCOS in 39% of the women. Given this high prevalence, PCOS should be investigated in all adult women consulting for acne

The clinical aspect is quite specific; an inflammatory acne of the lower face, generally chronic and recurrent

Acne in the context of polycystic ovary syndrome is often difficult to treat. Treatment options should be adapted to the clinical specificity and pathophysiological characteristics of acne on the one hand and PCOS on the other, for which a multidisciplinary management is required; involving dermatologist, endocrinologist and gynecologist.

Abstract N°: 815

Title: The role of pharmacists in the management of acne

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Introduction

Acne is a common skin condition affecting over 80% of teenagers. The clinical presentation is polymorphic. Patients usually visit the pharmacist in the early stages of the disease. Therefore, it was necessary to evaluate the role of pharmacists in the management of acne.

Materials and methods

This is a cross-sectional survey carried out in August 2021 concerning Moroccan pharmacists and assistants. The participants answered a questionnaire including questions about their data, the products recommended and the methods of delivery of the retinoids.

Results

We collected 63 participants (36 pharmacists, 24 assistants and 3 pharmacy students). 71% of them were female (sex ratio: 0.4).

The majority of participants have never attended a dermatology conference/training (46%), 21% of participants have attended once, 16 % attended more than 4 conferences.

Among 63 pharmacists and assistants, 61 have received at least one patient for acne per week, between 20-30 years in 49 cases. No patient was older than 30 years old.

95.2% of the participants have already recommended an anti-acne treatment. They were mainly interested in the severity of the acne (76%) followed by the type of acne (52%) and the previous treatments (49%).

A cleansing gel was prescribed in 93.7% of cases followed by sunscreen (71%). The most recommended treatments were Benzoyl peroxide (63%), topical antibiotics (35%), topical retinoids (32%), and oral antibiotics (24%). Oral retinoids were recommended in only 20.6% of cases.

Concerning hygiene and lifestyle, a healthy diet was advised to 27 patients, the use of mild soaps and the avoidance of manipulating acne lesions in 27 cases each.

The patients were referred to the dermatologist from the first time in 26 cases, according to the severity of the acne in 15 cases or after the failure of the recommended treatment in 12 cases.

Regarding the delivery of retinoids, the prescription is mandatory for 50 participants. A possible pregnancy was verified in 20 cases. Contraceptive methods were rarely assessed.

Pharmacists reminded patients of the irritating side effects of retinoids in 92% of cases, and advised at least one

measure to prevent them.

Discussion

Acne is a frequent reason for consultation with pharmacists that affects mainly teenagers. In our study, a large number seek advice from their pharmacist. The age between 20-30 years was the most demanding treatment in our study.

Several therapeutic options are available to treat acne, based on topical treatments for minor to moderate acne, or the combination of topical and systemic treatment for moderate to severe acne. The different treatments were prescribed by our participants.

Pharmacists contribute to the management of the teratogenic risk by ensuring the follow-up of contraception. However, the pregnancy test was only verified in 31% of cases. Moreover, there are aberrations in terms of prescription of retinoids and cyclins, hence the need to restrict the prescription of these molecules to dermatologists, and to regulate their dispensing in pharmacies.

Referral to a specialized consultation is sometimes necessary. Sun protection is essential due to the risk of post-inflammatory hyperpigmentation. Our pharmacists are aware of this problem.

The management of acne requires the involvement of all healthcare actors, in particular dermatologists and pharmacists. Thus, the role of the pharmacist is not limited to the simple delivery of treatment; listening and advising would be very useful.

Abstract N°: 891

Title: The role of some neuro-endocrine and metabolic disorders as a results of cronic stress in pathogenesis of acne with different clinical course

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Introduction. The high incidence of acne among teenagers, adolescent and young people indicates an important medical and social significance of the problem. In literary sources there is only a few reports about the possible role of stress, neuroendocrine pathology and the development of metabolic syndrome in the pathogenesis of acne, but the given data are often contradictory and insufficiently reasoned, which determines the relevance of further research in order to optimize the treatment and prevention of exacerbations of dermatosis.

Objective. To study the role of some metabolic and neuroendocrine disorders in the pathogenesis of acne in women with different clinical course against the background of chronic stress.

Materials and methods. We have examined 122 acne female patients aged 18-35. All patients underwent lab tests to determine the level of cortisol and prolactin in blood serum, index of insulin resistance.

Results An analysis of acne clinical manifestations showed that there were 41 patients (33.61%) with grade 1 acne severity, 46 patients (37.70%) with grade 2, 25 patients (20.49%) with grade 3, and 10 patients (8.20%) with grade 4 acne severity. All examined patients were divided into two groups: the first group consisted of women with grade 1 and 2 acne severity, and the second group consisted of patients with grade 3-4 of acne severity.

The level of cortisol increased by 14.63% ($p<0.05$) (up to 522.5±14.52 nmol/l) in grade 1-2 acne women, and decreased by 16.02% ($p<0.05$) (up to 382.8±18.33 nmol/l) in grade 3-4 acne patients when compared to those in the control group (455.8±25.54 nmol/l). Blood serum prolactin was by 7.26% higher in women with mild to moderate acne (338.3±7.92 mIU/L) versus the values in the control group (315.4±19.34 mIU/L, $r>0.05$) and by 33.86% higher ($p<0.001$) than in those with severe to extremely severe acne (422.2±7.38 mIU/L). The index of insulin resistance in acne patients has also revealed changes in comparison with the control group (2.44±0.52), namely a 13.11% increase ($p>0.05$) in patients with grade 1-2 acne severity (2.76±0,40) and a 56.15% increase ($p>0.05$) in patients with grade 3-4 acne severity (3.81±0.59).

There was a direct strong positive correlation (+0,8) between the indices of cortisol and prolactin levels in grade 1-2 acne patients, which, we believe, indicates the interdependence between changes of the determined neuroendocrine indices and the effects of stress. Chronic prolonged stress (group 2) leads to a medium inverse correlation between the above indices and indicates the adaptation process development.

The index of insulin resistance was in the direct medium correlation (+0.6) with the changes of cortisol and prolactin levels, indicating the development of metabolic syndrome in acne women and can be regarded as an additional criterion of the metabolic syndrome in such patients.

Discussion. In women with acne revealed changes in some neuroendocrine, metabolic parameters (serum

cortisol, prolactin, insulin resistance index), which are markers of chronic stress. The correlation between strong and average correlation between the character of the above-mentioned parameters and the clinical course of the disease was found. This substantiates the need to find new, comprehensive methods for treating patients with acne taking into account neuroendocrine, metabolic changes and the effects of chronic stress.

Abstract N°: 907

Title: Pathogenetic role of skin and intestine microbiota and indicators of some cytokines in the development of acne

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Introduction. Acne remain an immediate problem in dermatology due to the tendency for increase of severe forms with frequent recurrence and damage of significant skin areas, which are the causes of temporary impaired productivity and reduced social activity in patients. This determines its important medical and social role. The **aim** of our research was to study the indicators of skin and intestine microbiocenosis and immunological parameters in patients with acne.

Materials and methods. 117 patients with acne were under the observation and 35 healthy persons were involved in the control group**.**

The indicators of colon microbiota status, the microbial flora of skin from sites of damages and the concentrations of cytokines (IL-1ß, IL-4, IL-8 IL-10) in the blood serum were determined.

Results. The increase of bacterial content by associations of Streptococcus ά Haemoliticus + Staphylococcus Haemoliticus + Micrococcus associations (27.4% in the patients with acne; absent in the control group) and Streptococcus β Haemoliticus + Staphylococcus Aureus + E.Coli + Candida albicans (46.1% in patients with acne; absent in the control group) ($p < 0.001$) was observed in microbiocenosis of patients with acne comparing with the control group. Disorders of skin microbiocenosis were revealed in 78.38% of patients with the 1st grade of acne severity, in 91.18% - with 2nd grade of acne severity, in 91.3% of patients - with 3rd grade of acne severity, in all patients with 4th grade of acne severity. *Staphylococcus aureus* and *Staphylococcus epidermidis* are the main dominant components of skin sites of damage microbiota, so they can be considered as trigger factors of the pathological process.

The changes of qualitative and quantitative parameters of intestine microbiocenosis, such as decrease of bifid bacteria, lactic bacteria, Escherichia coli, staphylococci, were observed in patients with acne. The higher content of Escherichia coli with enzymatic properties and the presence of lactose-negative and hemolytic Escherichia coli and enterococci were found. In addition, a significant ($p<0.05$) increase in the number of conditionally pathogenic enterobacteria, coagulase-negative staphylococci and Candida albicans was observed in this patients.

The probable changes of the proinflammatory cytokines levels, such as increase of IL-1 (ß) in 2.46 times in patients with acne ($p<0.001$); IL-8 respectively in 2.18 times ($p<0.001$) and anti-inflammatory interleukins IL-4 such as increase only in 1.4 times ($p> 0.05$); IL-10 in 1.84 ($p<0.05$) were revealed in all examined patients with acne. These data indicate a lack of immune response (synthesis of insufficient amount of anti-inflammatory interleukins in the framework of skin and intestine microbiocenosis derangements.

Discussion. Thus, the bacterial content of skin sites of damages and disorders of intestine microbiocenosis in

patients with acne has an accentuated dependence on the clinical course and severity of dermatoses and is completely consistent with the degree of immunity disruptions, which affirms the need for further studies in order to improve treatment of such patients (with use of probiotics and immunomodulatory drugs).

Abstract N°: 913

Title: Sports-related acne

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Introduction

Although sport itself does not cause acne, skin care habits maintained during training sessions can have a significant impact on the skin. The purpose of this study is to identify acne triggers and aggravators as well as the specifics of acne in athletes.

Materials and methods

This is a descriptive cross-sectional study carried out in August 2021, focusing on people practicing sports in the city of Oujda. We used a questionnaire written in French and comprising 33 questions designed by the Google forms platform which was distributed through social networks on different groups. Also, a paper version was deposited in the most popular gyms in the city.

Results

Our sample was composed of 231 athletes with 80% amateurs, 12% professionals and 8% semi-professionals. The average age was 28.7 years (21-38) with a sex ratio of 0.66. The average weight was 69.33 kg and the height was 171.66 cm. Eighty-two patients were of normal build, 75 were overweight, 45 were obese and 29 were underweight. Sixty-seven percent of our sample had been exercising for more than a year and more than half at the frequency of three times a week. Thirty percent of our sample applied body oils and a quarter of our respondents were taking protein or anabolic supplements, 30% of whom noticed worsening acne after taking these supplements. Eighty-four percent of the athletes had or had had acne, which started after the age of 20 in 37.5% of the sample. Acne lesions predominated on the face in 77.8%, followed by the back (55.6%) and the décolleté (22.2%). Ninety percent of the athletes who had acne treated it; 50% by local treatments alone, 12.5% by oral treatments and 37.5% by both. More than two-thirds of the responders did not clean their face before the sports session and 23% wore adapted sportswear. Fifty-six percent of respondents use a towel to wipe off sweat and 92% never clean common equipment and tools before and after each use. Sixty-four percent of patients wait 1 to 2 hours to shower and 57% use the communal showers.

Discussion

Heat, occlusion and repeated friction promote the development of acne lesions in athletes. The lesions are often seen under protective equipment such as helmets and shoes of soccer players, and chin straps of horsemen and boxers. More than 90% of our respondents never clean this equipment. Prevention and treatment can be difficult, as this type of acne, known as mechanical acne, does not seem to respond as well to treatment as other types. During a workout, sweat should be wiped off with a clean towel, avoiding rubbing but rather patting the skin. Cotton undershirts should be worn to minimize direct skin contact with the occlusive equipment. Also, it is best to shower immediately after the workout and use a mild, oil-free soap. Benzoyl peroxide or sulfur-based washes may be beneficial, and keratolytics may be helpful in preventing follicular occlusion. Systemic antibiotics may be

considered if acne is extensive. Protein supplementation in athletes is a growing problem; these supplements, taken by a quarter of our respondents, can cause adverse effects, particularly on renal and liver function, but also on the skin. They are associated with the presence of acne, worsening of acne lesions and changes in the microbiota. Also, body oils applied by athletes, especially in 30% of our sample, can be comedogenic and therefore induce acne lesions. Finally, the skin must be clean and free of make-up before starting a sports session, but more than two thirds of the respondents do not clean their face before training.

Abstract N°: 915

Title: Therapeutic compliance in acne patients

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Introduction

The dermatologist has many topical and systemic treatments to treat acne. The aim of this work is to define the epidemiological and clinical profile as well as the compliance to treatment of acne patients.

Materials and methods

This is a descriptive cross-sectional study conducted in August 2021, focusing on acne patients followed up in the Mohamed VI University Hospital of Oujda. We used a questionnaire with 23 questions designed by the Google forms platform that was sent to patients via the WhatsApp application. Then, a telephone conversation was conducted.

Results

Our sample consisted of 382 acne patients followed in our training for 5 years (2017-2021) and 154 completed our questionnaire. The age of our patients ranged from 12-41 years, with an average age of 20.3 years, a ratio of 3.4 and a clear female predominance (77.2%). Moderate acne was the most frequent form (59.3%), followed by severe acne (36.84%) and mild acne (4.25%). Two-thirds of the patients were on topical and oral treatments, 26% on local treatment alone and 8% on cosmetic products. The local treatments used were benzoyl peroxide and adapalene (62%) and retinoids (12%). The oral treatments used were cyclins (53%) and retinoids (49%). Thirty-two patients had side effects with oral treatment and 19 patients with local treatment. Seventy-two percent of patients felt that acne prescriptions contained a lot of products, 64% felt that acne treatments were expensive, and 73.5% were satisfied with the outcome of treatment. Forty-six percent of respondents buy all the products prescribed by the dermatologist and 87% apply all the products they buy until they finish them. Fifty-two patients have used another cream besides those prescribed by their dermatologist.

Discussion

Our study confirms that acne is a dermatosis of the young adult and adolescent and the predominance of the female sex in consultation can be explained by the fact that women are more preoccupied by their body image than men. However, one of the major problems for the dermatologist concerning acne is that of therapeutic compliance. Knowledge of the obstacles to compliance and the search for appropriate solutions are as important as the choice of medication to obtain a good therapeutic result. A French study was conducted on compliance in 2010 and showed that poor compliance was independently correlated with young age, the existence of side effects (found in 33.4% of our sample) and lack of efficacy and patient satisfaction. In our study, 73.5% of acne patients were satisfied with the therapeutic outcome. In addition, more than half of our respondents felt that dermatologists prescribe a lot of products and that acne treatments are expensive. De Lucas et al. showed that good compliance was significantly associated with better treatment outcomes in patients with mild to moderate acne. On the other hand, in a study by Boker et al, treatment outcomes were similar in patients with high and low

adherence.

Abstract N°: 939

Title: Clinical and therapeutic aspects of folliculitis decalvans : A case series of 13 patients.

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Introduction

Folliculitis decalvans (FD) is a rare neutrophilic scarring alopecia that preferentially affects the scalp. However, the pathogenesis remains obscure making its treatment a challenging task. Multiples antibiotic and anti-inflammatory treatments have been tried with unpredictable responses.

We present a case series of 13 Moroccan patients presenting FD.

Materials and methods

Thirteen patients (13) with clinical features of FD, diagnosed between 2017 and 2021 in our dermatology department, were enrolled. The diagnosis was established based on typical clinical findings after eliminating all differential diagnoses.

Data regarding epidemiology, clinical presentation, symptoms, biological tests, histopathological results, treatment, evolution and time to relapse were analyzed.

Results

There were 12 men (92.31%) and one woman (7.69%) with a median age of 29 ± 10.07 years. Three patients reported a personal pathological history : Treated pulmonary tuberculosis, type I diabetes and Becker muscular dystrophy. No comorbidity was noted in the 10 other patients (79.92%). No patient had similar cases in the family.

The associated dermatological diseases were: Severe acne in 3 cases (23.07%) and seborrheic dermatitis in one case (7.69%). The mean age of FD onset was 26.9±9.65 years.

The occipital region was the most affected area with 7 cases (53.84%), followed by the vertex in 4 cases (30.76%).

The patients' biological tests showed no significant abnormalities. Seven patients (53.84%) had a histopathological examination that was consistent with the diagnosis of FD.

The duration of treatment ranged from three to 14 months. The most frequently used treatments were: Doxycyclin 100mg/day in 9 cases, oral isotretinoin 0.5mg/kg/day as monotherapy in 6 cases, oral isotretinoin combined with intra-lesional steroids (1 injection/month) in 3 cases, Dapsone 100mg was used in only one case.

The patient treated with dapsone showed almost complete remission after 2 months. For the patients treated with isotretinoin, remission was achieved within the first month of treatment. The remaining patients did not present at their checkups.

Discussion

FD is a chronic and relapsing neutrophilic scarring alopecia of the scalp, it usually affects young male patients. In our group, 92.81% were males, which concurred with the male predominance reported in the literature (83%).

Clinically, it usually starts as a scarring alopecic patch with pustules frequently located at the vertex. In our case series, the occipital region was the most frequently affected area (53.84%), which is not consistent with the literature results.

Currently, the most effective treatments are antibaterials such as cyclins, dapsone, rifampicin, and clindamycin. In addition, isotretinoin and human immunoglobulin have been reported to be efficient for the treatment of FD. These therapies can be variably combined with intra-lesional steroid injections.

In our study, oral doxycyclin, dapsone and isotretinoin associated or not with intralesional steroids were effective in terms of clearing the scalp in a short time, asserting the results reported in the literature.

In conclusion, FD of the scalp is an alopecising dermatosis of the scalp whose treatment may be difficult. Early initiation of treatment with doxycyclin, dapsone or isotretinoin may prevent the destruction of hair follicles and avoid the evolution to scarring alopecia.

Abstract N°: 1059

Title: Combined treatment of atrophic acne scars with trichloroacetic acid and Dermaroller microneedling

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Introduction

Acne is a common dermatosis that can lead to permanent scarring. Atrophic acne scars are difficult to treat. There is a growing demand for less invasive and effective treatments. In our work, the efficacy and safety of combined trichloroacetic acid (TCA) and dermaroller micro-needling treatment for atrophic acne scars was evaluated.

Materials and methods

This is a prospective study conducted in the dermatology department of the Ibn Rochd University Hospital in Casablanca between January 2021 and January 2022. Patients with atrophic acne scars without progressive lesions and without ongoing systemic treatment were included. Treatment was performed with a dermaroller consisting of 600 needles of 1.5 mm in length that was passed over the affected areas 8 times in 4 directions (vertical, horizontal and diagonal). Immediately thereafter, TCA initially started at 30% in the first 2 sessions and then at 40% was applied with a cotton swab until a uniform white frosting was obtained, indicative of epidermal coagulation. All patients received 4 to 8 sessions of this combined treatment, one session every 2 weeks.

Results

The study included nine patients, five women and four men. The mean age of the patients was 26.5 years; seven patients were phototype IV and two were phototype III. The mean duration of scarring was 26 months. Improvement was assessed by clinical examination as well as by patient satisfaction. 5 patients had good improvement, 1 patient had very good improvement and 3 patients had partial improvement. Patient satisfaction was 70% or more in 2 patients, between 30% and 70% in 5 patients and less than 30% in 2. The only side effect observed was hyperpigmentation in 1 patient with phototype IV, which resolved in 3 days after application of depigmenting agent.

Discussion

Acne can cause physical and psychological scarring. Atrophic scars often result from severe inflammatory nodulocystic acne or self-manipulation. The goal of treatment is to give the skin a more acceptable physical appearance. Combination therapy is the application of 2 or more different techniques to optimize results and improve tolerance. The trichloroacetic acid peel causes epidermal coagulative necrosis. It is a very versatile peel with excellent results in rejuvenation and scar improvement.

In the present study, we used a TCA peel combined with microneedling, which resulted in an improvement of skin texture as well as collagen induction.

Abstract N°: 1060

Title: Facial hidradenitis suppurativa

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Introduction

Hidradenitis suppurativa (HS) is a chronic and recurrent inflammatory disease of the pilosebaceous unit, of not fully understood pathogenesis. It usually presents after puberty with painful papules, nodules, cysts, abscesses and sinus tracts with progressive scaring affecting the skin folds (classically axillae, inguinal and anogenital regions). More rarely, HS can affect the scalp, face, neck, and back. We report a case of HS with exclusive face involvement.

Results

An overweight, smoking male of twenty-two years old, with no medical history presented to our department of dermatology with multiples painful nodules and abscesses of the face with foul-smelling pus discharge for the past year of recurrent course, resistant to several courses of antibiotics. Cutaneous examination showed multiple inflamed deep-seated nodules over the lower half of the face, a fibrous cord-like hypertrophic scar on the right cheek and an oblong renitent collection on the left submandibular area whose punction brought back a purulent fluid. Numerous comedones were noted in the surrounding skin. Regional lymphadenopathy was absent and the other areas including the axilla, groin, buttocks and anogenital region were normal except for a pilonidal sinus. Bacterial culture of the puncture fluid was sterile which rule out an infectious cause. Considering these findings, we kept the diagnosis of HS of unusual location. The patient was treated with doxycycline which resulted in partial improvement.

Discussion

HS usually affects regions where apocrine sweat glands are present but atypical areas including the ears, face, posterior neck, chest, and back have been described in patients with HS, especially in men. Most of the cases reported showed lesions of HS in unusual locations associated with other typical areas affected, which facilitates the diagnosis. The most important differential diagnoses considered was acne conglobate but the presence of rope-like hypertrophic scars, in addition to the association with a pilonidal sinus allowed us to conclude to a localized form of HS involving an atypical location. The management of this disfiguring disease is challenging. The facial involvement may worsen the psychosocial impact hence the importance of early recognition of this atypical presentation of HS to prevent scarring. Biological agents such as adalimumab are being tested for the treatment of HS resistant to standard therapies with promising results.

Abstract N°: 242

Title: Grover disease presenting as keratoacanthoma-like lesions induced by dabrafenib

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Introduction

BRAF inhibitors have recently been approved for patients suffering from Erdheim Chester disease (ECD), a non-Langerhans cell histiocytosis that harbors MAP-kinase pathway mutations.

Few is known about the frequency of acantholytic dermatoses induced by BRAF inhibitors. We report the case of a patient who developed a Grover disease (GD) under dabrafenib, that presented as keratoacanthoma-like lesions.

Results

A 65-year-old woman, diagnosed with BRAF V600E mutated ECD (central nervous system, heart, bone localizations, retroperitoneal fibrosis, perirenal fat infiltration) presented with multiple hyperkeratotic lesions, which appeared 3 months after dabrafenib initiation. Clinical examination showed a hyperkeratotic papule on the right shoulder, more suggestive for keratoacanthoma and multiple yellowish, keratotic papules on the abdomen.

Two skin biopsies were performed. The one on the shoulder confirmed the diagnosis of keratoacanthoma. The other, made on the abdominal lesion, revealed a GD, with acantholysis above the basal layer, focal acanthosis, dyskeratosis and spongiosis.

The keratoacanthoma was surgically removed. For the GD, a treatment by adapalene was initiated. Due to the efficacy on ECD and good extracutaneous tolerance, dabrafenib was pursued. The 6 months follow-up consultation showed partial lesion regression.

Discussion

Due to paradoxical over activation of the MAPK signaling pathway, leading to keratinocyte proliferation, BRAF inhibitors treatment have been involved in the development of non- melanoma skin cancers such as kerathoacanthomas/ squamous cell carcinomas (SCCs) and acantholytic dermatoses (GD, Darier disease). However, the occurrence of GD under BRAF inhibitors is less reported. The development of GD may also arise from the accumulation of drug metabolites in sweat glands leading to epidermal toxicity, acantholysis and dyskeratosis. Grover disease appearing under BRAF inhibitors treatment has usually a benign course

Our observation highlights that hyperkeratotic GD may appear in patients with ECD treated with BRAF inhibitors. GD may sometimes be difficult to differentiate from SCCs/ keratoacanthomas because of clinical similarities. Skin biopsies are mandatory for differential diagnosis and for the evaluation of benefice/risk of BRAF inhibitors maintenance in ECD.

Abstract N°: 323

Title: Amantadine induced livedo reticularis: a case report

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Introduction

Livedo reticularis (LR) is a cutaneous physical sign characterized by transient or persistent, blotchy, reddish-blue to purple, net-like cyanotic pattern. We report the clinical case of a patient with Parkinson's disease, presenting persistent LR, associated with the use of amantadine.

Materials and methods

Results

A male, 70-year-old patient with a previous history of Parkinson's disease, on amantadine 300 mg daily, in association with levodopa was referred to the Dermatology Department due to the onset of erythematous-bluish lesions of lacy aspect, predominantly on the lower limbs. The patient noticed that his symptoms were present within the first 2 months of commencing amantadine. He also had bilateral edema of the lower extremities. He denied local or systemic symptoms, any exacerbating factors or changes with temperature. physical examination showed a diffuse, reticulated, erythematous to violaceous, blanching rash and lacy aspect on the lower limbs. No ulcerated lesions were evident, nor signs of atrophic scars. The laboratory investigation included a complete blood count, antinuclear factor (ANF), serum complement, cryoglobulinemia , rheumatoid factor, lupus anticoagulant, total proteins and fractions, liver and kidney function, serologies for hepatitis B and C, and chest radiograph were without alterations. The diagnosis of livedo reticularis secondary to amantadine treatment was made, based on the following arguments: the eruption had developed soon after the introduction of amantadine, no other potential causes were evident and none of the other drugs used is reported to cause livedo reticularis .the patient was referred for neurological evaluation; the medication was suspended. At a follow-up visit 5 months later, the patient's LR had improved.

Discussion

Amantadine, formerly used as an antiviral, is used today in the treatment of Parkinson's disease (PD) to improve dyskinesias secondary to the use of levodopa. Dermatological side effects frequently reported with amantadine are livedo reticularis and lower limb edema as found in our patient. Although LR is a known side effect of amantadine, a few rare cases have been reported in the literature. . The physiopathological mechanism suggests generalized cutaneous vascular damage, in the absence of systemic involvement. LR is a reversible side effect with a variable clinical course (1 to 48 months) and usually disappears quickly when the drug is stopped. However, the development of lesions does not necessarily justify discontinuation of the drug if it is beneficial for the patient. In conclusion, in front of an LR, it is important to draw attention to the possibility of a drug origin, particularly amantadine. However, a systemic assessment is necessary to eliminate all other causes.

Abstract N°: 420

Title: Fast traslate Icon translate SDRIFE - a case series Fast traslate Icon translate

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SDRIFE – a case series

Introduction

SDRIFE (symmetrical drug-related intertriginous and flexural exanthema), also known as Baboon syndrome is an uncommon, but often severe distinct type of adverse cutaneous reaction to drugs. It is characterized by a symmetric and sharply demarcated erythema that affects the buttocks, groin, thighs and other flexural folds. The rash has an early onset, developing hours to days after the administration of a certain drug, most often antibiotics such as amoxicillin, ceftriaxone, penicillin, clindamycin, and erythromycin. It is usually not accompanied by systemic symptoms. Treatment includes discontinuation of the suspected drug and the use of topical or systemic corticosteroids.

Materials and methods

Results

Case series: We wish to present the cases of two male patients aged 31 and 60, respectively, and that of a 67 year old female patient who were referred to our clinic for skin eruptions highly suggestive of SDRIFE. The culprit drug was acetaminophen in the first two cases. The third patient denied receiving any new treatment before the onset of the rash and seafood consumption was suspected as the etiologic factor. All patients achieved complete remission after topical and systemic corticosteroid treatment, associated with antiH1 antihistamines.

Discussion

Few cases of SDRIFE induced by acetaminophen have been reported so far. The temporal association between the administration of this drug and the onset of the syndrome in two of our patients and the lack of other potential triggers justify the assumption that acetaminophen lead to the occurrence of this specific rash. We also wish to draw attention to the possibility of SDRIFE arising as a consequence of ingestion of certain food or food additives. We discuss the etiopathogenesis of this rare syndrome and the optimal management of such cases.

Abstract N°: 437

Title: Management of anti-EGFR monoclonal antibody-associated acneiform rash

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Introduction

Acneiform (papulopustular) rash occurs in 70-100% of patients during anti-EGFR monoclonal antibody (anti-EGFR mAb) treatment. This adverse event may lead to anti-EGFR mAb dose reduction or discontinuation and affect patient's quality of life, which underlines the importance of effective supportive treatment for acneiform rash associated with anti-EGFR mAb therapy. Objective: to evaluate the effectiveness of traditional and modified combined treatment for the management of anti-EGFR mAb-related acneiform rash.

Materials and methods

Seventy-one (n=71) patients treated with anti-EGFR mAb with grade I-II acneiform rash were included in a 12-week study. Patients were divided into three equal groups and received the following treatment: group 1 – traditional therapy, group 2 - combined intermittent therapy with systemic doxycycline and topical therapy with metronidazole 1% gel and cream with betamethasone valerate 0,05% and fusidic acid 2%, group 3 - combined intermittent therapy with systemic doxycycline and topical therapy with ivermectin 1% cream and cream with betamethasone valerate 0,05% and fusidic acid 2%. Clinical outcomes were assessed with the IGA score, the NCI Common Terminology Criteria for Adverse Events (CTCAE-NCI) v. 5.0, and Dermatological Life Quality Index (DLQI).

Results

Patients from all groups showed a clinical response to supportive treatment. However, patients from groups 2 and 3 demonstrated a higher regression rate of acneiform rash than patients from group 1 (IGA score, CTCAE-NCI v 5.0 grade). Combined intermittent therapy with systemic doxycycline and topical therapy with ivermectin 1% cream and cream with betamethasone valerate 0,05% and fusidic acid 2% (group 3) showed the best tolerability and improvement of DLQI score**.**

Discussion

Combined intermittent regimens are effective therapeutic options for anti-EGFR mAb-related acneiform rash. Combined intermittent therapy with systemic doxycycline and topical therapy with ivermectin 1% cream and cream with betamethasone valerate 0,05% and fusidic acid 2% is highly effective, well tolerated and allows to improve promptly oncologic patient's quality of life.

Abstract N°: 485

Title: Comparative Analysis of Basal Cell Carcinoma and Squamous Cell Carcinoma Recorded in Adverse Drug Reaction Reports and Cancer Registries from Germany

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Introduction

Basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) are the most common types of non-melanoma skin cancers, with increasing incidences in the past. UV radiation is considered the primary risk factor for induction of BCC and SCC. Likewise, occurrence of BCC and SCC has been reported as an adverse drug reaction (ADR) to immunosuppressants and to hydrochlorothiazide owing to immunosuppressive and photosensitising mechanisms, respectively. The first aim of our study was to determine the number of ADR **reports** from Germany referring to BCC and SCC and to analyse the reported characteristics. The second aim was to compare these reports to BCC and SCC **cases** recorded in the German Cancer Registries in order to identify potential drug-associated factors.

Materials and methods

After extraction and an individual case assessment, 191 and 75 validated BCC and SCC **reports** were identified for Germany before 6th March 2019 in the European ADR database EudraVigilance. At the Centre for Cancer Registry Data for Germany, 1,267,210 BCC and 476,903 SCC **cases** were recorded between 2006 and 2018. We calculated the annual number of BCC and SCC reports and the annual incidences of BCC and SCC cases per 10 million inhabitants. In addition, we performed comparative analyses of BCC and SCC reports from the ADR database compared to BCC and SCC cases from the registry with regard to the demographical parameters of the patients. Further, in BCC and SCC ADR reports, the drugs most frequently reported as suspected and associated factors were determined. We calculated odds ratios in order to identify differences between ADR reports of BCC and SCC. The median time to onset between taking a drug and the BCC or SCC occurrence was calculated.

Results

There was an increase in the annual number of BCC (1997-2018: 31.6-fold) and SCC ADR reports (2002-2018: 11.9-fold) and in the annual BCC (2006-2018: 1.3-fold) and SCC (2006-2018: 1.8-fold) incidences of the registry, respectively. Patients in BCC (median age: 60 years) and SCC ADR reports (median age: 64 years) were approximately 10 years younger than patients in BCC (median age: 72 years) and SCC cases (median age: 76 years) from the registry. Immunosuppressants were most frequently reported as suspected drugs in 57.1% of BCC and in 60.0% of SCC ADR reports. A photosensitising potential of the drug was assumed in 41.9% and 44.0% of BCC and SCC ADR reports. On the drug substance level, fingolimod (OR 3.8 [1.1-12.9]) was more frequently reported as suspected in BCC compared to SCC ADR reports. In contrast, lenalidomide was clearly less often suspected in BCC (OR 0.0 [0.0-0.4]), and thus, more frequently reported in SCC reports. A previous history of cancer was less frequently reported for patients in BCC than SCC ADR reports (OR 0.3 [0.6-0.9]). The median time to onset for BCC (2.5 years) and SCC (2.2 years) associated with immunosuppressants was shorter compared to

BCC (5.6 years) and SCC (5.9 years) associated with drugs with photosensitising potential.

Discussion

Drug associated BCC and SCC could be observed at an earlier age than in the general population, and already within the first two years of drug therapy. A regular screening for skin cancer of patients treated with immunosuppressants and drugs with photosensitising potential is recommended. Further research is needed in order to analyse if the observed differences are related to differences in pathophysiological mechanisms of specific drugs or to differences in the treated patient populations.

Abstract N°: 512

Title: Acneiform eruption caused by capecitabine: second case of literature

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Introduction

Capecitabine is a chemotherapeutic agent that is converted to Fluorouracil by thymidine phosphorylase, which is an antimetabolite commonly used in the treatment of colorectal cancer and metastatic breast cancer.

Among the dermatological side effects reported, the hand-foot-mouth syndrome is the most frequent ranging from 10 to 50% cases.

In literature, only one case of acneiform eruption has been reported following capecitabine. We report here another case in a patient with breast cancer.

Results

A 31-year-old patient, followed for triple negative breast carcinoma, having benefited from neoadjuvant chemotherapy (3 Epirubicin, cyclophosphamide, and placlitaxel) and mastectomy followed by adjuvant chemotherapy based on capecitabine (7 cures in full 3568 mg /day for 14 days/month), who presents for an itchy rash one week after the first cure evolving in flare-ups without any other medicinal intake or application of plants.

We find micropapular and pustular follicular lesions, no comedones, located on the face, the sides of the neck, the midthoracic region, the back, and the armpits.

The bacteriological and mycological samples of the pustules were sterile, and the skin biopsy showed apoptotic bodies being eliminated in the stratum corneum, an edematous dermis, with lymphohistiocytic predominance in favor of drug eruption. The pharmacological investigation imputed capecitabine with an S3 C3 (I6) and B3 score.

The patient recieved symptomatic treatment based on salicylic acid, niacinamide, lactic acid with a good improvement and disappearance of pruritus.

Discussion

Hand-foot syndrome is the most common dermatological adverse reaction observed with capecitabine. In addition, several dermatological effects have been described: lichenoid drug eruption, pyogenic granuloma-like lesion, subacute lupus erythematosus, palmoplantar keratoderma, alopecia and nail damage.

To our knowledge, only one case of acneiform eruption has been reported in Turkey in a patient with small cell neuroendocrine pulmonary carcinoma which appeared on Day 6 of treatment.

Acneiform drug eruption is a subtype of acne that differs from classic acne by: occurrence at an unusual age, location in non-seborrheic areas, pruritus, absence of comedones, and sterile pustules. Several drugs such as corticosteroids, psychotropic, antitubercular drugs and certain chemotherapy molecules, in particular VEGF inhibitors, can give such a clinical presentation, generally one to six weeks after taking the drug.

In our case, it occurred after the 7th day. The occurrence of an acneiform eruption does not require modification of the therapeutic doses or discontinuation.

Symptomatic treatment is sufficient as topical metronidazole, topical clindamycin, or topical salicylic acid may be prescribed or Tetracycline in moderate to severe lesions.

Abstract N°: 516

Title: Difficulties in drug-induced hypersensitivity syndrome diagnosis

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Introduction

Drug induced hypersensitivity syndrome (DIHS) is characterized by macular-erythematous rash and prodromal symptoms such as fever up to 40°C, chills, pharyngitis and lymphadenopathy (50-75% of patients). In addition, there are symptoms of internal organs involvement, most often the liver, heart, kidneys or lungs. Anticonvulsants (especially carbamazepine), antibiotics and allopurinol are thought to be among the most common causes of DIHS.

Results

We would like to present the case of 64-year-old female with 3-weeks history of erythroderma in the course of DIHS.

Two months after applying the therapy of allopurinol, the patient complained about dry cough, fever and dyspnoea. On physical examination, there were generalized skin erythema with exfoliation, conjunctivitis, peripheral edema and lymphadenopathy.

Laboratory tests showed leucocytosis, eosinophilia, increased C-reactive protein (CRP), uricemia, proteinuria, increased creatinine and decreased glomerular filtration rate (eGFR).

In the treatment were used systemic corticosteroids (methylprednisolone, followed by prednisone) which improved the condition of the skin.

After 3 weeks, while the dose of prednisone was reducted, the skin condition worsened. During the rehospitalization, other possible causes of erythroderma were considered: DIHS induced by another drug or provocation of another inflammatory dermatosis.

The clinical picture and the histopathological examination of the skin indicated the diagnosis of DIHS.

The diagnosis of DIHS constitutes a challenge due to the nonspecific symptoms and the difficulty in identifying the drug which is the cause of reaction.

Abstract N°: 582

Title: An atypical case of SDRIFE with mucosal and palmoplantar involvement

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Introduction

SDRIFE (Symmetrical drug-related intertriginous and flexural exanthema) formerly known as Babouin's syndrome, is a rare drug reaction characterized by well-defined and symmetrical erythema of the buttocks/peri-anal region or V-shaped erythema of the inguinal region and at least one other large fold. The palmoplantar areas, the face and the mucous membranes are only rarely affected.

Here, we report the case of an SDRIFE with its typical localization, in addition to palmoplantar and mucosal involvement caused by the introduction of carbamazepine.

Results

A 35-year-old patient with a history of epilepsy and mental retardation. Who presented to dermatological emergencies, with an itchy erythematous bullous eruption that appeared 24 hours after the introduction of carbamazepine following convulsive attacks. Clinical examination found symmetrical and confluent post-bullous erosions of the axillary, inguinal, and intergluteal fold, with involvement of the neck, and palmoplantar areas. In addition, there is cheilitis, blepharitis, and nasal erosions. The rest of the examination did not reveal any facial edema or peripheral adenopathy. The assessment does not find cytopenia, nor hepatic or renal damage, as well as the Parvovirus 19 serology. The skin biopsy showed apoptotic bodies, subcorneal pustules and keratinocyte necrosis in favor of drug eruption. The pharmacological investigation was systematic, with discontinuation of carbamazepine. The patient progressed well under mucosal and cutaneous care after 10 days.

Discussion

SDRIFE is a rare drug reaction, of which the literature has reported a limited number of cases. It differs from other drug eruption in its typical morphology, distribution, and lack of systemic findings. It is a type IV hypersensitivity reaction of unknown pathogenesis, predominantly male and which can occur at any age. The most widely implicated drugs are antibiotics, especially beta-lactams, but several other molecules have been reported.

The diagnostic criteria are: systemic drug exposure; well-defined characteristic erythema affecting the gluteal, perianal, inguinal or peri-genital area; involvement of at least one intertriginous area; symmetry of affected areas; and absence of systemic symptoms.

Classically, skin involvement is in the form of maculopapular erythema, rarely with pustules and bullae. Involvement of the mucous membranes, face and palmoplantar areas is very rarely described. although skin biopsy is non-specific, patch tests can be positive in 50%. The prognosis remains good after stopping the causative drug.

The particularity of our case lies in the incrimination of carbamazepine as well as the atypical clinical presentation of SDRIFE with mucosal involvement, and the palmoplantar areas, which are rarely described.

Abstract N°: 602

Title: Ibuprofen-associated aquagenic wrinkling of the palms

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Introduction

Aquagenic wrinkling of the palms (aquagenic keratoderma) is a rare condition, usually reported in association with cystic fibrosis. Idiopathic and drug-induced cases have also been reported.

Materials and methods

A 17-year old boy presented with a 10 days history of pruritic white papules and wrinkling of both palms that appeared after short immersions (3-5 min) in water. The lesions persisted for 15 minutes afterwards and disappeared spontaneously, recurring after each new immersion. His medical history was unremarkable, except for a recent knee trauma for which he was prescribed ibuprofen 400 mg x 2/day. During the consultation we were able to reproduce the clinical findings described by the patient.

Results

The recent onset of wrinkling of the palms after short immersion in water is suggestive for a drug-associated aquagenic wrinkling of the palms. The signs and symptoms disappeared within 4 weeks after discontinuing ibuprofen and did not reappear during the 12 months of follow-up.

Discussion

There are only a few cases in the literature of drug associated aquagenic wrinkling of the palms, with reports on aspirin, indomethacin, salazopyrin and paracetamol. (1-2)

Our patient's history and clinical signs were not compatible with the diagnosis of cystic fibrosis. The onset of aquagenic wrinkling of the palms correlated with the recent administration of ibuprofen and the symptoms dissapeared after the drug was discontinued and did not recur.

Aquagenic wrinkling of the palms can be associated with the intake of drugs. The presented case suggests that ibuprofen could be added to the lists of potential drugs that can induce this disease.

References:

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Abstract N°: 671

Title: A case of baboon syndrome induced by paracetamol

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Introduction

Materials and methods

Results

INTRODUCTION

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE), previously known as baboon syndrome, is a rare form of toxidermia, typically localized in the gluteal region and flexural folds. It occurs after systemic administration of an allergen in previously sensitized patients.

Baboon syndrome is rarely seen in children. Here, we report the exceptional case of a baboon syndrome in an 8-year-old child after taking acetaminophen (paracetamol).

CASE REPORT

An 8-year-old child with a history of a megaureter operated 2 years ago presented an exanthema in the folds and the gluteal region for 10 days, following paracetamol intake 3 days previously.

The physical examination revealed well-defined eczema lesions in the elbows, knees, axillary and popliteal folds, in the gluteal region and the backs of the feet. A lichenified appearance of the hands and feet was noted.

The patient was put on oral corticosteroid therapy after stopping paracetamol intake, and complete remission was obtained after 10 days.

DISCUSSION

Baboon syndrome is a form of eczema linked to a systemic intake of an allergen. The positive diagnosis is based on 5 criteria: exposure to a systemic drug, erythema of the buttock, inguinal or axillary region, involvement of at least one intertriginous site, symmetry of lesions, and absence of systemic signs.

All these criteria were present in our patient, and the clear improvement of the patient after stopping paracetamol was also in favor of the diagnosis.

Although the most incriminated drugs are generally beta-lactams antibiotics, but paracetamol remain one of the most widely used medication and consequently it should be considered too as a potential causative agent.

The originality of our work lies in the unusual presentation of baboon syndrome in children, as well as the incrimination of paracetamol which, to our knowledge, has been rarely reported in the literature as a causative agent.

Abstract N°: 672

Title: A case of drug-induced bullous pemphigoid associated with fluoxetine

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Introduction

Materials and methods

Results

Introduction

Bullous pemphigoid (BP) is a rare autoimmune skin disease that mainly affects the elderly and it is manifested by cutaneous blisters on the skin. Drug-induced bullous pemphigoid is a term used to describe a variant of BP associated with a recent systemic ingestion, or topical application of particular drugs.

We report the case of Drug induced BP in a patient treated with Fluoxetine.

Case report

a 40-year-old patient with a history of depression on Fluoxetine introduced 4 years ago, presented for bulous eruption, the physical examination found a tense bulla with serous content distributed over erythematous and urticarial skin, located on the trunk and limbs with positive Nikolsky's sign, examination of oral mucosa found endobuccal ulcerations and bullae with hematic content located on the tongue.

Laboratory test showed an important hypereosinophilia, and Indirect immunofluorescence reveled A linear Basement membrane zone staining pattern with IgG.

Skin biopsy with direct immunofluorescence showed linear IgG and C3 depositions at the base

membrane zone and on the blister roof in areas of blistering.

The diagnosis of a Fluoxetine-induced bullous pemphigoid was established, the patient was treated with oral corticosteroid at 1mg/kg, Azathioprine 100mg/day, Fluoxetine was discontinued and switched to Sertraline.

All the lesions resolved completely within 3weeks after Fluoxetine had been withdrawn.

Discussion

There are criteria to help distinguish idiopathic BP from drug-induced BP which is characterized by its occurrence at a younger age compared to the idiopathic form, the presence of mucosal involvement, blood hypereosinophilia and improvement after stopping the attributable drug.

All these elements were found in our patient.

Fluoxetine is a commonly prescribed antidepressants that can induce cutaneous side effects in 1-3% of treated patients but rarely associated with PB. To our knowledge, there are few cases of fluoxetine-induced BP reported in

the literature. However, our case finds its originality in the fact that our patient developed BP following a period of 4 years after the introduction of Fluoxetine. which is unusual compared to the data in the literature (less than 6 weeks).

That unusual delay can be explained by the complex pathogenesis of DIBP which is possibly linked to the interaction between various precipitating factors or triggers such as drugs in our case, that could induce or exacerbate BP disease in the context of several predisposing factors include genetics, comorbidities, and aging...

Discussion

Abstract N°: 700

Title: A singular varenicline-induced drug eruption

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Introduction

Cutaneous side-effects of varenicline, a selective partial agonist of the □4□2 nicotinic acetylcholine receptor used to support smoking cessation, are relatively rare. We found only 8 cases documented in PubMed, predominantly of acute generalized exanthematous pustulosis (AGEP) (5 cases), and only 2 cases of maculopapular eruptions and 1 case of symmetrical drug-related intertriginous and flexural exanthema (SDRIFE), which occurred at least 2 days after varenicline introduction. Besides these, multiforme exudative erythema, Stevens-Johnson syndrome, and angioedema are listed on the product specification sheet. We describe an atypical clinical presentation of a varenicline-induced drug eruption, which occurred 1 day after drug initiation.

Materials and methods

Case report.

Results

A 68-year-old male smoker was referred to our Dermatology emergency unit with a 4-day history of a disseminated maculopapular eruption. The patient started treatment with varenicline for smoking cessation one day before this eruption appeared and stopped immediately after its start. He denied fever, recent infectious process, or use of new medication. Physical examination revealed disseminated confluent erythematous macules and papules on the trunk and proximal parts of the extremities, as well as edematous facial involvement. There were also more pronounced erythematous patches, symmetrically distributed over the anterior neck, buttocks, axillary and inguinal region, and target lesions on the trunk, but no pustular/vesiculobullous lesions, involvement of mucous membranes, or Nikolsky sign. Laboratory tests, chest x-ray, and electrocardiogram were normal. Skin biopsy of a target lesion showed irregular acanthosis of the epidermis with foci of spongiosis and a superficial dermis perivascular lymphocytic infiltrate with interstitial eosinophils. Thus, we established the diagnosis of maculopapular drug eruption associated with varenicline. The patient was treated successfully with antihistamines and betamethasone cream 0.5mg/g, with complete clinical resolution 1 week after. Patch testing was performed three weeks later, with a 0,5-mg and 1-mg varenicline tablet, diluted to 30% in petrolatum, but was negative at 48h and 72h. The patient refused to perform a lymphocyte activation assay and oral provocation test. He was followed up during 6 months, with no symptom recurrence.

Discussion

Our patient presented simultaneously targeted lesions on the abdomen (suggestive of erythema multiforme), maculopapular lesions on the limbs (suggestive of morbilliform exanthema), and more pronounced confluent erythematous patches, symmetrically distributed over the anterior neck, buttocks, axillary and inguinal region,

resembling an SDRIFE. Although these adverse skin reactions described in the literature occurred after an average of 6 days, our skin reaction occurred after a single tablet. Clinical resolution was observed 6 days after initiating topical corticosteroid therapy, with no need for systemic corticosteroids and with faster resolution than the other described cases.

We report this case since we believe no drug reaction to varenicline has had this singular clinical presentation or occurred only one day after drug intake. Dermatologists should be aware of this potential adverse cutaneous reaction in patients taking varenicline for smoking cessation.

Abstract N°: 833

Title: Acneiform eruption caused by panitumumab : About a case

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Introduction

As the number of cancer therapies increases, so do their side effects. The skin is one of the most affected organs by these effects, with the characteristic feature that the lesions are prominent, which can affect the adherence to treatment.

We report the case of a patient admitted with diffuse pustular lesions caused by panitumumab.

Materials and methods

A 52 years old patient, with a 5 years history of diabetes, followed since June 2021 for metastatic Adenocarcinoma of the colon under polychemotherapy based on panitumumab, oxaliplatin and fluorooracil, was admitted to our establishement for a pruritic rash on the face and trunk involving one week before his consultation with a similar episode after the administration of panitumumab that resolved with cyclin.

The clinical examination found multiple follicular pustules on the face and upper trunk with massive impetiginization, without mucosal or phanerial involvement, without fever or adenopathy.

A parasitological sampling in search of demodex as well as a bacteriological sampling of the pus were done and returned negative.

A pharmacological investigation was performed and incriminated panitumumab.

Since it was a grade 2 undesirable effect, the panitumumab was maintained and the patient was put on cyclin and local treatment based on metronidazole with an anti histaminic and emollient with a good evolution.

Discussion

Paroxysmal drug-induced acne currently represents one of the most frequently encountered dermatological symptoms during oncological treatments in particular with classical anti-EGFR therapies with which between 75 and 90% of acneiform rash can be observed.

The differential diagnosis is essentially with acne but the absence of comedones eliminates the diagnosis and a demodecidosis given the immunosupression condition that promotes bacterial, fungal and parasitic infections. Therefore the practice of a parasitological sampling remains necessary to eliminate this diagnosis.

The suspension of the causal treatment depends on the grade of the adverse effect, so a grade 1 and 2 does not require stopping treatment as it was the case of our patient

Thus to promote adherence to treatment and given the unsightly nature of the lesions, some authors recommend the introduction of a prophylactic treatment based on cyclin from the beginning of the anti EGFR treatment .

Abstract N°: 841

Title: Atenolol-induced lichen planus: a case report

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Introduction

Atenolol belongs to a class of drugs known as beta blockers, it's used to treat high blood pressure and arrhythmia. Their cutaneous side effects are rare. We report in this case the observation of a lichen planus induced by atenolol.

Materials and methods

Results

A 79-year-old woman was referred to our dermatology department for a pruritic rash evolving for 2 months. The patient was treated for hypertensive heart disease with losartan and acetylsalicylic acid for more than 10 years with a recent introduction of atenolol 3 months ago. Physical examination found a firm polygonal, purplish, pruritic, confluent papular lesions, located on the upper limbs and extending to the anterior side of the wrist, on the knees and dorsal side of the feet, not involving the trunk and back. The genital area was also affected, but the oral mucosa, the nails and hair were not affected.

The skin biopsy showed an acanthosic of the epidermis with orthokeratotic hyperkeratosis and hypergranulosis. The superficial dermis showed a lichenoid mononuclear inflammatory infiltrate, in a subepidermal band made of lymphocytes, plasma cells and eosinophilic polynuclears. The overall findings were suggestive of lichen planus.

The pharmacovigilance investigation had concluded that atenolol was plausibly responsible. Thus, the diagnosis of atenolol-induced lichen planus was made. The involved drug was discontinued, and the patient received topical steroids, antihistamines, and phototherapy with good evolution. No recurrence was observed 1 year after discontinuation of the treatment.

Discussion

Cutaneous side effects of beta-blockers include aggravation of psoriasis, Raynaud's phenomenon, alopecia, hyperhidrosis, and vitiligo. Cases of induced lichen planus have also been described.

Lichen planus is a common inflammatory dermatosis that that affects the skin, nails, hair, and mucous membrane. The etiology is unknown, but immunological mechanisms are strongly suspected.

The imputability of the drug can only be made after recovery when the drug is stopped. The delay between the introduction of the drug and the eruption varies from several weeks to several months. Drug-induced origin must be considered when there is coexistence with eczematous or psoriasiform lesions, absence of Wickham's striae, photo-distributed character, progression towards pigmented scars and presence of eosinophils in the dermis on histology. The time to regression after discontinuation of the drug is variable, ranging from one month to several months or even one year.

Abstract N°: 877

Title: Hydroxychloroquine-induced Hyperpigmentation in a patient with rheumatoid arthritis

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Introduction

Hydroxychloroquine (HQ) is an antimalarial agent widely prescribed in internal medicine, rheumatology and dermatology. Their use can be complicated by several cutaneous side effects, including hyperpigmentation. Herein, we report the case of a patient followed for rheumatoid arthritis who presented a hyperpigmentation induced by HQ.

Results

42-year-old female patient, followed for 6 months for rheumatoid arthritis, initially put on oral corticosteroids at rate of 1mg/kg/d with the introduction of hydroxychloroquine at rate of 200 mg twice a day. One month after the introduction of HQ, the patient presented a central hyperpigmentation of the face and the dorsal sides of both hands, which were not pruritic and not lichenified. The skin biopsy showed a non-specific pigmentary incontinence. In view of this, the HQ was stopped with the use of depigmenting agents with slight clinical improvement after one month of treatment.

Discussion

Antimalarials are considered as generally well-tolerated when compared with other disease-modifying drugs. Their well known side effects can involve gastrointestinal, ocular, haematopoietic, cardiovascular, auditory, mucocutaneous and central nervous systems. Besides some adverse cutaneous reactions such as pruritus, rashes, alopecia, allergic contact dermatitis, Stevens–Johnson like syndrome and photosensitivity, bluish-grey to black discolouration has also been reported with antimalarial drugs. Hydroxychloroquine-induced skin hyperpigmentation appears after several months or years of treatment but does not appear to be related to the duration of treatment or the cumulative dose. In the majority of cases this hyperpigmentation is reversible with the cessation of treatment and the maintenance of photoprotection measures.

Although the HQ-induced hyperpigmentation is not a life threatening side effect, it should be recognized by practitioners.

Abstract N°: 899

Title: Certain aspects of the nitrogen oxide role in the Stevens-Johnson syndrome course

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Introduction. Stevens–Johnson syndrome (SJS), which is a drug-induced disease in 50% of cases, is increasingly common in everyday practice. A determining role in the pathogenesis of pathological conditions (inflammation, shocks of various genesis, etc.) plays a unique extra- and intracellular messenger, i. e., the nitrogen oxide (NO) system acts as an endogenous regulator in various dermatoses. In physiological concentrations, NO interacting with reactive oxygen species exhibits antioxidant properties, in case of metabolic disorders associated with the NO accumulation in tissues, and said reactions promote highly toxic substances adversely affecting the disease course. The NO biological action wide scope determines the interest in studying the NO-NOS system (nitrate ions (NO3-), nitrite ions (NO2-)) in patients with SJS, which is accompanied by the involvement of all body systems and defines the disease prognosis.

Materials and methods. We have studied the NO system using biochemical methods in 9 SJS patients, 4 of whom were mild and moderately severe, while 3 had a severe course of the disease. A significant increase in nitrite and nitrate anions was registered in mild and moderate cases of SJS, whereas a greater level of nitrate anions was observed in cases of severe dermatosis when compared to those in healthy subjects. The comparison of parameters in patients with varied degrees of severity of the process revealed a significant increase in the content of nitrite anions and a decrease in nitrate anions in patients having a mild and moderate degree of severity as compared to those with a severe SJS course. The increased content of nitrogen oxide, namely its anions at different SJS degrees, is the result of the impact of endo- and exotoxins, inflammatory factors that is activators of free radical oxidation.

Results. Studies of the nitrogen oxide system suggest a pathogenetic role of hyper- and hypo-production of NO anions, which is a causative factor in SJS patients, as well as a necessity for its correction.

Discussion. It is advisable to use corticosteroid medications for the normalization of NOS activity and NO hyper-production as part of a complex therapy for SLS patients.

Abstract N°: 929

Title: R-CHOP-Associated Acute Generalized Exanthematous Pustulosis

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Introduction

Acute generalized exanthematous pustulosis (AGEP) is a rare drug-induced hypersensitivity reaction consisting of numerous nonfollicular pustular lesions and desquamation in late stages. Systemic involvement occurs in about 20% of cases. Here, we present a case of AGEP associated with R-CHOP chemotherapy.

Results

A 62-years old male with a history of grade 3 follicular lymphoma (FL) presented with a pruritic rash occurring a few days after the third administration of R – CHOP chemotherapy. He denied using any other medications or over-the-counter supplements.

Dermatologic examination revealed generalized, pin-head-sized pustules on an erythematous base that involved approximately 80% of body surface area. Skin biopsy revealed neutrophilic spongiotic pustules and neutrophilic and eosinophilic inflammatory cell infiltrate present within the superficial dermis. The findings were consistent with AGEP. Clinical examination showed no systemic signs or symptoms.

Discussion

FL is the most common form of indolent lymphoma and accounts for 20% to 30% of all newly diagnosed non-Hodgkin's lymphoma. R-CHOP chemotherapy regimen of rituximab, cyclophosphamide, doxorubicin hydrochloride, vincristine sulfate, and prednisone appears to be a good option for elderly patients with aggressive lymphoma.

The diagnostic criteria for AGEP include morphology of the cutaneous eruption, clinical course, and histopathologic findings. Based on these criteria, our patient's presentation falls within the definitive diagnostic range for AGEP. In around 90 percent of cases, AGEP is caused by drugs, most often antibiotics, antifungals, the calcium channel blocker diltiazem, and antimalarials. In recent case reports biologic therapy has been mentioned as a cause of AGEP. To the best of our knowledge, this is the first case to report R-CHOP-associated AGEP.

Abstract N°: 931

Title: Symmetrical drug-related intertriginous and flexural exanthema: A Moroccan case series of 9 patients

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Introduction

SDRIFE (symmetrical drug-related intertriginous and flexural exanthema) formerly known as Baboon syndrome, is a rare form of drug reaction typically localized in the gluteal region and flexural folds. It is occurring after systemic administration of allergen in previously sensitized patients. Herein, we describe a Moroccan case series of 9 patients.

Materials and methods

This is a retrospective and analytical study including all patients seen at the dermatology department of Ibn Rochd University Hospital in Casablanca, Morocco between 2013 and 2021 with a diagnosis of SDRIFE.

Results

Nine patients were included, 5 adults and 4 children, 5 male and 4 female. The average age was 23 years. All patients had gluteal region involvement. Fold involvement was symmetrical and involved an average of 4 folds in each patient (inguinal folds in 9 patients, axillary in 7 patients and popliteal in 5 patients). Periflexural involvement was found in 7 patients, pustulo-bullous lesions were present in only 1 patient. None of our patients had fever or hyper eosinophilia. The median delay of onset after exposure was 24 hours. The incriminating drugs were amoxicillin in 3 patients, non-steroidal anti-inflammatory drugs in 3 patients, aspirin in 1 patient, paracetamol and carbamazepine in 1 patient each. The skin biopsy performed in 5 patients supported the diagnosis of drug reaction. The treatment was based on emollients and antihistamines in all patients with the introduction of dermocorticoids in 2 patients. The cure was obtained between 7 and 10 days.

Discussion

SDRIFE is a severe drug reaction characterized by a particular clinical topography occurring a few hours to a few days after a systemic drug exposure; it is a type IV hypersensitivity reaction of unknown pathogenesis. The positive diagnosis is based on 5 criteria: exposure to a systemic drug, erythema of the gluteal inguinal or axillary region, involvement of at least one intertriginous site, symmetry, and absence of systemic signs. Although the most common drugs are the betalactam antibiotics, approximately 50 drugs have been reported to date to cause SDRIFE. The sensitivity of skin tests appears to be low; when they are negative, reintroduction allows confirmation of the diagnosis. Histopathology is non-specific, showing both keratinocyte necrosis, mononuclear cell infiltration and spongiosis.

SDRIFE is a rare but not exceptional drug reaction, the diagnosis is essentially based on the clinical presentation and pharmacological imputability.

Abstract N°: 973

Title: PDE-5 inhibitor induced EM and SJS: a worrisome outcome of COVID-19 pandemic stress

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Introduction

Sexual and reproductive health (SRH) and rights is a significant public health issue during the epidemics. The novel coronavirus (SARS-CoV-2) is new to humans, and only limited scientific evidence is available to identify the impact of the disease COVID-19 on SRH.

Materials and methods

Phosphodiesterase-5 (PDE5) inhibitors such as tadalafil and vardenafil are used in the treatment of erectile dysfunction (ED), either over the counter or under prescription. Drug eruptions are skin eruptions that are induced by drugs and are immunologically mediated. The COVID-19 quarantine measures, stress and PDE5 uptake resulted in the presentation of two drug reaction phenotypes, ranging from multiple erythema minor to Stevens–Johnson syndrome (SJS) / toxic epidermal necrolysis (TEN).

Results

Case 1: A 55-year-old married Caucasian male with a history of chronic end-stage renal disease undergoing peritoneal dialysis, hypertension and prostate hypertrophy presented with multiforme erythema minor. He reported excessive stress and fear of death due to the pandemic, resulting in sexual dysfunction for which he was prescribed tadalafil 2.5mg. Biopsy was consistent with the clinical diagnosis. RT-PCR, viral serology and cell culture swabs were negative for microorganisms. Halting tadalafil yielded a complete resolution of the lesions.

Case 2: A previously healthy 52-year-old single Caucasian male, presented with extensive mucocutaneous damage characterized by blistering and epithelial shedding on torso, mouth and genitalia following uptake of 20 mg Vardenafil hydrochloride (OTC), twice in 5 days, 12 days prior. Three days before hospital presentation, he developed a febrile flu-like prodrome. Two days later, the patient reported the initial appearance of red-purple macules on the mouth (lips, palate, tongue, buccal mucosa) and genitals that turned into large blisters, eventually developing into painful epidermal necrosis and detachment of the skin and mucous membranes. Persistent hiccups (3 days) were observed; however laryngoscopy was impossible due to extensive mucosal damage.

Discussion

The government COVID-19 quarantine measures have an impact in physical and mental health. In our cases, reportedly distressed men in their 50s tried to maintain an active sex life during self-isolation, seeking help from PDE5 inhibitors. PDE5 inhibitors selectively inhibit PDE5, which is cGMP-specific and responsible for the degradation of cGMP in the corpus cavernosum, used as remedies for erectile dysfunction. Whether this type of adverse cutaneous events occur only as a result of pandemic stress, only time will tell.

Abstract N°: 1005

Title: Fluconazole induced toxic epidermal necrosis in a HIV negative woman: a new case.

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Introduction

Toxic epidermal necrolysis (TEN) is a rare, life-threatening mucocutaneous condition, which may occur as an adverse reaction to a number of medications. The anitifungal agent, fluconazole, has been associated with TEN in limited reports. We present a new case of probable toxic epidermal necrolysis induced by fluconazole in a 60 year old woman.

Observation

A 60 year-old woman with a medical history of type 2 diabetes presented with painful generalized body rash. The rash involved initially 40% of the body surface area and occurred 7 days after beginning treatment with 150 mg daily dose of oral fluconazole for oropharyngeal candidiasis. Medications prior to admission included Metformin and Glimépiride, which she had taken for 4 years without any recent change in dose. Initially involving the trunk ,with marked lip and oral blisters ,the rash later spread peripherally to involve 80% of the body surface area , 2 days after introducing oral aciclovir. The rash rapidly progressed from ill defined discrete and confluent macules to blisters. Nikolsky's sign was present . A diagnosis of fluconazole induced toxic epidermal necrolysis was made based on the clinical picture. Pharmacological analysis revealed an imputability score of I54B for fluconazole and I3B2 for aciclovir. A skin biopsy later showed total epidermal confluent kératinocyte necrosis with a focal mononuclear cell infiltrate in the dermis. HIV testing was negative. In hospital, management included pain control, skin, mouth and eye care, intravenous hydration and withdrawal of fluconazole and cicloviral following which the lesions gradually resolved . .

Discussion

Drug induced toxic epidermal necrolysis (TEN) is more commonly associated with medications such as sulfonamides, penicillin, anticonvulsants, oxicam non-steroidal anti-inflammatory drugs, allopurinol and corticosteroids. Fluconazole is a commonly used drug with mild side effects. TEN caused by fluconazole is rare ,and till now only few cases have been reported in the literature, mainly in patient with HIV infection. We reported a rare case of fuconazole induced TEN in a HIV négative woman.

Abstract N°: 1040

Title: D-penicillamine-induced elastosis perforans serpiginosa in Wilson's disease

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Introduction: Wilson disease is a rare autosomal recessive disorder of copper metabolism caused by a mutation in the ATP7B gene. It is characterized by excessive deposition of copper and, if left untreated, may cause serious liver disease, neurological and psychiatric complications and death. The mainstay of therapy for Wilson disease is chelating agent D-penicillamine, that at high doses interferes with neosynthesis of elastic fibers and may produce a wide spectrum of skin manifestations, but also it can alter and weaken elastic tissue in other organs, including upper and lower respiratory tract, joint capsules and blood vessels.

Elastosis perforans serpiginosa (EPS) is a rare primary perforating dermatosis, characterized by transepidermal elimination of abnormal elastic fibers. It occurs in three forms: 1) idiopathic; 2) reactive, associated with hereditary diseases of the connective tissue; 3) drug-induced form, which is caused by prolonged D-penicillamine administration and affects 1% of patients treated with high doses of this drug.

Materials and methods: We report the case of EPS induced by prolonged D-penicillamine treatment in Wilson disease**.**

Results: A 37-year-old, Caucasian male presented with a 6-year history of asymptomatic skin lesions affecting multiple skin folds and posterior of the neck. He was diagnosed to have Wilson's disease and started on D-penicillamine treatment 900mg/day 23 years before presentation.

Physical examination revealed multiple reddish-brown keratotic papules coalescing into annular, arciform and serpiginous plaques with central mild atrophy and hypopigmentation. The lesions were symmetrically distributed over axillary, inguinal, antecubital regions and posterior of the neck.

A skin biopsy revealed acanthosis, hyperkeratosis and characteristic transepidermal tunnels containing damaged elastic fibers, associated with lymphocytic inflammatory reaction. Verheoff-van Gieson stain revealed an accumulation of altered elastic fiber in the dermis in the vicinity of the channels. Based on typical clinical and histopathological findings, the diagnosis of EPS was made.

Discussion: Prolonged D-penicillamine therapy is associated with a wide spectrum of cutaneous adverse effects, including drug-induced form of EPS. As the literature stongly suggest that this form of EPS is accompanied by systemic elastic tissue damage, early recognition of this condition and switching to other treatment modalitis, when possible, is important in order to prevent serious complications.

Abstract N°: 1049

Title: Cutaneous reactions to cyclin-dependent kinase 4/6 inhibitors

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Introduction

Three cyclin-dependent kinase 4/6 inhibitors, palbociclib, ribociclib and abemaciclib, are currently used in positive hormone receptor and negative human epidermal growth factor receptor-2 metastatic breast cancer, associated with endocrine therapy. Cyclin-depedent kinases regulate the cell cycle progression. Inhibition of this pathway will block cell cycle progression and prevent tumor grow. The three approved drugs are small orally administered molecules prescribed in combination with endocrine therapy.

These molecules are associated with dermatologic toxicities, such as alopecia, some of them reported in the initial studies that led to approval.

In daily clinical practice, few data exists about the presentation and management of the cutaneous adverse effects associated with these molecules.

Materials and methods

Description of three cases with clinical photographs. Histopathology photographs in one case.

Results

We present three patients treated with cyclin-dependent kinase 4/6 inhibitors and describe the skin toxicities. Two patients were treated with ribociclib and one patient with palbociclib. One patient presented with pruritus and hyperpigmented patches reminiscent of ashy dermatosis, mostly located on the trunk. Some patches were linear, with a flagellate-like pattern. Other patient developed pruritus and skin rash two weeks after starting palbociclib, with erythematous patches and plaques on the neck and trunk. In the lumbar area some plaques were linear. A grayish-brown lichenoid-like pigmentation was also present on the face and neck. The third patient presented weeks after starting ribociclib with severe pruritus and violaceous-brown patches and plaques on the neck, trunk and lower limbs. Some lesions also displayed a linear, flagellate-like morphology. A cutaneous biopsy was performed, showing a pattern consistent with a lichenoid dermatitis. The patient was treated with a course of oral prednisolone with marked improvement. Re-challenge with abemaciclib weeks later was well tolerated, without relapse of the skin toxicity. The reminiscent lesions evolved to grayish-brown patches, mostly located on the face and neck.

Discussion

Considering the increasing use of these molecules and the prevalence of breast cancer, it's important for both dermatologists and oncologists to know the associated skin toxicities and the symptoms management. Scarce information exists about this topic, so the presented cases help to elucidate the skin manifestation of the cyclin-dependent kinase 4/6 inhibitors.

Abstract N°: 156

Title: Torasemide-induced vascular purpura in the course of eosinophilic granulomatosis with polyangiitis

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Introduction

Torasemide is a loop diuretic which molecule is similar to the sulphonamides described as eosinophilic granulomatosis with polyangiitis (EGPA) triggering drugs. The presented case is probably the first description of torasemide-induced vascular purpura in the course of EGPA.

Materials and methods

74-year-old patient was admitted to the Department of Dermatology with purpura-like skin lesions within the upper and lower limbs, which appeared 7 days before admission, complaining on lower limb paresthesia and pain; she suffered from bronchial asthma, chronic sinusitis, ischemic heart disease, mild aortic stenosis, arterial hypertension, and degenerative thoracic spine disease. Ten days prior to admission, a torasemid at a dose of 50 mg per day was prescribed to the patient by a general practitioner due to high blood pressure. Doppler ultrasound excluded deep venal thrombosis; laboratory tests revealed leukocytosis with eosinophilia, elevated CRP, D-dimers. Indirect immunofluorescent test identified a low titer (1:80) of ANA antibodies, but elevated (1:160) ANCA - immunoblot found them to be pANCA. A chest X-ray showed increased vascular lung markings, high-resolution CT revealed peribronchial glass-ground opacities. Skin biopsy from the lower limb revealed perivascular infiltrates consisting of eosinophils and neutrophils, fragments of neutrophil nuclei and fibrinous necrosis of small vessels. Electromyography highlighted a loss of response from both sural nerves, as well as slowed conduction velocity of the right tibial nerve and in both common peroneal nerves. Both clinical characteristics of skin lesions and histopathology suggested a diagnosis of EGPA, which was later confirmed by consultant in rheumatology. The patient was commenced on prednisone at a dose of 0.5 mg per kg of the body weight daily and mycophenolate mofetil at a daily dose of 2 g; antihypertensive therapy was modified and torasemide was replaced by spironolactone 25 mg per day. The treatment resulted in a gradual regression of skin lesions within a few weeks.

Results

The chemical structure of torasemide is similar to molecule of sulfonamides which previously were found to be a triggering factors for EGPA. A comparison of the chemical structure of torasemide and sulphanilamide molecules is presented in figure. A clear time relationship can be observed between the commencement on torasemide and the onset of symptoms in patient. A coexistence of several disorders (asthma, nasal polyps, symptoms of peripheral neuropathy) suggest EGPA could develop years before oral intake of torasemide, however sudden onset of skin symptoms shows torasemide to be possible inducing factor for the development of vascular purpura in patients suffering from EGPA but without previous cutaneous involvement.

Discussion

The chemical structure of torasemide is similar to molecule of sulfonamides which previously were found to be a triggering factors for EGPA. This drug belongs to the group of loop diuretics classified as sulfonamide derivatives. To date, only three cases of leukocytoclastic vasculitis have been reported after the administration of torasemide; all developed cutaneous symptoms within 24 hours of the administration of torasemide in patients with no previous history of drug hypersensitivity and disappeared within 8-15 days after drug discontinuation.

Abstract N°: 289

Title: ANALYSIS OF SKIN CD44 EXPRESSION IN PATIENTS WITH ALLERGIC AND IRRITANT CONTACT DERMATITIS AND VULGAR PSORIASIS

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Introduction

Some studies on animal models have indicated the potential role of CD44 in allergic contact dermatitis (ACD). The CD44 antigen, found on cell membranes, is a glycoprotein and is involved in intercellular interactions, cell adhesion and migration, and activation of lymphocytes, haematopoiesis and tumour metastasis. It also participates in cell proliferation and differentiation, cellular migration, angiogenesis, the expression and binding of cytokines, chemokines and growth factors to corresponding receptors, adhesion of protease to cell membranes and is a signal for cellular survival.

In this study we wanted to examine skin CD44 expression in patients with ACD and irritant contact dermatitis (ICD), and to compare it to patients with psoriatic lesions and healthy controls' (HCs) skin.

Materials and methods

The study included 200 patients comprising four groups with 50 patients: ACD, ICD, psoriasis vulgaris, and HCs. CD44 expression was determined by immunohistochemical analysis using an optical microscope, and the results were visualized semiquantitatively by determining the percentage of immunoreactive cells in the epidermis, dermis, and on lymphocytes.

Results

According to the obtained results, the highest CD44 expression was found in ICD, followed by ACD, psoriasis vulgaris, and lastly, the HCs ($P < 0.001$). Epidermal CD44 expression was significantly higher in contact dermatoses (especially in ICD) compared with psoriasis and healthy skin ($P < 0.001$). Similarly, CD44 expression in the dermis and on lymphocytes was strongest in ICD, although less pronounced than in the epidermis.

Discussion

Based on our results of low CD44 expression in healthy skin, moderate expression in psoriasis, and strong CD44 expression in ICD and ACD, one could imagine the possible application of a CD44 blockade for these diseases and its usefulness in patients with contact dermatoses. Thus, since CD44 is a potential therapeutic target for modulating disease pathology and leukocyte recruitment, further studies on CD44 expression would be valuable.

Abstract N°: 675

Title: Helicobacter pylori and chronic urticaria: a retrospective study on 205 patients

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Introduction

Chronic urticaria (CU) is a common and potentially debilitating skin condition. Some recent studies point out the Helicobacter Pylori infection as being an element of major importance in the pathogenesis of chronic urticaria.

The aim of this study is to determine the prevalence of H. pylori infection in a series of patients suffering from CU.

Materials and methods

This is a retrospective study conducted at the dermatology department, within the period from January 1st, 2018 to January 1st, 2022.

Patients included met the following criteria: patients had urticaria for at least 6 weeks; other known causes of urticaria were excluded by appropriate testing; the initial diagnosis of H pylori infection was made by either serology, urea breath test, or upper endoscopy.

Data were collected through direct interviews, and the results of laboratory investigations were recorded in the extraction sheet.

Results

The study included a total number of 205 cases with chronic urticaria. The average age of the population was 45.2 [±15.3] years, with a sex ratio (M/F) of 1.13. 92 of our patients showed epigastralgia, 10 of our patients were followed for chronic epigastralgia and we suspected Helicobacter pylori infection in 21 patients.

Before their consultation, 19 patients were already treated with antihistamines alone without improvement in their symptoms. Paraclinical explorations had isolated Helicobacter pylori in 18 patients. We had treated our 21 patients with Hp eradication treatment with good clinical evolution in 17 patients and therapeutic resistance in the rest of them.

Discussion

Chronic urticaria is often defined as chronic idiopathic urticaria (CIU) because its causes remain undetermined in the vast majority of patients. Several factors play a role in the occurrence of outbreaks, the role of the H. pylori infection in the pathogenesis of CIU remains controversial, however H.pylori remains one of the causes to be explored.

Recent studies have shown an association between CU and H. pylori infection. And our results suggest that H. pylori should be included in the diagnostic workup of chronic urticaria especially in patients with concurrent gastrointestinal symptom.

Abstract N°: 693

Title: Drug eruption caused by azathioprine

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Introduction

Azathioprine is an effective corticosteroid-sparing agent for a variety of systemic autoimmune diseases. Unlike Azathioprine's well-characterized and well-recognized dose-dependent side effects, its hypersensitivity syndrome is rare and unpredictable as it is thought to be a delayed immune-mediated hypersensitivity reaction. Procedures such as patch testing and delayed

intradermal skin testing is increasingly used to diagnose delayed adverse drug reactions.

Results

A 75-year-old female patient with Crohn disease presented with a 2 days-history of widespread pruritic skin eruption and polyarthralgia. She was started on azathioprine in the past 5 weeks and had a second injection of infliximab 3 weeks earlier. On physical examination, the patient had a good general condition with stable vital signs. There were multiple erythematous maculopapular patches on the trunk and proximal aspects of the limbs and no mucosal involvement. The patient's white blood count, basic metabolic panel, and liver function tests were all within normal limits. A skin biopsy showed mild epidermal acanthosis and mild dermal edema with perivascular infiltrate made of lymphocytes, neutrophils and eosinophils.

The combination of arthralgia and cutaneous eruption was felt to be consistent with an azathioprine hypersensitivity reaction and the drug was stopped, resulting in a dramatic improvement of the skin eruption within 72 hours. Given the onset of the illness within 5 weeks of initiating azathioprine and improvement upon its discontinuation, the diagnosis of a mild form of azathioprine hypersensitivity syndrome (AHS) was most probable. However, infliximab could not be entirely ruled out. Thus, skin testing was performed 6 weeks after the drug reaction, according to the European Society of Dermatology's guidelines. A patch test using azathioprine 1% and 10% was performed, using Finn chambers on Scanpor tape, with negative reactions on day 2 and day 4. Prick testing with 1/10 and 1/100 dilutions were also performed on the patient's arm resulting in a negative reaction. However, delayed intradermal testing, using the same dilutions, showed erythematous papules on day 4 and was considered as a delayed positive reaction.

Hence, the diagnosis of AHS was made and infliximab was reintroduced without incident. Azathioprine rechallenge was judged inappropriate as the patient had a mild form of Crohn disease well-controlled with injections of infliximab.

Discussion

Azathioprine hypersensitivity syndrome (AHS) is described as the association of constitutional symptoms such as fever, fatigue and arthralgias and a skin eruption, occurring 3 weeks after azathioprine initiation. The most commonly reported cutaneous manifestations are Sweet's syndrome, erythema nodosum and non-specific

eruption such as maculopapular rash. While the exact etiology of AHS remains unknown, studies have suggested a type III or IV immune-mediated reaction. Although not widely available and validated, procedures such as patch testing and delayed intradermal skin testing may provide valuable information to identify likely implicated drug(s). A delayed reading of these skin tests especially delayed intradermal skin testing has been proven interesting in the diagnosis of delayed adverse drug reactions. Little information concerning skin testing with azathioprine is reported in the literature. Therefore, further studies are needed to understand the value of skin testing in diagnosing AHS.

Abstract N°: 835

Title: Generalized eczema revealing Wiskott-Aldrich syndrome

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Introduction

Wiskott-Aldrich syndrome (WAS) is an X-linked recessive immune deficiency characterised by a triad of eczema, thrombocytopenia and recurrent, sometimes severe infections. The responsible gene was identified in 1994, but the molecular and cellular mechanisms of this syndrome are still being researched.We report a new case of a generalized eczema associated with recurrent infections, suggesting a Wiskott-Aldrich syndrome.

Materials and methods

Results

A 5-year-old boy, the youngest of two children, born of a non-consanguineous marriage, with no similar symptoms in the family. He presented a history of generalized eczematous rash since the age of one year with recurrent ORL infection without other disorders. Skin examination showed a generalized eczematous rash covering the whole body with localized excoriation. The rash was more marked on the back and limbs with secondary skin thickening. There were molluscum contagiumsum lesions on the genitalia. Blood counts revealed thrombocytopenia. In the immunoglobulin profile, IgE and IgA were elevated, while IgG and IgM were normal. Because of the generalized skin rash, recurrent infection, thrombocytopenia, and clinical signs of immunodeficiency, a possibility of primary immunodeficiency was suspected, especially Wiskott-Aldrich syndrome (WAS). Flow cytometry showed reduced expression of the WAS protein (WASp), focused exon sequencing revealed no mutations. However, full exon sequencing was not done due to financial constraints. We administered intravenous immunoglobulin in combination with a steroid topic and emollient. A clear improvement of the skin lesions as well as the child's general health was obtained. The child was given antibiotic prophylaxis and followed up regularly. The parents were informed about his prognosis and the treatment option available, including haematopoietic stem cell transplantation.

Discussion

Our case is unique by the occurence of generalized eczema associated with recurrent infections, suggesting a suspicion of Wiskott-Aldrich syndrome.

Wiskott-Aldrich syndrome is an X-linked recessive primary immune deficiency affecting T and B lymphocytes and platelets.

The classic form of Wiskott-Aldrich syndrome manifests as a triad made of reduced platelet counts, recurrent bacterial, viral and fungal infections and skin eczema.

In the long term, the occurrence of lymphoma, leukaemia, or autoimmune diseases make the syndrome severe.

The specific treatment of eczema in WAS is not well defined, topical emollients and steroids can be given. Topical tacrolimus is an option as a steroid-sparing agent. Intravenous immunoglobulin may be necessary in severe cases.

However, haematopoietic stem cell transplantation remains the gold standard.

Abstract N°: 917

Title: A bullous eczema to an adhesive plaster

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Introduction

Medical adhesive dressings are widely used in hospital and outpatient medicine. They are often marketed as "hypoallergenic" materials. However, they can be a source of allergic contact dermatitis.

Materials and methods

Here we describe a case of allergic contact dermatitis (ACD) due to these dressings.

Results

A 52-year-old woman, followed for chronic pulmonary heart disease, presented with a week-long pruritic rash on the anterior aspect of her right arm (Figure 1). The skin lesions appeared at the site of placement of a tape (Figure 2) to secure the peripheral venous line. The tape was stuck to the patient's back and gave a positive reaction of erythema and pruritus (Figure 3). The patient was treated with dermocorticoids and daily washing with Chlorhexidine with good improvement. The patient was advised to avoid the use of such dressings.

Discussion

There are few reports in the literature describing proven allergic contact dermatitis (ACD) due to medical adhesive bandages. The frequency of ACD caused by modern medical adhesives and dressings is probably underestimated. It is difficult to obtain information from manufacturers about their composition and therefore impossible to test with sensitizing substances. Acrylates and methacrylates, present in these dressings, are the most incriminated. These are acrylic resin monomers present in various materials, such as nail cosmetics, dental materials, printing inks and adhesive dressings. They are responsible for allergic reactions, such as dermatitis and stomatitis, with new and emerging sources resulting in altered clinical presentations. But, they are well known for their cross-reactivity patterns, being able to cause multiple positive reactions. This explains why patch testing with an extensive series is often considered unnecessary. It is necessary to label all components of adhesive dressings on their packaging and to avoid certain sensitizing molecules [4]. Unfortunately, the respective companies do not provide such information, even when requested in specific cases of contact dermatitis.

Abstract N°: 1036

Title: Cutaneous toxicity associated with cytarabine infusion in a child

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Introduction

Cytarabine is an antimitotic agent, which inhibits cell division by inhibiting DNA synthesis during the S phase of the cell cycle. Dermatological complications induced by cytarabine are frequent. We report the case of cytarabine-related skin toxicity in a child.

Materials and methods

Results

An 8-year-old and 9-month-old boy followed in pediatrics for stage 3 abdominal burkitt's lymphoma, under chemotherapy protocol. The child received cytarabine for 5 days, an erythematous, warm, non-itchy rash localized on the forehead and extremities appeared on the fourth day of chemotherapy. Dermatological examination showed erythema in the frontal region accentuated in the left periorbital area with erythema at the extremities. The rest of the exam was unremarkable. Laboratory tests revealed pancytopenia without other abnormalities. The evolution was marked by the regression of the lesions two days after stopping the cure. A similar rash occurred again just after starting the next course of cytarabine with regression in a few days. After discussion with pediatricians, skin toxicity was considered a minor adverse effect that does not contraindicate chemotherapy.

Discussion

Cytarabine can cause cardiovascular, dermatological, gastrointestinal, hepatic and immunological adverse effects. Most skin reactions are manifested by acute generalized exanthematous pustulosis, alopecia, pruritus, skin erythema or urticaria. Most cytarabine-related skin reactions resolve without sequelae. Co-administration of dexamethasone rapidly improves the rash, allowing chemotherapy to continue and suggesting the beneficial effect of corticosteroids.

Abstract N°: 1090

Title: The association between allergic reactions and lip inflammatory lesions (cheilitis)

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Objective: To investigate association between cheilitis and allergic reactions examined in patients with cheilitis, as well as to identify the most common allergens responsible for allergic reactions in patients primarily suffered from cheilitis. Within the same patients, we also investigated influence of mental stress.

Subjects and methods: 50 patients with recurrent cheilitis were involved in this study. All of them were dermatologically examined and tested by patch and prick test (standard group of allergens). Additionally, we measured their mental stress levels by using the Perceived Stress Scale (PSS).

Results: In patients with cheilitis, positive prick tests (atopy) were positive in majority of them (84%). The most common positive allergens were: cobalt chloride, nickel sulfate, thimerosal (54%) and inhalant allergens (46%). Positive patch-test results were significantly more often within the group of patients who commonly used cosmetic, hygienic, and decorative products. Additionally, we founded lower stress level within the group with confirmed allergies compared with the group of non-allergic patients.

Conclusion: Our results confirmed association between cheilitis and allergies by indicating a higher incidence of cheilitis in the people prone to allergies (atopy). To our knowledge, this is the first study which investigated the patients with cheilitis, simultaneously analyzing their allergies, responsible allergens and perceived stress within the same group.

Key words: cheilitis, lip inflammation, allergy, allergens, mental stress

Abstract N°: 260

Title: Common mistakes in the treatment of Infantile Haemangioma

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Introduction

The gold standard for the treatment of infantile haemangioma (IH) is oral propranolol. It is highly effective and if therapy is started before the end of the lesion's growth phase, it poses less risk of negative sequelae. However, most children are referred too late for the treatment either because of parental skepticism or due to outdated approaches by some physicians.

Materials and methods

Relying on the experience from everyday practice and review of the contemporary literature we evaluate the common mistakes by physicians and parents regarding the therapy of infantile haemangiomas.

Results

A main problem in the IH treatment is the delayed administration of the oral propranolol. Associated factors are tardy visit to the doctor, late referral to an experienced dermatologist or the watchful waiting approach, practiced by some physicians due to outdated beliefs. Late onset of the therapy has lower efficacy and reduced ability to prevent risks such as residual anomalies, telangiectasias, fibrofatty tissue, anetoderma, etc.

Other common physicians' mistakes are various methods of approach such as surgical removal of IH, laser therapy, systemic corticosteroid therapy, intralesional corticosteroid therapy or topical therapy attempts for high-risk IH indicated for systemic treatment. Emerging risks of that are relapses, prolonged recovery period, pain, psycho-emotional impact in both children and parents, general anesthesia for some, skin burns, hormonal imbalance. Another common misconception is discontinuation of the treatment with oral propranolol before the phase of proliferation as a satisfactory result has already been achieved. This is a serious prerequisite for relapses.

Parents' behaviour is also a key element for a successful treatment. Common mistakes are dosing errors, prior to meal administration of the propranolol syrup, late receiving of the second dose.

High-risk infantile haemangiomas can cause life-threatening complications, functional problems, facial disfigurement, ulceration, scarring. In such cases the immediate commencement of oral propranolol is obligatory.

Discussion

The dermatologists must be able to identify correctly infantile haemangiomas and conduct proper consultation on the matter. Their treatment is specific, important and must be performed by an experienced physician. In the era of already established efficacy and safety of oral propranolol, mistakes in the therapy are inadmissible.

Abstract N°: 372

Title: Multifocal Infantile Hemangioma - Presentation of 4 Cases with Different Clinical Patterns

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Introduction

Infantile haemangiomas (IHs) are quite frequent vascular tumours in infancy, occurring in as many as 3-10% of infants. According to the distribution pattern they are categorized into the focal, multifocal, segmental and indeterminate type. Multifocal IHs are focal lesions affecting more than 1 anatomic site, and represent the rarest form of IH manifestation (3.6% of all affected infants). Multifocal cutaneous IHs may be a marker for extracutaneous disease, with the liver being the most frequently affected organ.

Results

We report 4 infants with multifocal IHs presenting with different clinical patterns. First patient was very preterm male infant born after 29 gestational weeks (GW) and with a birth weight (BW) of 1550g. At the postnatal age of 4 weeks, numerous (>20) cutaneous IHs were noted. They were small (up to 1 cm), diffusely distributed, superficial, round to oval in shape. No additional internal organ involvement was noted. He was treated with oral propranolol but during follow-up period we noticed only mild response to the therapy; in fact, IHs retreated as expected in spontaneous involution. Second patient was very preterm female infant born from twin pregnancy in 32nd GW with BW of 2040g. At the age of about 2 months several varied IHs appeared. Most of them were small (1-3 mm), round and superficial, but 3 were larger (up to 1 cm), irregularly shaped and of combined type. During the next few months many more new IHs appeared on skin but also on oral mucosa (a total of about 30). All of new IHs were small (up to 3 mm), round and in the level of the surrounding skin. There were no local complications of IHs, nor IHs on internal organs. The possibility of application of oral propranolol was discussed with parents in detail, but they did not opt for it. During the follow-up period spontaneous significant regression of all IHs was observed. Third infant was term born, female infant from single pregnancy (38 GW; BW 3350 g). More than 15 focal, small (1-3 mm) IHs were noticed during first week of life, and even more appeared during next few weeks. Abdominal ultrasound visualized multiple hypoechoic areas, and computed tomography demonstrated multiple vascular malformation in the liver. At the age of 2.5 months oral propranolol was administered. Gradual regression of skin changes and substantial reduction of lesions in the liver parenchyma were noticed during follow-up, after 6 months of propranolol therapy. Fourth patient was preterm girl, born from single pregnancy in 34th GW, with BW of 2420g. At the age of about 6 weeks numerous small, round, flat IHs were noticed. Since we noticed more than 20 IHs, investigations was performed in order to establish if there were IHs on internal organs. Abdominal ultrasound revealed several lesions with characteristics of hemangiomas; this suspicious was confirmed by abdominal MRI. Systemic therapy with propranolol was introduced and excellent response of hepatic and

cutaneous lesions was noticed.

Discussion

Early evaluation for extracutaneous lesions is indicated in infants with 5 or more cutaneous IHs. Physicians should be aware of this association. Treatment of infants with multifocal IHs require multidisciplinary approach and they should be followed in tertiary centres.

Abstract N°: 465

Title: Digital necrosis: The tip of the iceberg! About 69 cases.

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Introduction

Digital necrosis is the ultimate stage of distal ischemia and presents a problem of etiological diagnosis given the diversity of causal pathologies dominated by connectivites (systemic scleroderma...), arteriopathies, vasculites, haemopathies or occupational diseases...

It is a medical emergency requiring a rigorous diagnostic approach in order to avoid the evolution towards irreversible gangrene limiting the therapeutic options to amputation and lifelong disability!

Materials and methods

This is a cross-sectional study with an analytical aim that included patients hospitalized in the dermatology and venereology department of the Ibn Rochd University Hospital in Casablanca during the last 21 years between January 2000 and November 2021 in order to study the epidemiological, etiological and therapeutic profile of digital necrosis in our department.

Results

69 cases were collected over the last 21 years. They were 35 men and 34 women with an average age of 51 years and extremes ranging from 25 to 87 years. 31 patients were smokers (45%) and 11 were cannabis users (15%). Raynaud's phenomenon was present in 39 cases (56%).

The average diagnostic delay was 7 months [10 days-5 years].

Obliterative arterial disease of the lower limbs was the most frequent etiology (31%), followed by systemic scleroderma (13%), systemic lupus erythematosus (13%), Leo Buerger's disease (13%), mixed connectivities (7%), cryoglobulinemia (5%), Gougerot-Sjögren's disease (5%), anti-phospholipid syndrome (5%) and 3 cases of systemic vasculitis (4%), 1 of which was Takayasu disease.

Etiological treatment was the main therapeutic means associated with smoking cessation, vasodilator treatments and local care. 19 patients (27%) required amputation, 16 (23%) necrosectomies and 3 (4%) endovascular revascularisation.

Discussion

Our work has shown the diversity of etiologies of digital necrosis dominated by obliterative arterial disease and Leo Buerger's disease in male smokers (predominantly in the toes) and connectivites in women (fingers alone or associated with toes).

The prognosis is poor, requiring early and appropriate management.

Abstract N°: 546

Title: Glomangioma

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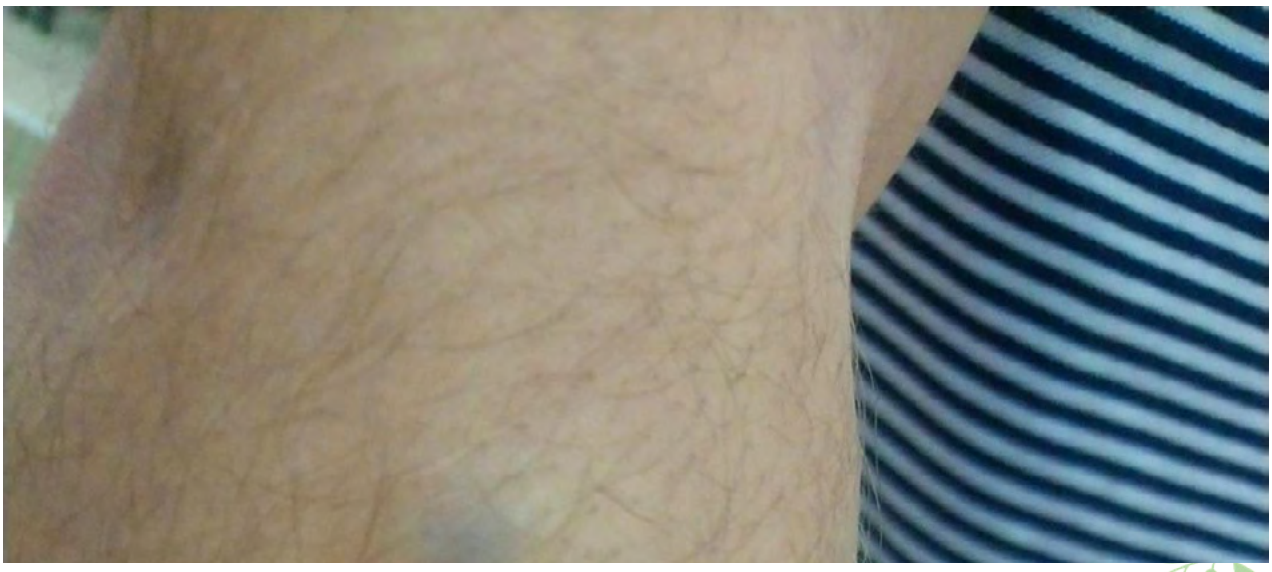
Introduction

Glomus tumors are solitary and usually located in the periungual region. Multiple glomus tumors (glomangions) are a less common subtype. They are large, dermal lesions similar to plaques. They are usually not manifested by pain, sensitivity to compression and temperature. Clinical diagnosis is confirmed by dermoscopy and histopathology. Surgical excision is recommended for solitary lesions. Tumors have a good prognosis. (1-4)

Materials and methods

Results

This paper presents a 23-year-old man with numerous, painless blue subcutaneous nodules of dimensions that vary from a few millimeters to about 1.5-2 cm. The changes were localized on the upper torso, upper extremities and neck (images 1,2 and 3). They are asymmetrical, solitary on the neck and upper extremities, and on the side of the trunk multiple, in the form of a plaque up to the size of a palm. The changes are palpably soft. The patient is healthy, denies any other problems and does not take any medication. He has had these skin changes as long as he can remember. Changes first appeared when he was a baby. Throughout his life, they kept appearing and spreading, which resulted in diffused distribution on his skin. He also feels pain when punched, otherwise the changes are asymptomatic. His father has the same changes as his father's sister and her grandson. Patient's father (65) suffers from hipertenison for which he takes antihypertensive therapy. Grandma (85), his father's aunt, and her grandson both have same blue skin changes. The dermoscopic finding is largely dominated by homogeneous blueviolet unstructured fields. The purple lagoons, surrounded by a pale halo, stand out. Ultrasonography shows numerous vascular tubulonodular incompressible vascular structures.



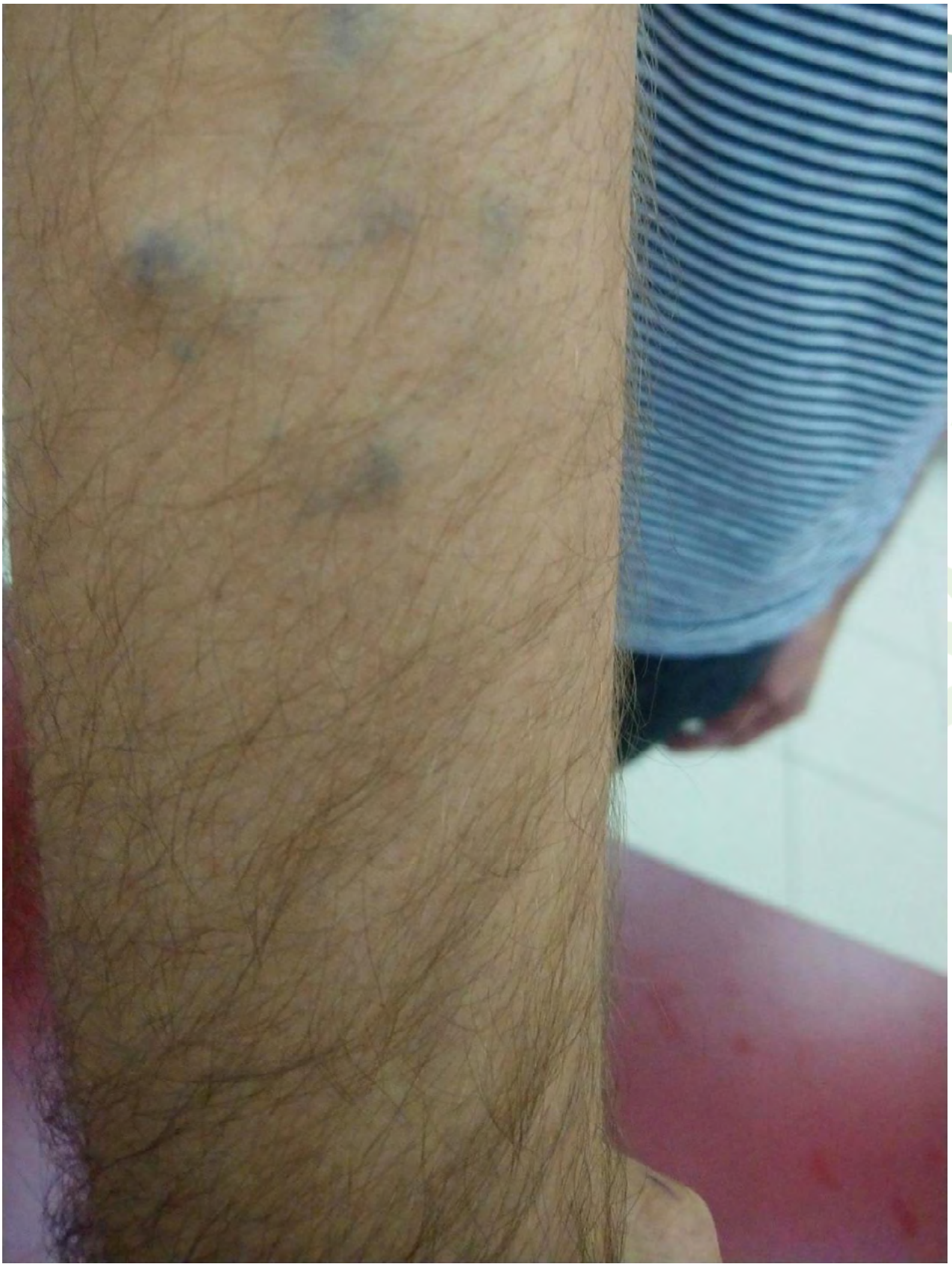


Fig. 1. Clinical appearance of glomangioma of the left posterior forearm

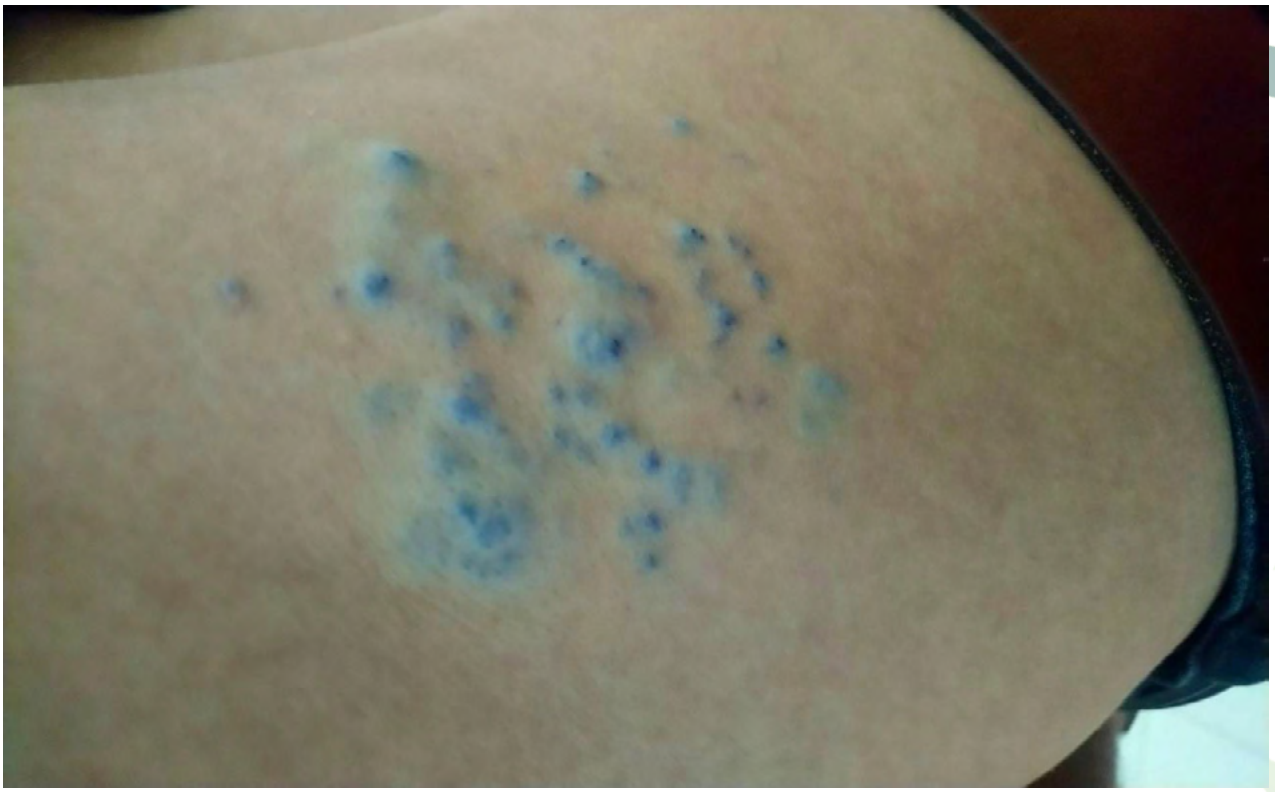


Fig. 2. Clinical appearance of plaque -like glomangioma on the left side of torso

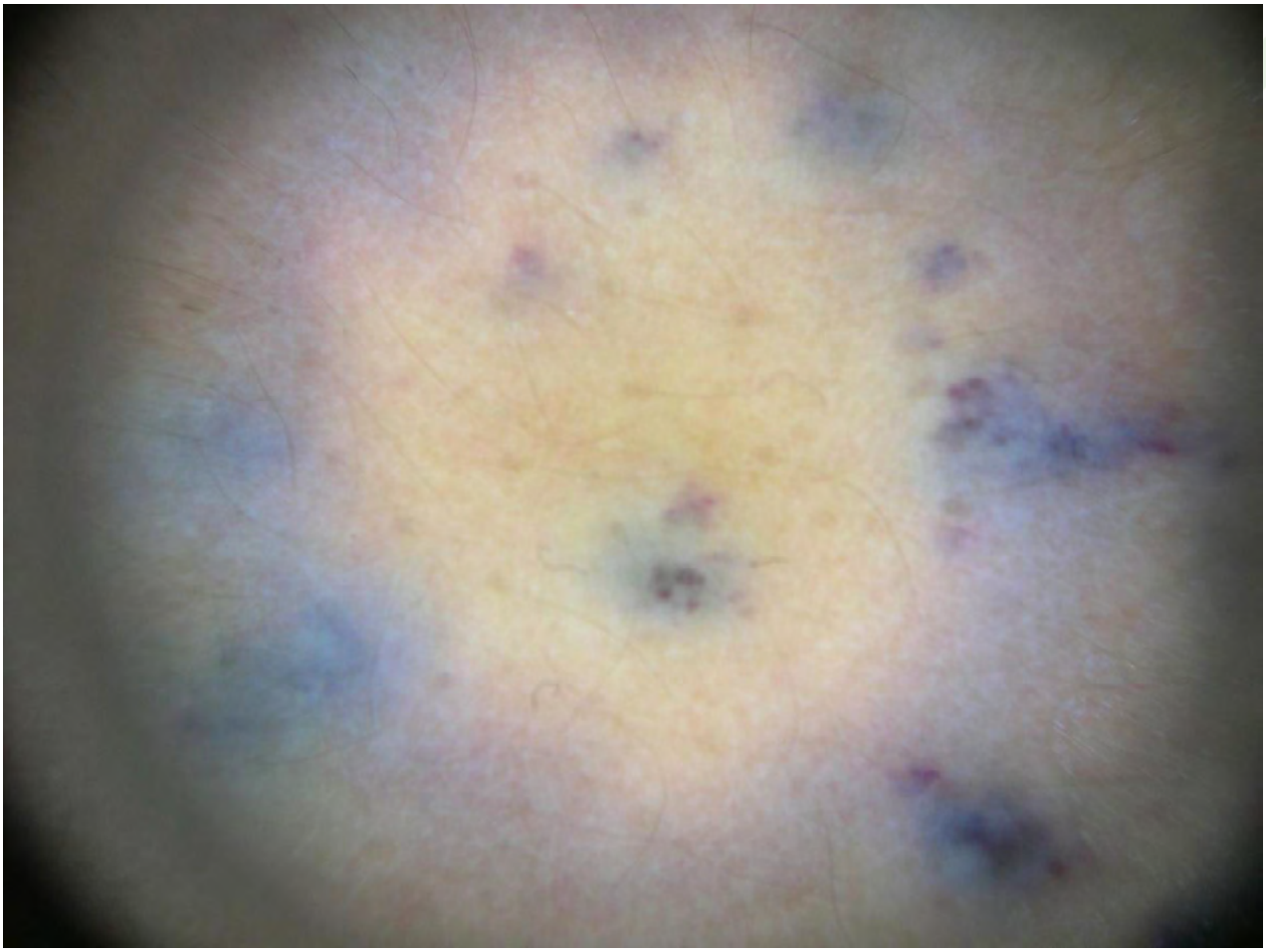


Fig. 3. Dermoscopic appearance of glomangioma of the left side of torso

Discussion

Subtypes of glomus tumors in adults and children are solitary, multiple, solid, diffuse. Glomus cell tumors have recently been divided into two main subtypes: glomus tumor and glomangioma (1,2,6,7). Glomangiomas occur in

childhood and adolescence, are asymptomatic, have no tendency toward the subungual region, and are often multifocal. They are pink or blue, often dark with age. They can be plaque-like or nodular. Multiple glomangiomas are rare and account for about 10 percent of all glomus tumors. Since glomangiomas are not neoplastic, they resemble venous malformations (7).Subungual glomangiomas or glomus tumors are 75% more common in women. Nonspecific pain is the main ailment. Extradigital glomus tumors are rare, more common in men, and present a diagnostic challenge (5). Multiple glomangiomas are very rare, less than ten patient reports have been described so far, four of which were plaque-like glomangiomas. Although an association with multiple disseminated glomus tumors has been reported in the literature, radiological studies do not confirm this. (4)

Conclusion

We presented a young man with painless, palpably soft solitary and multiple glomus tumors. Other members of his family have the same, blue painless changes. The dermoscopic findings are homogeneous blue-purple unstructured fields and isolated purple lagoons surrounded by a pale halo.

Abstract N°: 552

Title: Hemorrhagic Bullous Henoch-Schonlein Purpura: An unusual clinical presentation

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Introduction

Henoch-Schönlein Purpura (HSP) or IgA vasculitis is the most common systemic vasculitis of childhood with skin, joint, gastrointestinal and kidney involvement. Despite being common in adults, cutaneous hemorrhagic bullous may rarely occur in childhood with an incidence rate lower than 2%.

Case report

A 16-year-old patient with a history of pulmonary tuberculosis 9 months before the onset of symptoms, for which he was treated with antituberculosis drugs for 6 months presented with a 15-day history of fever, purpuric rash localized in lower limbs, intermittent abdominal pain, arthralgia, hematemesis and melena. The patient was referred to our department for the suspicion of erythema multiforme. On clinical examination, the patient had hemorrhagic bullae with purpuric macules and petechiae, symmetrically located on the upper, the lower limbs and on the auricles, without mucosal involvement. Laboratory examinations revealed elevated leucocytes ($18*10^3/mm^3$) with neutrophils at $15*10^3$ mm^3, C-reactive protein (45 mg/L; range 0–6 mg/L) and erythrocyte sedimentation rate (35 mm/h). Biochemical parameters, coagulation tests, urinalysis, anti-nuclear antibody, anti-double stranded DNA, antineutrophil cytoplasmic antibodies (c-ANCA, p-ANCA), complements (C3 and C4) and rheumatoid factor levels were all within normal ranges. Skin biopsy was performed; showed leukocytoclastic vasculitis of small vessels, then the diagnosis of Hemorrhagic Bullous Henoch-Schönlein Purpura was confirmed based on clinical, biological and histological findings. Therefore, the patient was referred to the internal medicine department where he received antibiotics with oral corticoids. The clinical symptoms were resolved completely within 3 weeks and there was no recurrence.

Discussion

The most common skin manifestations of Henoch-Schönlein Purpura include palpable purpura and petechiae with symmetric distribution, localized especially on the lower extremities. This unusual clinical presentation may therefore pose a diagnostic challenge due to the variety of bullous diseases including erythema multiforme, bullous impetigo, dermatitis herpetiformis, staphylococcal scalded skin syndrome and linear IgA bullous dermatosis of children, emphasizing the importance of performing a skin biopsy to confirm the diagnosis. The early use of systemic corticosteroids has been suggested in bullous HSP patients to be beneficial by reducing the extent of lesions and minimizing sequelae of disease. Most of the bullous skin lesions resolve within a few weeks with a good prognosis despite the frightening clinical aspect.

Abstract N°: 636

Title: infantile hemangioma:epidemio-clinical and therapeutic profile

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Introduction

Infantile hemangiomas (IH) are vascular tumors affecting 5% of children.It is a benign lesion of undetermined etiology following proliferation of endothelial and mesenchymal cells with formation of neo-vessels in the dermis. It regresses spontaneously in most cases

Materials and methods

This is a retrospective study lasting 12 years from from January 2010 to April 2021 , conducted at the Dermatology and Venereology Department of La rabta hospital Tunis Tunisia including 67 children. Informations were collected from the consultation records using a survey card containing epidemiological, clinical,and therapeutic data .

Results

During the study period, we collected the records of 67 children followed for IH. The average age was 8 months. There was a female predominance (73.1%). Lesions were multiple in 10.44% of patients and single in 89.55% of cases. The cervicofacial region was the most frequent location: 58% of which 21% were periorificial, limbs 19%, trunk 16% and mucous membranes 13%. Ulceration was found in 28.35% of cases. The average size of the lesions was 2.9 cm and the extremes were ranging from 0.5 to 9 cm. Doppler ultrasound was used in only 8 patients. Therapeutic abstention with regular monitoring was recommended in 30 patients, i.e. 50% of cases, with complete regression in 11 patients. Oral propranolol was proposed in 25% of cases (15 patients) for about 6 months. The main indications were: ulceration, Impairment of function and risk of permanent disfigurement . The lesions regressed totally in 6 patients, partially in 5 cases.

Discussion

IH is the most common vascular tumor in infants, more common in girls. Some risk factors are well known such as family history of hemangiomas, higher maternal age and prematurity. IHs are often unique, with a predominant location on the head and neck. They usually measure less than 3 cm. The most frequent complication is ulceration. Diagnosis is clinical. An ultrasound and/or a magnetic resonance imaging (MRI) are requested in case of doubt. Although it is a benign lesion, the IH can cause ulceration, impairment of a vital function (ocular compromise or airway obstruction), or risk of permanent disfigurement. Regression is often spontaneous, therapeutic abstention is recommended with regular clinical monitoring. Since 2008, we have been able to demonstrate the effectiveness of oral propranolol in the treatment of IH, which has since supplanted general corticosteroid therapy helping to avoid its adverse effects. The recommended dose is 2 to 3 mg/kg/day divided into 2 to 3 doses. The treatment is started in hospital after a pre-therapeutic checks (a cardiovascular examination, an electrocardiogram, a cardiac echography and blood sugar).

Abstract N°: 889

Title: Refractory livedoid vasculopathy successfully treated with Baricitinib: a case report

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Introduction

Materials and methods

Results

Livedoid vasculopathy (LV) is a chronic, refractory, ulcerative cutaneous disease characterized by progressive clinical manifestations preliminary performed as painful and/or pruritic erythema, papules on the bilateral lower extremities, followed by multiple ulcerations resulting in scars termed atrophie blanche. The etiology of LV remains obscure, and there are no established therapeutic recommendations as the therapeutic effectiveness varies according to previous data. Herein, we reported a patient with refractory livedoid vasculopathy successfully treated with Baricitinib, a selectively inhibit jak1 and jak2, after the treatment failure of glucocorticoids and anticoagulants.

A 26-year-old woman presented to our clinic due to over 2-year painful recurrent ulcers on the lower extremities. In July 2019, several irregular erythema with irritating pain presented on the bilateral dorsum of feet without predisposing factors. The skin biopsy was characterized by dermal vascular circuity with intraluminal thrombosis, segmental hyalinization of dermal vessels, indicating the diagnosis of 'livedoid vasculopathy'. The therapeutic regime was prednisone (60mg qd) combined with anti-ulcer therapy, and the lesions were partially relieved with this high dosage for a week. In the next two years, the lesions recurrent during the glucocorticoid dosage tapering, new ulcers often presented and never completely healed. She developed steroid-induced diabetes and denied any other medical history. Physical examination showed multiple ulceration with black scrabs on the bilateral ankles and dorsal feet. The livedoid vasculopathy activity/severity score (LVAS) was 5, of which the maximum score is 6. After routinely screening without contradictions and fully off-label consent, the patient was prescribed Baricitinib 4mg once a day. The erythema gradually diminished, and the ulcers healed after 12-week treatment. Thus, the dosage of Baricitinib was halved at 12 week without disease fluctuation. There was no adverse event reported during the 20-week follow-up. Based on the observation, We suggest that Baricitinib exhibits the potential to serve as a therapeutic option for refractory livedoid vasculopathy.

Discussion

Abstract N°: 911

Title: Treatment of complicated cutaneous vascular lesions in skin of colour

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Introduction:

Some cutaneous vascular lesions are dermatological emergencies while some are resistant to regular treatments.We would like to discuss the treatment of complicated cutaneous vascular lesions like hypertrophic portwine stain, orificial hemangiomas, ulcerated hemangiomas and recalcitrant angiokeratomas of scrotum.

Materials and methods

Results

Laser therapy has become indispensable in the management of vascular birthmarks. In selecting a proper balance of wavelength, pulse duration, and fluence, the physician can mold laser energy to effectively manage lesions once considered untreatable.

In the presentation, we will be discussing few complicated vascular lesions like hypertrophic portwine stain, orificial (oral and genital) hemangiomas, ulcerated hemangiomas and recalcitrant angiokeratomas of scrotum that were treated in our centre.

Infantile hemangiomas are rare but very important dermatologic conditions that require intervention. The understanding of treatment of infantile hemangiomas have now changed. Most of the infantile hemangiomas require intervention for 2 reasons- risk of scarring and incomplete clearance.

Many cases of lip hemangiomas in infants of age 2 to 4 months were treated. Some of these lesions were painful and ulcerated, hampering the ability to take feeds. These lesions started responding in 2 sessions of plused dye laser and nearly resolved in 4 sittings.

Few infantile hemangiomas are extremely painful. Especially ulcerated ones in the vulva of female infants can produce severe pain whenever the baby micturates. A large vegetative ulcerated hemangioma on the arm of an infant was much painful that it lead to failure to thrive. The baby was treated with PDL and after resolution of lesion, the baby began to gain weight well.

Infants with ulcerated/ orificial hemangiomas were treated with short general anesthesia in a day care setup. Most of these hemangiomas required 3 to 4 sessions for clearance. It is important to understand that ulcerations over hemangiomas heal only with laser and lasers can be used safely on ulcerated hemangiomas. These hemangiomas needed to be treated when they are fast growing (4 to 6 months). The complications commonly noted were post procedure pain and rarely blisters that were self limiting.

A 16 year old male presented with bleeding and recurrent swelling of tongue due to multiple hemangiomas. This case posed serious challenges to treatment in terms of Induction of anesthesia due to difficult intubation and also in accessibility but was eventually treated successfully.

A neonate presented with a single cherry angioma that had recurrent episodes of bleeding. The lesion

resolved with a single session of PDL.

A young boy with idiopathic thrombocytopenic purpura who had platelet count of 6000/cu.mm presented with multiple bleeding angiokeratomas of scrotum. The frequent bleeding episodes held the patient home bound for nearly 10 years. He was treated successfully with PDL.

It is important to understand that portwine stains are progressively sclerosing conditions that require intervention as soon as possible after birth. Most were treated with PDL alone while in few cases long pulsed Nd YAG was combined.

Though these vascular lesions are not life threatening, few can be quite disabling to the patients. So we would like to share our experience with our dermatology fraternity to encourage vascular laser interventions in these needy unfortune, more importantly pediatric population.

Abstract N°: 921

Title: Exceptional association of granulomatosis with polyangiitis and chronic pulmonary aspergillosis : A diagnosis and therapeutic challenge

Noura Walid[1], Kenza Baline[2], Maha Soussi[3], Farida Laanaya, Najiba Yassine, Nadia Moussali[4], Hali Fouzia[5], Soumia Chiheb[5]

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Introduction

Granulomatosis with polyangiitis, formerly called Wegener's granulomatosis, is an autoimmune systemic vasculitis associated with ANCA characterized by multisystem lesions with cutaneous involvement found in 10 to 50% of cases. It often requires aggressive immunosuppressive therapy

We report an exceptional case of severe Wegener's disease associated with chronic aspergillus disease posing a diagnostic and therapeutic problem.

Observation

A 61-year-old patient, chronic smoker followed for arterial hypertension and diabetes under treatment, admitted for polymorphic skin lesions which appeared 20 days after an episode of acute resistant pneumopathy associated with dyspnea on exertion, functional impotence and weight loss not figure

The examination found petechial purpura of the hands, feet, oral and scrotal mucous membranes, ulcerations affecting the elbows, hips and the sacral region, bullae with hemorrhagic contents on the back of the hands and aphthoid erosions of the palate. The rest of the clinical examination revealing bronchial syndrome, moderate muscle deficit with left facial paralysis and polyathralgia

Paraclinical examinations: Biological inflammatory syndrome with microcytic hypochromic anemia, thrombocytosis, elevation of CRP, c-ANCA and positive anti PR3, nephrotic syndrome and thoracic CT showed bilateral nodular and cystic images and a mobile bell image in procubitus. The aspergillosis and tuberculosis assessment came back negative.

The diagnosis of polyangiitis with granulomatosis associated with chronic pulmonary aspergillosis was retained and an antifungal treatment with Voriconazole was started before the initiation of immunosuppressive therapy based on bolus cyclophosphamide with good clinical improvement.

Discussion

In our patient, the diagnosis of WEGENER's polyangitis was retained based on the following criteria:

-Skin damage: ulcerations, purpura and bullae

-Nephrological impairment: Proteinuria, hematuria and leucocyturia

-Neurological impairment: Multiple sensory-motor neuropathy

- Pulmonary involvement: nodules, micronodules, bilateral cavitary images

The presence of a bell image on the chest CT posed a problem as to its origin; aspergillus or falling within the framework of the pulmonary involvement of Wegener's disease. The mobile nature of the intracavitary material and the size of the image being more in favor of pulmonary aspergillosis despite the negativity of the aspergillus assessment. Since then ; an antifungal treatment was started then an immunosuppressive treatment with good clinical and radiological evolution.

APC and GPA can rarely coexist and are difficult to distinguish like the case of our patient due to the nonspecific symptoms and the similarity of clinical and radiological features.

Conclusion

Our case illustrates the dilemma of diagnosis and treatment of GPA and CPA, this association rarely reported in the literature.

Abstract N°: 937

Title: Carotid artery aneurysm in a patient with Sneddon's syndrome

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Introduction

Sneddon's syndrome (SS) is a rare, non-inflammatory, occlusive, arterial vasculopathy affecting small to medium calibre arterial vessels and defined by the presence of bluish-purple, lattice-like skin lesions known as livedo racemosa in association with ischaemic cerebrovascular events.We report a patient with sneddon's syndrome complicated by aneurysm of the internal carotid artery.

Results

A patient, 18 years old, with no previous medical history, who presented with a migraine and a purplish-red network of the lower limbs that had been evolving for about 1 year. On clinical examination: livedo racemosa of the lower limbs without necrosis, ulcerations or nodules, absence of raynaud's phenomenon and photosensitivity. Neurological examination was normal. CBC, combs test are normal .The sedimentation rate was slightly elevated at 31 mm/h; Antinuclear antibodies (C3, C4, and CH50), antithrombin III, protein C and protein S,anti-smooth muscle, anticentromere, Sjogren Syndrome A and B and cryoglobulin level are normal .Skin biopsy demonstrated superficial dermal perivascular lymphocytic infiltrates but was otherwise nonspecific. Cerebral angiography revealed Aneurysm of the C4 segment of the internal carotid artery of 3 *1 mm. no anticoagulant medication was prescribed due to the risk of bleeding . Bi-annual clinical, radiological and biological monitoring was recommended .

Discussion

Sneddon's syndrome affects young adults and has a wide spectrum of physical, neurological and laboratory findings including livedo reticularis, antiphospholipid antibodies, and multiple ischemic cerebrovascular events that can be silent and frequently lead to severe cognitive impairment. There are a variety of angiographic findings, which include stenosis and occlusion of major cerebral vessels, transdural anastomoses, large networks of fine collateral vessels and granulomatous leptomeninges. Arteriovenous malformations are one of them, they were first described by Rebello et al in 1983. Stenosis and occlusion of cerebral arterioles result in chronic cerebral hypoxia, which in turn leads to angiogenesis and collateral formation. An abnormality of the microcirculation may explain the appearance of aneurysms as in our patient's case. the interesting issue of this case is that it is one of the very rare cases of artery aneurysm as a form of presentation of Sneddon syndrome.

Abstract N°: 1006

Title: Congenital capillary hemangioma of the lower eyelid

Ajaaouani Rokia[1], El Fatoiki Fatima Zehra[2], Dahbi Skali Hayat[2], Marnissi Farida[3], Hali Fouzia[2], Chiheb Soumia[2]

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Introduction

Materials and methods

Results

Introduction:

Capillary hemangiomas are vascular malformations, associated with capillary proliferation. These tumors are frequent, representing 10 to 12% of children. Palpebral involvement is particular due to the specific anatomy of the eyelids and their intimate relationship with the eye. We report a case of congenital capillary hemangioma of the lower eyelid.

Case report:

A 15-months-old female baby, presented in consultation with a red mass arising from left lower eyelid since birth. In the antenatal history elicited, mother found to be a primipara who had regular antenatal checkups, with no history of any invasive interventions, and the baby was born out of full-term normal vaginal delivery with no perinatal complications. On examination, the right eye appeared to be normal. Examination of the left eye showed a red, highly vascular, nontender mass of 2.5 cm × 1.5 cm localized on the internal canthus of the left eye with extension on the lower eyelid. The lesion appeared covered the visual axis. There was minor bleeding from the surface of the swelling on manipulation. The rest of the conjunctiva was normal except for mild congestion. The cornea of the left eye was clear. There was no evidence of similar cutaneous lesions on the rest of the body. A provisional diagnosis of capillary hemangioma made. There was also the possibility of pyogenic granuloma and rare possibility of rhabdomyosarcoma. Ultra-sonogram (USG) and MRI are in favor of a hemangioma. USG of cranium and abdomen were done to rule out internal hemangiomas but were found to be normal. The patient treated with oral beta-blockers for 6 months without improvement. Taking into consideration the unsightly appearance, possibility of developing amblyopia due to the central location, and to obtain a histopathological diagnosis, a surgical removal finalized as the treatment. On 18 months, the baby prepared for general anesthesia. Underanesthesia an excision of the mass done. On the first postoperative day, the eye was quiet with adequate eyelid opening, clear cornea, and normal fundus. Multiple sections studied showed a cellular neoplasm composed of plump endothelial cells with well-canalized and poorly canalized vessels, confirming the diagnosis of cellular infantile hemangioma. The baby followed up for 2 months post-surgery and showed no deformities.

Discussion:

Capillary hemangioma is the most common benign vascular eyelid tumor in childhood. It is present in 1%–4% of all births and is more common in premature infants and often following chorionic villus sampling. These are benign vascular tumors, which consist of endothelial cell proliferation. It usually presents a few weeks after birth,

sometimes at birth, grows for several months, and later regresses spontaneously over years. These occur singly or as part of syndromes (PHACES). Active intervention performed only if the lesion is very extensive and causes amblyopia, mechanical ptosis, exposure keratopathy, or optic neuropathy. Treatment modalities for cutaneous or subcutaneous hemangiomas include topical and oral beta-blockers, local and oral steroids, surgical excision, immunotherapy laser photocoagulation with pulsed dye laser, and embolization. In the present case, the capillary hemangioma was refractory to oral beta-blockers. In order to prevent amblyopia, the lesion surgically excised.

Discussion

Abstract N°: 1039

Title: Noninvoluting congenital hemangioma : report of four cases

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Introduction

Congenital hemangiomas (CHs) are rare congenital vascular tumors seldom mentioned in the literature they are fully formed vascular tumors at birth and display little, if any, postnatal growth. Congenital hemangiomas divided into 2 subgroups, rapidly involuting congenital hemangioma (RICH) and noninvoluting congenital hemangioma (NICH). We present a series of four cases to highlight the clinical characteristics of NICH.

Materials and methods

We carried out a retrospective study of all the cases of CH diagnosed, from 2016 to 2020. The clinical and radiological, data of each case collected.

Results

Four cases of NICH were identified in 1 boys and 3 girls.The mean age at last follow-up was 5.5 years. All patients were full-term and eutrophic. Diagnosis was clinical for all infants. The location was a trunk in two patients and upper extremity in one. The mean diameter was 5 cm (3.5-6,5 cm). All lesions resembled ''tumor'' congenital lesions: single, oval-shaped, no pulsatile, and well delimited. Two patients treated as infantile hemangioma (IH) with beta-blockers without improvement. All patients had a clinical subtype nodular/plaque type with bluish discoloration, overlying coarse dark-red telangiectasia, and vasoconstriction and pallor that often accentuated at the periphery. Bleeding and pain observed in one patient. Doppler ultrasound imaging in all patients, showed a highly vascularized tumor often well limited, made of multiples enlarged veins and arteries with high-velocity bloodflow, tended to be hypoechoic and homogenous as well as heterogeneous.

Discussion

The small number of patients, in spite of the length of the study, confirms the rarity of NICH. The most discriminating element between NICH and RICH remained the follow-up over 1 year, based on clinical characteristics and natural history: RICH typically regresses by 1 year of age, whereas NICH does not regress. According to the literature, a clinical description of NICH emphasize a relatively sharply demarcated tumor. A telangiectasia were almost constant and presented a peripheral halo of vasoconstriction. We noted 2 morphologic variants of NICH: a patch type, characterized by a flat or slightly atrophic surface, which on palpation had a slight sense of induration; and a nodular/plaque type, associated with much more prominent soft-tissue swelling . Both morphologic types were warm to palpation and had a high-flow signal with Doppler interrogation. Most hemangiomas were larger which can be explained by the older age presentation of patients at the first consultation, as NICH grows proportionally with the child. We noted a slight female predominance in our study, compared with the other case series that showed a slight male predominance. Some of the features of the nodular/plaque-type NICH are reminiscent of deep infantile hemangioma (IH). Those with a more patch-like clinical appearance can be similar in appearance to IH precursors or IH with minimal to absent growth, in which pallor and telangiectasia are prominent features. In general, the telangiectasia in NICH is coarser and the degree of

pallor greater compared with IH. Most NICH do not require treatment. Surgical resection is an option if the lesion is discrete, contained within the subcutaneous tissue, and in a surgically amenable location.

Abstract N°: 8

Title: Beneficial effect of synthetic HIF-1alpha and STAT5 ODN on atopic dermatitis via regulation of mast cell survival

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Beneficial effect of synthetic HIF-1α and STAT5 ODN on atopic dermatitis via regulation of mast cell survival

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Introduction

Atopic dermatitis (AD) is a common inflammatory disease of skin, resulting from an immune disorder. Mast cell is the effector cell in IgE-associated allergic disease, including rhinitis, asthma, and AD. In addition, mast cells can recover and re-granulate after degranulation. Thus, these cells can thereby be activated over and over again and in that way maintain the allergic reaction. Hypoxia-inducible factor-1 alpha (HIF-1α) and Signal transducer and activator of transcription 5 (STAT5) decoy oligodeoxynucleotide (ODN) is a synthetic DNA containing complementary sequence for HIF-1α and STAT5 transcription factors.

Materials and methods

This study investigated the beneficial effect of HIF-1α and STAT5 ODN on 1-Chloro-2,4-dinitrobenzene (DNCB) and dermatophagoides farina extract (DfE)-induced AD in vivo model and IgE-activated in vitro model. For this purpose, various molecular biological methods were conducted.

Results

The results showed that DNCB+DfE induced inflammation, infiltration of mast cells, skin thickening, and skin barrier destruction. Conversely, HIF-1α and STAT5 ODN administration notably suppressed DNCB+DfE-induced AD-like skin disease. Furthermore, synthetic HIF-1α/STAT5 ODN suppressed IgE-induced mast cell survival via blocking of anti-apoptotic signaling.

Discussion

This research demonstrated the therapeutic effect of HIF-1α/STAT5 decoy ODN on DNCB/DfE-induced AD-like skin disease and on a DNP-IgE/DNP-BSA-sensitized mast cell-like cell line. HIF-1α/STAT5 decoy ODN administration significantly inhibited AD-like cutaneous symptoms, such as skin morphology changes, immune cell infiltration, skin barrier dysfunction, exaggerated serum IgE activity, and increased inflammatory cytokines via suppressing the HIF-1α and STAT5 target genes. This study may be the first evidence that simultaneous inhibition of both HIF-1α and STAT5 transcription factors using a decoy strategy can effectively attenuate mast cell survival. Collectively, this study provides the possibility of synthetic HIF-1α and STAT5 ODN as new effective therapeutic

tool for AD.

Abstract N°: 183

Title: Long-term efficacy following randomised downtitration of baricitinib in patients with moderate-to-severe atopic dermatitis and inadequate response, intolerance, or contraindication to cyclosporine who were responders or partial responders after 52 weeks of treatment: A substudy of BREEZE-AD4

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Introduction

Baricitinib (BARI), an oral selective Janus kinase 1/2 inhibitor, is approved in the EU and other countries for moderate-to-severe atopic dermatitis (AD) in adults who are candidates for systemic therapy. We report here treatment outcomes up to Week 104 for patients (pts) randomised to BARI 2 mg or 4 mg who were eligible for randomised downtitration at Week 52 of BREEZE-AD4 (NCT03428100).

Materials and methods

In BREEZE-AD4, 463 pts were randomised 1:1:2:1 to placebo, BARI 1 mg, 2 mg, or 4 mg with concomitant moderate/low potency topical corticosteroids. At Week 52, responders (vIGA-AD score 0 or 1) or partial responders (vIGA-AD score 2) who were randomised to BARI 2 mg (BARI 2 mg cohort, n=49) or 4 mg (BARI 4 mg cohort, n=32) at baseline were rerandomised 1:1 to either dose continuation or dose downtitration (2 mg to 1 mg, and 4 mg to 2 mg). Pts enrolled in the downtitration study were retreated with their initial dose at the first occurrence of recording vIGA-AD ≥3. Efficacy outcomes, including response rates for vIGA-AD (0,1), vIGA-AD (0,1,2), and EASI ≤7, were assessed through Week 104. Itch numerical rating scale (NRS) ≥4 point improvement response rates were recorded to Week 68. Clinical response [vIGA-AD (0,1,2)] after relapse was assessed after 16 weeks of retreatment. Missing data were imputed using last observation carried forward methods.

Results

In the BARI 4 mg cohort, 16/16 pts (100%) who were rerandomised to continue BARI 4 mg and 12/16 pts (75%) who downtitrated to BARI 2 mg completed the study. In the BARI 2 mg cohort, 22/25 pts (88%) continuing on BARI 2 mg and 21/24 (88%) downtitrated to BARI 1 mg completed the study. After rerandomisation, 69% (n=11) of pts who continued BARI 4 mg and 50% (n=8) who downtitrated to BARI 2 mg in the BARI 4 mg cohort maintained vIGA-AD (0,1,2) at Week 104, and vIGA-AD (0,1) response was achieved by 44% (n=7) and 25% (n=4), respectively (Figure 1A). In the BARI 2 mg cohort, 72% (n=18) of pts continuing BARI 2 mg and 25% (n=6) downtitrated to BARI 1 mg, respectively, maintained vIGA-AD (0,1,2) at Week 104. At the same time, 44% (n=11) and 8% (n=2) of pts, respectively, achieved vIGA-AD (0,1) (Figure 1B). The proportion of pts achieving EASI ≤7 and ≥4 point improvement in itch NRS was consistent over the study period among pts continuing BARI 4 mg, pts continuing 2 mg, and pts who were downtitrated from 4 mg to 2 mg, with some fluctuations over time (Figure 2).

Retreatment criteria were met in 5 pts who continued on BARI 4 mg and 11 pts who downtitrated to 2 mg in the BARI 4 mg cohort; 80% (n=4) and 82% (n=9), respectively, regained response of vIGA-AD (0,1,2) within 16 weeks of retreatment. In the BARI 2 mg cohort, 11 pts who continued on BARI 2 mg and 18 pts who downtitrated to 1 mg met criteria for retreatment; 91% (n=10) and 83% (n=15) of pts, respectively, regained vIGA-AD (0,1,2) within 16 weeks of retreatment. Treatment-emergent adverse events (AE) were observed in 46 (57%) of the total pts enrolled in the downtitration study. Three pts (19%) in the BARI 4 mg cohort who downtitrated to 2 mg discontinued the study due to AE; there were no other discontinuations due to AE.

Discussion

In this small downtitration substudy in pts with treatment refractory AD, continuous treatment with BARI 4 mg or 2 mg in pts who had achieved clinical response at Week 52 showed sustained long-term efficacy to Week 104; if retreatment was needed, most pts regained clinical response.

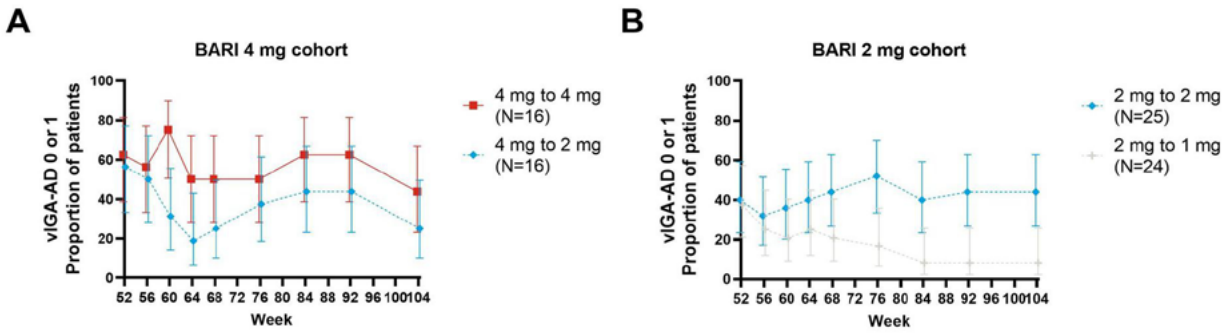

Figure 1: The proportion of patients in (A) the BARI 4 mg cohort and (B) the BARI 2 mg cohort achieving vIGA-AD (0,1) response up to Week 104 of the downtitration substudy. Patients were censored following retreatment.

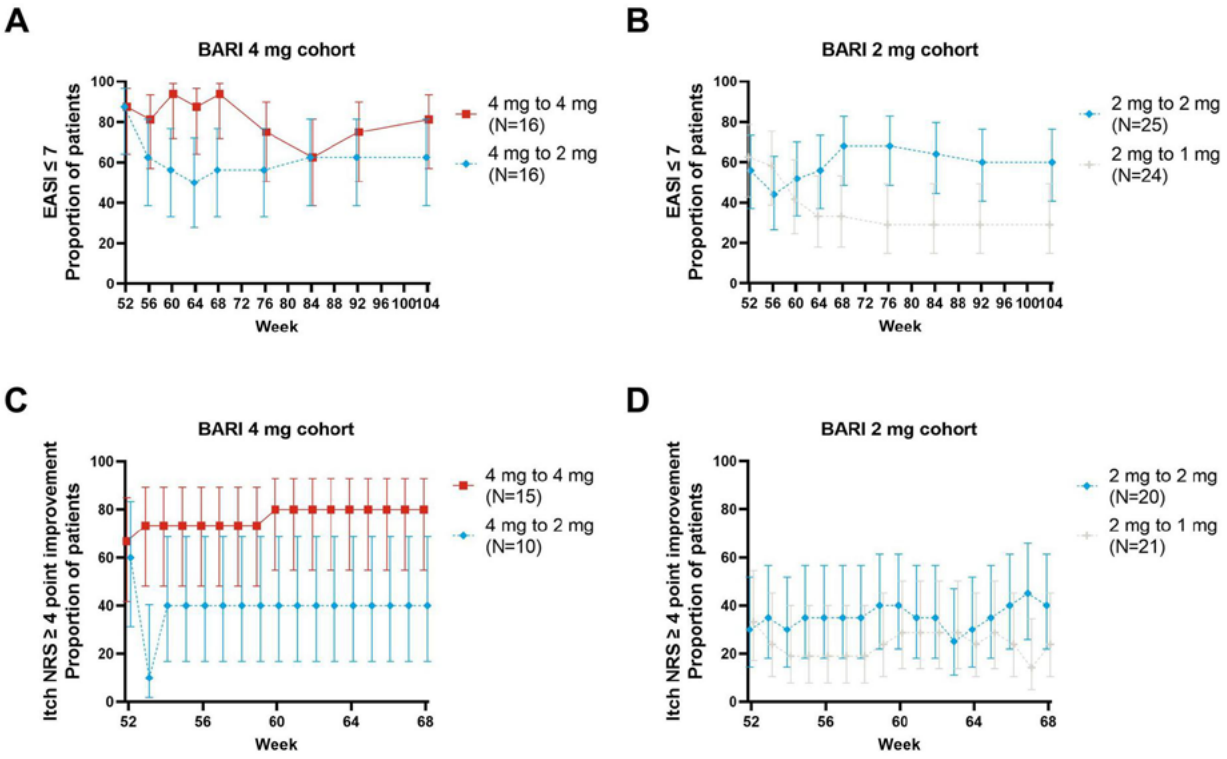

Figure 2: The proportion of patients in (A) the BARI 4 mg cohort and (B) the BARI 2 mg cohort achieving EASI ≤7 up to Week 104 of the downtitration substudy. The proportion of patients in (C) the BARI 4 mg cohort and (D) the BARI 2 mg cohort who achieved ≥4 point improvement in itch NRS up to Week 68 of the downtitration substudy.

Abstract N°: 224

Title: Veinouse Eczema Case Report

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Introduction

Veinous eczema is a distinct form of eczema, also known as stasis dermatitis. It often follows a chronic veinous insufficiency. Clinical manifestations include a deeply pigmented skin with multiples plaques along veinous trajectory. Cutaneous lesions can vary in size and have irregular borders. Small vesicles around the edematous area can also be noted.

Case report

An eighty year-old patient presented to our Dermatology department with a one-month history of erythemato-squamous plaques along the lower limbs. Physical examination revealed numerous plaques that were reddish-violet in color with an overlying yellow thick adherent scale. Skin of both legs was warm and painful to touch (Fig 1 and 2). Medical history was notable for hypertension and a two-year evolution of chronic veinous insufficiency. The patient reports a tingling sensation along with a constant heaviness in his legs. Renal, hepatic and carbohydrate panels revealed no anomalies; with a urea value of 0.21g/L, creatinine 8g/L, AST 17 g/ L, ALT 12 g/L and fasting blood sugar level of 0.5g/L. However, CRP was elevated to 33.9. Given the patient age, others tests were performed; PSA level, ESR, lipid profil, LDH level and a complete blood count all came back normal. A Doppler ultrasound confirmed the presence of chronic veinous insufficiency and the diagnostic of veinous eczema was established.

The patient was treated with a course of topical clobetasol and an emollient creme associated with compressive stocking with notable improvement after one month of treatment.

Discussion

A hyperpigmented plaque on the anterior aspect of the legs can reveal many pathologies, some of them may present serious emergencies and require rapid assessment . The diagnostic of veinous eczema relies primarily on a meticulous physical examination; red scaling rash with irregular borders. Itching can also be an important diagnostic clue. Differential diagnostic includes nummular eczema, contact dermatitis and asteatotic eczema.

This type of complications is nearly ineluctable in patients with chronic veinous insufficiency. Venous valves prevent back flow and ensure that blood flows in one direction. With the association of multiple risk factors (age, sedentary lifestyle, pregnancy, heat), dilation of the veinous wall leads to valve incompetence and thus failure of the anti-reflux mechanism. Blood stasis then causes veins to become varices. Anyhow, veinous eczema requires an appropriate treatment due to it debilitating nature.

Abstract N°: 238

Title: Efficacy of baricitinib in combination with topical corticosteroids in patients with moderate-to-severe atopic dermatitis who failed, are intolerant to, or have a contraindication to cyclosporine: a post hoc analysis of the European cohort from the BREEZE-AD4 trial

Andrew E Pink[1], Luca Stingeni[2], Ignasi Figueras-Nart[3], Susanne Grond[4], Fan Emily Yang[4], Elisabeth Riedl[4], Matthias Augustin[5]

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Introduction

Baricitinib (BARI) is an oral, reversible Janus kinase 1 and 2 inhibitor approved for the treatment of adults with moderate-to-severe atopic dermatitis (AD) in Europe and other countries. The international phase 3 trial BREEZE-AD4 (AD4) (NCT03428100) assessed the efficacy and safety of BARI in combination with topical corticosteroids (TCS) in patients with previous failure, intolerance, or contraindication to ciclosporin. Here, we analyze the efficacy of BARI in the European cohort of AD4.

Materials and methods

Adults with moderate-to-severe AD (N=463) were randomized to PBO:BARI 1-mg:2-mg:4-mg (1:1:2:1). Use of low-to-moderate potency TCS was permitted. Endpoints assessed in this subpopulation analysis for BARI 4-mg and BARI 2-mg versus placebo until Week (W) 16 were ≥75% reduction in Eczema Area and Severity Index (EASI75); validated Investigator Global Assessment for AD (vIGA-AD™) 0 or 1; improvement in Itch Numeric Rating Scale (NRS) ≥4-point; Dermatology Life Quality Index (DLQI) 0 or 1; reduction in SCORAD (SCORAD75) ≥75%; mean change from baseline (CFB) in Skin Pain NRS, and mean CFB in the AD Sleep Scale (ADSS) Item 2. TCS use was measured by reporting mean grams (g). P-values were not adjusted for multiplicity.

Results

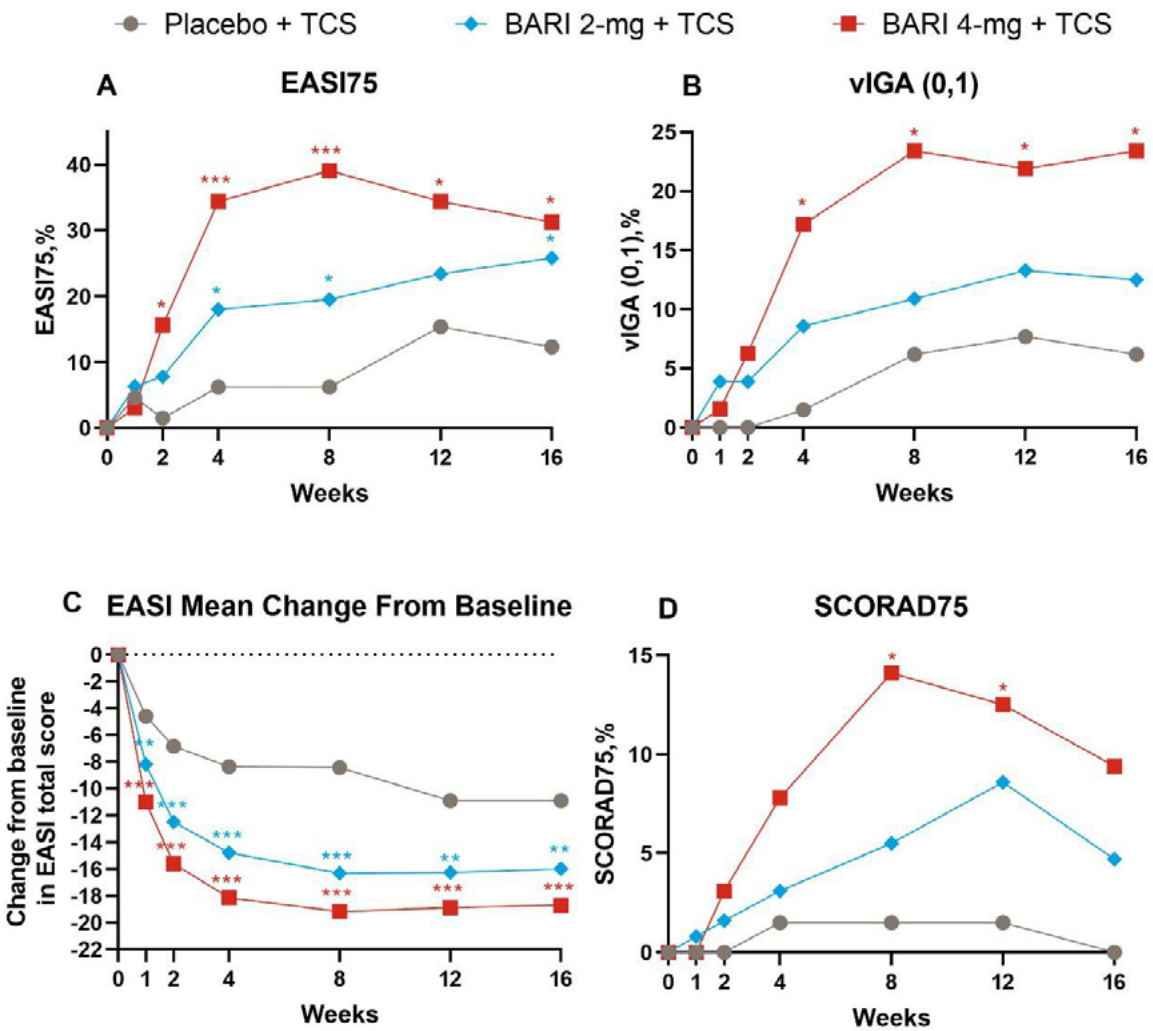
The European subgroup accounted for 70% (N=322/463) of the study population in AD4. At baseline, proportions of patients with severe AD, assessed by vIGA of 4, were similar for PBO (55.4%), BARI 2-mg (52.8%) and 4-mg (53.1%). Among European patients randomized to PBO (N=65), BARI 2-mg (N=128) and 4-mg (N=64), 67.7%, 91.4% and 92.2%, respectively, completed W16.

At W16, EASI75 response rates were significantly higher for BARI 2-mg and 4-mg (25.8%, $p<.05$, and 31.3%, $p<.05$, respectively) compared to PBO (12.3%) (Fig. 1A) and significantly more patients reached a vIGA 0,1 with BARI 4-mg versus PBO ($p<.05$) (Fig. 1B). EASI mean change improved significantly with BARI 2-mg and 4-mg from W1 onwards (Fig. 1C). A significantly higher proportion of patients achieving a SCORAD75 was observed for BARI 4-mg versus PBO starting at W8, through W12 (Fig. 1D). Response rates for ≥4-point improvement in Itch NRS were significantly higher in BARI 4-mg and 2-mg groups compared to PBO as early as W2 and W4, respectively (Fig. 2A). Statistically significant improvements in skin pain NRS and in ADSS Item 2 were observed as early as W1 for both BARI doses, continuing through W16 (Fig. 2B and 2C). For BARI 4-mg, significantly more patients had DLQI 0,1 response at W16 compared to PBO ($p<.001$) (Fig. 2D). The mean amount of TCS use was significantly

lower for patients on BARI 2-mg (183g; $p < .05$) and 4-mg (154g; $p < .05$) compared to PBO (271g) over the 16 weeks.

Discussion

BARI 4-mg in combination with TCS consistently showed rapid and significant improvements in AD signs, symptoms, and quality of life versus PBO in European patients with moderate-to-severe AD who had failed, were intolerant to, or had contraindication to ciclosporin, despite lower TCS use.

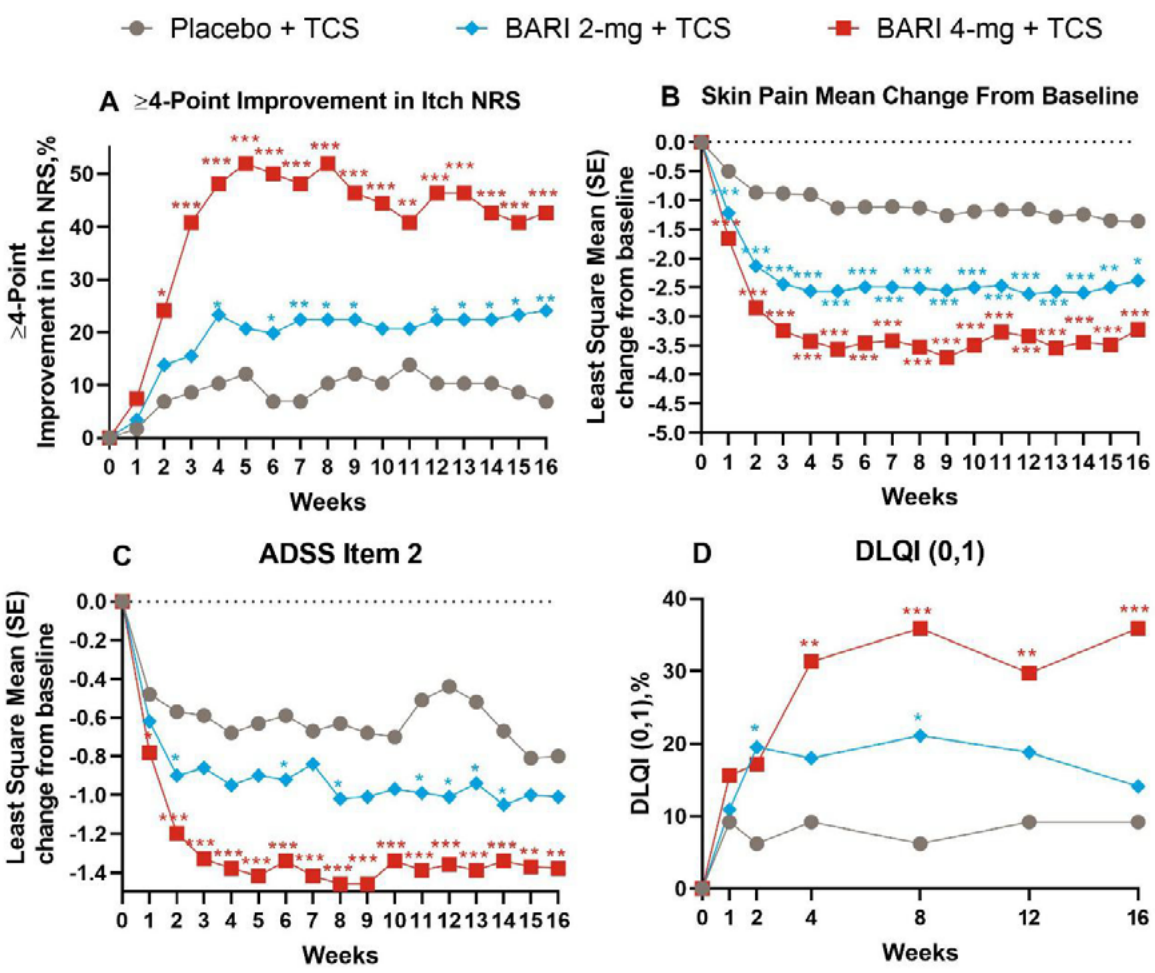


For EASI75, vIGA (0,1) and SCORAD75, logistic regression was applied. Patients with missing data or using rescue therapy were considered as non-responders (non responder imputation).

For EASI change from baseline, MMRM model was applied. Data collected after first rescue therapy or permanent drug discontinuation was excluded.

EASI75: ≥75% reduction in Eczema Area and Severity Index; MMRM: Mixed Model for Repeated Measures; SCORAD75: ≥75% reduction in Scoring Atopic Dermatitis; TCS: Topical Corticosteroids, and vIGA: validated Investigator Global Assessment for Atopic Dermatitis

Figure 1. Proportion of patients achieving (A) EASI75 and (B) vIGA (0,1), (C) mean change from baseline in EASI score, and (D) proportion of patients achieving SCORAD75.



For ≥4-point improvement in Itch NRS, DLQI (0,1), logistic regression was applied. Patients with missing data or using rescue therapy were considered as non-responders (non responder imputation).

For skin pain and ADSS Item 2 change from baseline, MMRM model was applied. Data collected after first rescue therapy or permanent drug discontinuation was excluded.

ADSS: Atopic Dermatitis Sleep Scale; DLQI: Dermatology Life Quality Index; MMRM: Mixed Model for Repeated Measures; NRS: Numeric Rating Scale; SE: Standard Error, and TCS: Topical Corticosteroids

Figure 2. (A) Percentage of patients achieving a ≥4-point improvement in Itch NRS, (B) skin pain NRS change from baseline, (C) ADSS Item 2 change from baseline, and (D) percentage of patients achieving DLQI (0,1).

Disclosure: Funded by Eli Lilly and Company.

Abstract N°: 281

Title: Association of serum vitamin D concentration with the severity of atopic dermatitis

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Introduction: Atopic Dermatitis is a relapsing & inflammatory skin disease with significant economic burden to patients' families. Initial epidermal barrier defect with subsequent immune activation is an underlying mechanism where the role of immunomodulator vitamin D was found controversial in different studies.

Materials and methods: This cross-sectional, descriptive study was done in Dermatology & Venereology Department at BSMMU, Dhaka from Sep, 2015 to Feb 2017. Total 41 respondents of any age & sex were included after diagnosis of AD according to the American Academy of Dermatology diagnostic criteria. Disease severity was determined by using Scoring Atopic Dermatitis (SCORAD) index & the patients were divided into three groups; mild (SCORAD<25), moderate (25-50) and severe (>50). Serum vitamin D levels were measured by chemiluminescent microparticle immunoassay in Biochemistry department, BSMMU. Statistical analysis was performed using analysis of variance (ANOVA) & Pearson's correlation coefficient test. The value of 'p' <0.05 was considered as statistically significant.

Results: According to SCORAD index, 12 patients had mild, 20 had moderate and 9 had severe AD. Levels of 25-hydroxyvitamin D were deficient/ insufficient in 75.6% of patients. No significant association was found in between serum vitamin D level and severity of AD (r=-0.173). The mean of serum vitamin D level in mild AD (25.7±8.1) was higher compared with those with moderate (23.9±8.8) or severe (19.5±8.3) AD. However, the result was not statistically significant (p 0.249).

Discussion: The study was carried out with an aim to establish the relationship between serum vitamin D concentration and severity of patients with AD. As per the knowledge concern, there is no study in this field, so it happens to be the first in Bangladesh. Most patients were within 2-10 years (51.2%), remaining were below 2 years (29.3%) and above 10 years (19.5%). There was no association of vitamin D level with age & sex which is contradictory to previous studies. We may account urbanization as a reason for this non-significant association. 58.5% patients had family history & 53.7% patients had personal history of atopy along with 68.29% patients had food allergy. Although, allergic phenotypes including asthma, rhinitis, eczema, and atopy were not associated with serum 25(OH)D3, in contrast with previous studies. This study demonstrate a statistically negligible inverse (r = -0.173) correlation between serum 25(OH)D3 and AD severity. The mean ± SD vitamin D level was 25.7 ± 8.1 in patients with mild AD, 23.9 ± 8.8 with moderate AD and 19.5 ± 8.3 with severe AD. There was no significant difference among the three groups (P>0.05). When the values of serum 25(OH)D3 and SCORAD index plotted in a scatter diagram it showed a nonlinear inverse correlation between them. The association was not statistically significant might be due to the sunny weather in our country all around the year. The representative sample with a broad age range, incorporation of objective markers of atopy and thorough analysis add strengths to the result. This study identified a public health issue of vitamin D deficiency in Bangladeshi children and invites for careful consideration of vitamin D supplementation particularly in high risk children to optimize good health. But these deficient results were not significantly related to AD severity. So the study provides epidemiological evidence against the association of vitamin D status with AD in Bangladesh.

Abstract N°: 357

Title: Combined antibiotics with synergistic action (bacitracin and neomycin) in topical treatment of patients with pyoderma on the background of atopic dermatitis

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Introduction Selection of a safe medicine with the widest range of antimicrobial action is extremely consequential in the treatment of primary and secondary infections of the skin and soft tissues. It is also important to use it as monotherapy and in combination with systemic therapy. The absence of systemic and local adverse reactions is one of the most considerable selection criteria for any pharmaceutical. The ability to choose the form of release of the drug significantly expands the range of possibilities for its use, because it focuses on various morphological elements of skin rashes, which are characteristic of pustular skin lesions, as well as on different phases of wound healing. The study of the clinical effectiveness, safety, and tolerability of combined antibacterial remedy, which contains both bacitracin and neomycin, in patients who suffer from atopic dermatitis and pustular skin disease at the same time is very relevant. Therefore, our goal is to investigate the effectiveness of a combination of two antibacterial drugs bacitracin and neomycin in the form of an ointment for the local treatment of patients with atopic dermatitis complicated by bacterial skin diseases.

Materials and methods Under our clinical observation were 35 patients aged 18 to 40 years who were in inpatient or outpatient treatment with a diagnosis of atopic dermatitis complicated by bacterial infection such as contagious impetigo, folliculitis of the chest, neck and scalp, erysipelas on the background of atopic dermatitis. As monotherapy, and in case of the exacerbation of atopic dermatitis, along with the main therapy, certain ointment was used - a combined antibacterial drug that contains two bactericidal antibiotics with synergistic action (bacitracin and neomycin), which provides a wide range of antimicrobials. Patients were monitored for 14 days from the start of the drug. Assessment of the clinical condition was performed before treatment, during treatment on the 3rd-4th day and on the 14th day, respectively. The drug was applied topically to the affected areas of the skin. The affected areas were covered with a thin layer of ointment 2-3 times a day. The course of treatment ranged from 7 to 10 days. Other general or topical antibacterial drugs were not allowed during treatment. As concomitant therapy, patients received general medical treatment according to the established diagnosis.

Results On the 3rd – 4th day from the beginning of therapy in 80% of patients no new rashes were noted. All patients had good tolerability; the pathological process was resolved on the 7th-14th day. Clinical recovery was recorded in all patients.

Discussion The use of an ointment containing a combination of bacitracin with neomycin may be recommended for the treatment of patients with bacterial skin infections, including atopic dermatitis complicated by secondary pyoderma. This topical remedy is well tolerated by patients. No side effects were observed during the use of the drug, and there was no photosensitization effect. The results of the study allow us to recommend the drug for clinical use in the treatment of bacterial infections of the skin in patients with atopic dermatitis.

Abstract N°: 406

Title: Clinical efficacy and safety of using a multi-strain probiotic as part of the complex treatment of atopic dermatitis in children.

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Introduction

Atopic dermatitis (AD) is one of the most common chronic inflammatory skin diseases in children and infants. Classical recommendations for the treatment of AD include topical glucocorticosteroids, calcineurin inhibitors, and antihistamines. Over the past decades, several studies have emerged on the benefits of probiotics for the treatment of children with AD, however, this therapy represents a vast underestimated area of research; and as a result, there is no reliable evidence to date to strongly support their safe use.

Materials and methods

The study included 148 children aged 3 months to 3 years with mild, moderate and severe manifestations of atopic dermatitis. During the study, the observed patients were randomized into the main (n=95) and control (n=53) groups. For all patients, an introductory period of 1 month was provided, during which general clinical examinations were performed (examination, assessment of the severity of AD according to the SCORAD index). All patients in the introductory period were prescribed a diagnostic elimination diet with food diaries and conventional therapy (antihistamines, topical therapy). By the end of the introductory period, the clinical efficacy of conventional basic therapy in both groups was assessed. Further, the children of the main group were added to the basic therapy with a multi-strain probiotic, 1 sachet per day during a meal. Children in the control group continued to receive basic therapy. The duration of therapy was 30 days. Efficacy was assessed using clinical parameters and the SCORAD index before and during treatment. As a therapy, a multi-strain probiotic was used, containing in its composition 7 probiotic strains in a titer of 10 * 9 and fructooligosaccharides from inulin.

Results

After prescribing a probiotic to children after 30 days of therapy, remission of AtD was achieved in 89.5% (n=85) of patients of the main group (SCORAD was 6.9±0.5), 10.5% (n=10) had complaints of recurrent new rashes. In the control group (without the use of a probiotic), after 30 days, improvement in skin symptoms was achieved in 75.5% (n=40) of patients (SCORAD index was 7.3±0.4), in 24.5% (n=13) – BP manifestations persisted (SCORAD index 14.1±0.8).

Discussion

The study confirms the clinical benefit of including a multi-strain probiotic in the complex treatment of children with AD and allows us to consider this approach as one of the ways to increase the effectiveness of AD therapy in young children. During therapy, clinical improvement and a decrease in the SCORAD index were noted. Parents of all patients of the main group noted good tolerance and the absence of any adverse reactions when using a multi-strain probiotic.

Abstract N°: 448

Title: Contact Sensitization in Patients with Moderate to Severe Atopic Dermatitis: A Retrospective Study in a Single Dermatology Centre

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Introduction

Atopic dermatitis (AD) and allergic contact dermatitis (ACD) are both common inflammatory T-cell mediated skin conditions that may coexist in a patient. The relationship between AD and ACD is frequently debated and not completely understood. Furthermore there are few studies investigating the incidence of moderate to severe AD and ACD. Our aim was to investigate the incidence of patch testing (PT) in patients with moderate to severe AD and assess a possible relationship between contact sensitization and AD.

Materials and methods

We retrospectively investigated 102 patients who were given systemic treatment with dupilumab due to moderate to severe AD in a single Dermatology Centre, between November 2018 and February 2022. We evaluated if these patients were patch tested prior to application of biologic therapy and their Eczema Area and Severity Index (EASI) prior to the first application.

Results

During the study period patch tests had been performed on 45 patients (44.1%). A positive patch test (PPT) reaction to at least one of the tested allergens was observed in 27 individuals (60.0%) of the PT patients with moderate to severe AD. Out of the PPT 63.0% were females and 37.0% were males. The average EASI was 18.84 for the negative patch tested (NPT) patients, 17.09 for the PPT patients and 17.81 overall. Out of all positive tests, the most frequent reactions were fragrance mix (40.7%), nickel sulphate (33.3%), cobalt (33.3%) and potassium dichromate (18.5%).

Discussion

Contact allergy to at least one allergen has a reported prevalence of up to 20% (1), however in our study 60.0 % of the tested patients with moderate to severe AD had a PPT. The most common being fragrance mix which may be due to repeated exposure and prolonged usage of topical preparations, such as lotions and body care products. It has been hypothesized that patients with AD have a higher prevalence of PPT, due to an increased allergen penetration because of a defective skin barrier, augmented allergen presentation and sensitization and in addition regular exposure to potentially sensitizing topical products. However the evidence is conflicting and inconclusive. Moreover, an experienced clinician is needed for the correct interpretation of PPT, as AD patients are more prone to irritant reactions and therefore false positive results are possible, furthermore some authors have reported that severe AD has a higher prevalence of false negative results (2, 3). Patch testing is probably an underused test in patients with moderate to severe AD, therefore in conclusion we stress the importance of PT in moderate to severe AD patients intended for systemic therapy as they usually have refractory AD and concurrent ACD is an important comorbidity and can cause exacerbation of the disease.

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Abstract N°: 476

Title: ATOPIC DERMATITIS DISEASE BURDEN REPORT OF ADULT PATIENTS IN TURKEY

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ATOPIC DERMATITIS DISEASE BURDEN REPORT OF ADULT PATİENTS IN TURKEY

Introduction: Atopic dermatitis (AD), is a chronic, relapsing inflammatory skin disease affecting up to 10% of adults and is associated with skin barrier dysfunction, altered immune responses, and gene-environment factors. AD not only presents physical signs and symptoms, but also affects patients' mental health, quality of life with economic burden. In this study, the objective was to understand social, psychological, economic burdens and unmet needs of patients with moderate or severe AD in Turkey.

Materials and methods: A national, multicentre, quantitative research study was conducted across 12 cities in Turkey. Standardized questionary preparation and survey results evaluation realized by 5 Dermatologists and Head of Patient Association. A total of 100 moderate to severe AD patients who are ≥18 years and diagnosed 2 different dermatologists and prescribed systemic treatments were included in the study. Interviews were performed face-to-face, via telephone or virtual meetings between March and April 2021.

Results: Among 100 patients, mean age was 43 years and 51% were male. The average age at symptom onset was 28 years and 81% of patients were first diagnosed by "dermatologists" at mean age 30. Patients visited an average of 2.1 physicians before diagnosis. The most reported comorbid allergic diseases were pollen allergy (40%), asthma (20%) and food allergy (16%). The patients' highest expectations from the treatment were "the elimination of itching (52%)" and "fast action (36%)". When treatment compliance was considered; 55% of the patients stated that they ''rarely'' or ''sometimes'' forget to use the prescribed medication. The biggest barrier that prevented patients from using the prescribed medication was ''their concerns about side effects (49%)''. Most of the (93%) patients stated that new treatment options which are superior in terms of efficiency and safety are needed. During their last flare week, 74% of patients had itch and 34% of them had sleep disturbance for more than 5 days. Seventy seven percent of AD patients could not go to work or attend school average 12 day/year, 27% of patients reported having been hospitalized, with a length of stay of 6 days/year on average for AD related cases. AD patients who describe their health condition as "moderate to very poor" were 24%. Fifty-eight percent of the patient's stated that the treatment-related or personal care expenses they carry out to manage atopic dermatitis create an economic burden for the patients and their families. Seventy percent of patients stated that there was an increase in the severity/number of flares during the COVID-19 pandemic and could not properly manage their disease.

Discussion: AD is a chronic, pruritic, and recurrent inflammatory skin disease which chronic itching and skin lesions affect the daily lives of the patients and causing psychological and economic burden. The COVID-19 pandemic has led to various difficulties in terms of diagnosis and treatment management of moderate and severe

AD patients.

Abstract N°: 504

Title: Efficacy and Safety of Lebrikizumab in Moderate-to-Severe Atopic Dermatitis: Results from Two Phase 3, Randomized, Double-Blinded, Placebo-Controlled Trials

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Introduction and objectives

Lebrikizumab, a high-affinity IgG-4 monoclonal antibody targeting interleukin 13, selectively prevents the formation of IL-13Rα1/IL-4Rα heterodimer receptor signalling complex. It demonstrated rapid, dose-dependent efficacy and acceptable safety profile in moderate-to-severe atopic dermatitis (AD) patients in a Phase 2b trial (NCT03443024)[1]. Here, we report 16-week efficacy and safety outcomes of lebrikizumab monotherapy in AD patients from two ongoing 52-week, randomized, double-blinded, placebo-controlled Phase 3 trials, ADvocate 1 (NCT04146363) and ADvocate 2 (NCT04178967).

Materials and methods

Eligible moderate-to-severe AD patients (adults and adolescents [12-17 years, weighing ≥ 40 kg]) were randomized 2:1 to subcutaneous lebrikizumab 250 mg or placebo every 2 weeks. Efficacy analyses included proportions of patients achieving IGA 0/1, EASI-75 and pruritus Numerical Rating Scale ≥4-point improvement from baseline (P≥4) at Week 16. Non-efficacy related missing data were imputed by multiple imputation.

Results

In ADvocate 1, proportions of patients treated with lebrikizumab 250 mg (N=283) vs placebo (N=141) achieving IGA 0/1 at Week 16 were 43.0% vs 12.8% (p<0.001); EASI-75 responses were 59.3% vs 16.4% (p<0.001); P≥4 proportions were 46.3% and 12.7% (p<0.001), respectively. In ADvocate 2 (lebrikizumab, N=281, placebo, N=146), corresponding proportions for IGA 0/1 were 33.1% vs 10.9% (p<0.001) and EASI-75 responses were 50.8% vs 18.2% (p<0.001); P≥4 proportions were 38.3% and 11.3% (p<0.001), respectively. The percentage of patients reporting ≥1 TEAE was comparable in ADvocate 1 (lebrikizumab 45.4%; placebo 51.1%) and ADvocate 2 (lebrikizumab 53.0%; placebo 66.2%).

Conclusions

Data from two ongoing pivotal Phase 3 trials suggest that lebrikizumab 250 mg Q2W provides an efficacious

treatment option with an acceptable safety profile for patients with moderate-to-severe AD.

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Abstract N°: 506

Title: Allergy to bacterial haptens in a patient with nummular eczema

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Introduction

Nummular eczema (NE) is a chronic inflammatory condition which sometimes may last for months. Its diagnosis is based on the clinical appearance of the characteristic coin-shaped skin lesions, as there are no specific histopathological findings. It is often associated with dry skin, atopic dermatitis, contact allergy, bacterial infection, impaired blood supply, but the exact pathogenetic mechanism of NE is still not defined.

Materials and methods

Results

A 70 years old female Caucasian patient presented with round, slightly infiltrated erythematous plaques with fine desquamation, located symmetrically on her lower legs, for 1 month. The patient reported itching and burning sensation. A diagnosis of nummular eczema was set and the patient underwent a treatment with topical Clobetasol propionate 0,05% for 14 days with no significant therapeutic result.

Concomitant diseases were hypertension and chronic venous insufficiency with vein thrombosis of the lower right leg in the past. The patient reported personal history of atopy – hay fever and dust mite allergy.

The patient was patch tested for contact (cell-mediated) allergy with a series of 30 allergens- European Baseline, and for IgE mediated allergy to bacterial antigens (*Streptococcus alfa-haemoliticus, Streptococcus beta-haemoliticus, Staphylococcus epidermidis* and *Staphylococcus aureus*) intradermally. Results from the patch test were evaluated on the 2nd and the 3rd day, and from the intradermal allergy test on the 20th minute and on day 1. Our patient had no positive allergic reactions to contact allergens on day 2 and day 3 of the evaluation. However, there was one positive result for allergy to bacterial antigens on 20th minute evaluation, and three positive results on day 1.

The therapy was changed to combination of topical Betamethasone/Gentamicin, 2 times daily. The lesions cleared completely for 10 days.

Discussion

We presented a case of a patient with nummular eczema with allergy to bacterial antigens. The addition of topical antibiotic to her therapy led to complete resolution of the skin lesions.

The different backgrounds on which NE appears shed light on the potential pathogenetic mechanisms of its occurrence**.** In our case, maybe the impaired blood supply had led to the easier sensitization to common bacterial antigens which then had led to eczema.Nummular eczema is a multifactorial condition and the exact mechanism for its appearance and weather it is a separate nosological entity or is it a part of a more complex disease, are

questions of future research.

Abstract N°: 511

Title: Assessment of the food allergy profile change in polysensitized patients with atopic dermatitis in treatment with dupilumab: results of a pilot study

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Introduction

Atopic dermatitis is an eczematous skin disease with chronic relapsing behavior. This inflammatory cutaneous disorder requires management with systemic treatments when it is graded as moderate to severe and unrensponsive to topical treatments. Food allergy consists in an immunomediated reaction following exposure to certain foods, with heterogeneous clinical manifestations and variable degree of severity. Food allergy frequently occurs in association with atopic dermatitis and is reported in up to 45% of cases. To date there are no biologic drugs approved for the management of food allergy, which is based on avoidance of implicated foods, emergency rescue medications and desensitizing immunotherapy. These current approaches are scarcely feasible in polisensitized subjects that are allergic to multiple food allergens. Biologic drugs targeting key mediators of type 2 inflammation, such as omalizumab and dupilumab, revolutionized the dermatologic treatment armamentarium in chronic spontaneous urticaria and atopic dermatitis and experimental evidence suggests their potential use as non-allergen specific immunotherapies. The aim of this pilot study was to assess, in patients with atopic dermatitis in treatment with biologic drug dupilumab, modifications in the allergology profile through measurement of total serum IgE, specific IgE for aero- and tropho-allergens, molecular components for tropho-allergens. We enrolled in this study patients with atopic dermatitis and type 2 inflammatory comorbidities featuring oral allergy syndrome, anaphylaxis and gastro-intestinal disorders related to type I hypersensitivity.

Materials and methods

We conducted an observational pilot study, with longitudinal prospective design enrolling 10 patients eligible for treatment with dupilumab at our Dermatology Unit, who provided informed consent to participation. Laboratory exams for total serum IgE, specific IgE and molecular allergen components were performed at baseline. Dupilumab was initiated at the standard approved dosing for atopic dermatitis. At routine clinical assessment after 16 weeks of therapy, subjects repeated the previous laboratory work-up.

Results

Our results demonstrate a statistically significant decrease in molecular components of trophoallergens, specific IgE for trophoallergens, and specific IgE for aeroallergens following treatment with dupilumab in polysensitized patients.

Discussion

We suggest that treatment with dupilumab, by modulating type 2 immunity, may decrease IgE-mediated responses assessed with laboratory exams and therefore could minimize or abolish allergic symptoms in polysensitized patients. Future results of ongoing randomized controlled trials investigating dupilumab in food allergy are highly anticipated to confirm our preliminary observations.

Abstract N°: 528

Title: Ointments or a gel emollient? Randomised and blinded comparison of the hydration effect on ex-vivo human skin

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Introduction

The aim of this study was to compare the skin hydration effects of a gel emollient with two ointments using three commercially available products, DBON gel, HDML ointment and ZEDM ointment.

Materials and methods

In this blinded randomised comparative study, four test zones (6 cm x 5 cm) were marked on six ex vivo skin samples. Each zone was then further divided into four test sites (3 cm x 2.5 cm) and each test site marked with the study timepoints, 1, 4, 8 and 24 hours. After equilibration at room temperature, six corneometry measurements were performed on each test zone (baseline). Each emollient (0.06 ml) was uniformly applied across each randomised test zone, a fourth test zone was left untreated (control). At each subsequent study timepoint, the relevant demarcated test sites were wiped once with a tissue. Six corneometry measurements were performed on each test site. The Area Under the Curve (AUC) for the change from baseline hydration was calculated for each treatment. All statistical testing was performed at a 2-sided 5% significance level.

Results

DBON gel caused hydration to increase over the whole 24-hour measurement period, remaining above baseline level, with an average AUC of 377 (Lower and upper confidence limits (CLs) at 95% level for mean AUC being 279 and 476, respectively), while HDML ointment and ZEDM ointment had average AUCs of -14 (CLs -112 to 84) and -9 (CLs -107 to 89). The average AUC for control was -163 (CLs -262 to -65). The differences between DBON gel, the other two formulations and the untreated control were all statistically significant ($p < 0.0001$) indicating that, under the conditions of the test, DBON is the most hydrating formulation overall. Both HDML and ZEDM were significantly better at hydration than control ($p < 0.0316$ and $p < 0.0366$, respectively).

Discussion

Under the conditions of the study, these results show that there were statistically significant differences in skin hydration over a 24-hour period between the emollient formulations evaluated, with DBON gel being significantly more hydrating than either HDML or ZEDM ointments.

Abstract N°: 536

Title: Differences in skin barrier impairment between patients with psoriasis and atopic dermatitis: A cross-sectional study

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Differences in skin barrier impairment between patients with psoriasis and atopic dermatitis: A cross-sectional study

Introduction

Skin barrier dysfunction is observed in patients with psoriasi and atopic dermatitis (AD). Nevertheless, there are scarce studies that compare epidermal barrier function between patients with psoriasis and AD.

Materials and methods

A cross-sectional study was conducted. Patients with moderate/severe psoriasis and with moderate/severe AD were included. Skin barrier function parameters, including transepidermal water loss (TEWL), stratum corneum hydration (SCH), temperature, pH, erythema and elasticity, were measured on a psoriatic plaque, on an eczematous lesion and on a healthy skin region of the arm (without psoriatic or eczematous lesions).

Results

The study included 157 participants, being 92 patients with psoriasis and 65 patients with AD. The mean age of the population was 40.15 years and 56.1% (88/157) were females. Eczematous lesions showed higher temperature 32.05 vs 30.95, p<0.001), SCH (25.20 vs 8.71 arbitrary units (AU), p <0.001), TEWL (28.70 vs 18.45 $g{\cdot}m^{-2}{\cdot}h^{-1}$, p<0.001), and lower elasticity (0.69 vs 0.75%, p=0.072) than psoriatic plaques. Regarding healthy skin regions, patients with AD had lower erythema than psoriatic patients (244.50 vs 311.56 AU, p<0.001).

Discussion

Although skin barrier function may be damaged in both patients with psoriasis and AD, the way of being lesioned could be different in each disease.

Abstract N°: 561

Title: New approaches to external therapy in patients with atoic dermatitis

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Introduction: In practical dermatology, the search for new opportunities in the therapy of external action in patients with skin diseases is an urgent problem, since it is the leading link in therapeutic measures.

The aim of the study was to evaluate the clinical and microbiological efficacy of external therapy in patients with atopic dermatitis based on the use of dermatological underwear "dermodess".

Materials and methods. We examined 67 patients with atopic dermatitis aged 15 to 42 years. Among them, there were 30 males and 37 females. All patients were prescribed external therapy according to the standards of therapy using anti-inflammatory topical corticosteroids, taking into account the state of the skin microbiota. The innovative method of external therapy was characterized by putting on dermatological underwear "dermodess" (shirt, shoe covers, gloves, shorts) after injecting the activated silicic solution "fatiderm +" or lubricating anti-inflammatory ointments (TPKS), taking into account the area of the skin pathological process. All patients underwent clinical, microbiological and statistical studies. To assess the dynamics of resorption of the skin pathological process in patients with AD, the patients were divided into 2 groups: I - group - 32 patients with AD, who received innovative external therapy using dermodess in combination with the use of external solutions and ointments, and II - group 35 patients with AD who received standard external therapy without dermal underwear.

Results: The results of clinical observation showed that external treatment with the use of dermatological underwear "dermodess" contributed to the effective resorption of the skin pathological process in patients of the main group of AD, which contributed to a decrease in the DISH index by 4.4 times and averaged 5.7 + 0.05 points , which is 1.5 times higher than in the control group, where the DISHS index averaged 8.4+0.2 points. ($P<0.05$).

In group I, the degree of colonization decreased by 4.3 times and averaged 14.1+ 0.6 CFU/cm2 CFU/cm2, while in the control group of patients without dermodess underwear, this indicator averaged 23.2+ 0 .5 CFU / cm2, which is 1.6 times higher than the indicators. ($P<0.05$) The data obtained were statistically significant ($P<0.05$).

Discussion: The use of dermatological underwear contributed to a more noticeable negativity of opportunistic microorganisms in the lesions, which was statistically significantly reflected in the indicators in the degree of colonization. Apparently, the dry residue of silicon elements SiO2 in linen also contributed to the improvement of laboratory parameters.

Abstract N°: 564

Title: Clinical and microbiological characteristics of the course of atopic dermatitis in hot climate

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Introduction

Atopic dermatitis (AD) is still a global problem of the 21st century, due to its steady growth among the population, especially among children, as well as the manifestation of the incidence among adult patients. The study of clinical atopic dermatitis is important in the tactics of determining the optimal methods of therapy.

Purpose of the study. Evaluation of the clinical course of atopic dermatitis in the hot climate of Uzbekistan, taking into account the microbiological status of the skin.

Materials and methods. 234 patients with atopic dermatitis aged from 1 to 18 years were under observation. Among them, boys were 102 (43.6%) and girls - 132 (56.4%). All patients underwent clinical (SCORAD index) and microbiological, PCR studies for genotyping of staphylococci and statistical studies.

Results: . According to the clinical form, 56 (23.9%) patients noted the erythematous-squamous form, 37 (15.8%) - erythematous-squamous with lichenification, 65 (27%, 7) - lichenoid, 42 (17.9%) - exudative form and 34 (14.5%) noted the pruriginous form. In terms of severity, with mild severity up to 50 points, they were 54 (23.1%), moderate severity up to 70 points - 123 (52.6%) and severe severity - 57 (24.4%) . In children with AD with moderate and severe severity, in 67 (28.6%) patients, the st.aureus genotype - MRSA was detected on the skin of lesions on the PCR study, and the MSSA genotype - was detected in 43, which amounted to 18.4 % of cases. The degree of colonization of st.aureus with severe severity averaged 123.5+2.1 CFU (at a rate of 17.2+1.1 CFU, $P<0.05$). With an average severity of colonization, the average was 112.5+6.5 CFU, which was 6.5 times higher than in the control healthy group. Then, with mild severity, the degree of colonization averaged 54.2 + 3.5 CFU ($P<0.05$).

Discussion The obtained results indicate that in children with AD with moderate and severe severity, an increase in the detection of st.aureus genotypes - MRSA and MSSA with high colonization, which causes the development of an opportunistic form of bacterial skin infection in patients with AD.

Abstract N°: 585

Title: Economic Impact of Skin and Itch Severity Levels in Atopic Dermatitis: Results from a Real-world Multicountry Study

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Introduction

Atopic dermatitis (AD) is a common, relapsing, inflammatory skin disease associated with severe skin symptoms and intense pruritus. Understanding the economic burden of AD is critical for optimizing treatment and improving patient outcomes. MEASURE-AD is a cross-sectional study enrolling patients (age ≥12 years) with physician-confirmed AD eligible for or receiving systemic therapy in clinical practice. We evaluated the economic impact of greater levels of skin and itch severity among MEASURE-AD adult patients.

Materials and methods

Patients from 28 countries were enrolled in MEASURE-AD between December 2019 and December 2020. All assessments were recorded during a single office visit. Patients were stratified by skin severity levels using the following Eczema Area Severity Index (EASI) categories: clear (0.0), almost clear (0.1–1.0), mild (1.1–7.0), moderate (7.1–21.0), severe (21.1–50.0), and very severe (50.1–72.0). Patients were stratified by itch severity levels using the following Worst Pruritus Numerical Rating Scale (WP-NRS) categories: mild (0–3), moderate (4–6), and severe (7–10). Very low severity levels of both skin (EASI 0.0–1.0) and itch (WP-NRS 0–1) will also be assessed. Economic outcome measures included patient-reported healthcare resource utilization (HCRU) as assessed by the number of healthcare and acute care visits in the past 6 months, monthly out-of-pocket expenses (OOPE), and work impairment (absenteeism, presenteeism, work productivity loss). Interactions of skin and itch severity levels on economic outcomes were analyzed using the Kruskal-Wallis test.

Results

Among 1434 adult patients enrolled in MEASURE-AD, mean age was 39.1 years, 52.2% (n=748) were men, and 60.5% (n=868) were employed. Skin and itch severity data were available for 1428 and 1426 patients, respectively. Majority of patients reported moderate or worse skin severity (64.6%) and moderate or worse itch severity (66.8%). In general, patients with worse skin symptoms and more severe itch had significantly higher HCRU, OOPE, and WPAI (all $P<0.0001$, except for HCRU by itch severity, $P=0.0265$; **Table 1**). However, economic burden was still present at lower severity levels. Even patients with mild AD skin severity had an average of 5.8 healthcare and acute care visits in the past 6 months, >$150/month in OOPE, and overall work productivity loss of >25%. Similarly, patients with mild itch severity had an average of 5.4 healthcare and acute care visits in the past 6 months, >$125/month in OOPE, and overall work productivity loss of nearly 20%.

Discussion

This real-world study suggests that greater AD skin and itch severity levels are associated with worse economic outcomes. Treatments and disease management plans that effectively mitigate AD skin manifestations and itch are likely to reduce AD-related costs associated with HCRU, OOPE, and work impairment. These data could be useful for the pharmacoeconomic analysis of AD therapies and management.

Table 1. Economic Outcomes by Skin and Itch Severity

Economic outcome by EASI category (Leshem 2015), mean (SD)	Clear (0.0) (n=81)	Almost clear (0.1–1.0) (n=93)	Mild (1.1–7.0) (n=331)	Moderate (7.1–21.0) (n=520)	Severe (21.1–50.0) (n=386)	Very severe (50.1–72.0) (n=17)
HCRU*	3.7 (2.9)	4.7 (5.7)	5.8 (7.2)	5.4 (6.0)	6.5 (7.7)	10.8 (9.1)
OOPE†, $	89.37 (215.03)	105.32 (113.78)	155.53 (297.44)	146.11 (181.12)	184.26 (279.66)	370.69 (617.47)
WPAI, %						
Absenteeism	6.5 (20.4)	3.5 (13.6)	4.8 (13.9)	10.8 (21.0)	15.2 (27.0)	6.0 (12.5)
Presenteeism	7.8 (17.0)	11.2 (22.0)	24.0 (25.6)	33.6 (26.4)	39.3 (27.5)	62.9 (28.1)
Work productivity loss	9.7 (20.3)	14.3 (26.2)	26.2 (26.3)	38.8 (28.0)	43.5 (29.9)	67.5 (19.8)

Economic outcome by WP-NR S itch category, mean (SD)	Mild (0–3) (n=474)	Moderate (4–6) (n=337)	Severe (7–10) (n=615)
HCRU*	5.4 (7.1)	6.4 (7.8)	5.8 (6.2)
OOPE†	127.00 (240.08)	139.02 (182.94)	185.42 (282.25)
WPAI, %			
Absenteeism	6.2 (17.6)	10.1 (22.4)	13.2 (23.7)
Presenteeism	14.6 (20.9)	29.7 (24.2)	43.9 (27.6)
Work productivity loss	18.6 (24.6)	34.1 (26.5)	48.4 (28.4)

*Mean number of healthcare or acute care visits in the past 6 months in patients who reported healthcare or acute care visits for AD.
†Mean total monthly expenses and costs (US dollars equivalent) due to AD.
AD, atopic dermatitis; EASI, Eczema Area Severity Index (score range: 0–72, higher scores = worse symptoms); HCRU, healthcare resource utilization; OOPE, out-of-pocket expenses; WPAI, Work Productivity and Activity Impairment (score range: 0–100%; higher scores = worse impairment); WP-NRS, Worst Pruritus Numerical Rating Scale (score range: 0–10; higher scores = worse pruritus).

Abstract N°: 587

Title: Real-World Burden of Atopic Dermatitis-Related Sleep Disturbances: Results From a Multicountry Study

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Introduction

Atopic dermatitis (AD) is a chronic, relapsing skin disease. AD-related sleep disturbance has been shown to affect patients' quality of life (QoL). MEASURE-AD was a cross-sectional 28-country study of patients with physician-confirmed AD who were either receiving or eligible for systemic therapy. We analyzed associations between sleep disturbance and other measures of disease burden in patients enrolled in MEASURE-AD.

Materials and methods

Patients with AD (≥12 years of age) participated in MEASURE-AD between December 2019 and December 2020 while attending a routine office visit. Primary study findings have been reported. Here we report post hoc analyses among adults (≥18 years of age). Patients were grouped by the number of nights they reported sleep disturbance over the past week (0, 1–2, 3–6, and 7 nights). Outcomes assessed included disease severity (Eczema Area and Severity Index [EASI], Scoring Atopic Dermatitis [SCORAD]), itch (Worst Pruritus Numerical Rating Scale [WP-NRS]), and QoL (Dermatology Life Quality Index [DLQI]). Psychosocial burden (12-Item Short Form Health Survey Mental Component Summary, Hospital Anxiety and Depression Scale [HADS] scores for anxiety and depression) and AD-related impairment (Work Productivity and Activity Impairment) were also assessed. Differences in means and proportions among sleep disturbance groups were analyzed using Kruskal-Wallis and chi-square tests, respectively.

Results

Overall, 1434 adult patients (mean age 39.1 years; 52% male; 61% employed) were enrolled in the study. Among 1415 adult patients who reported sleep disturbance data, 404 (28%) reported no nights with sleep disturbance in the previous week; 304 (21%) reported 1–2 nights; 381 (27%), 3–6 nights; and 326 (23%), every night. Greater sleep disturbance was significantly associated with worse disease severity, itch, QoL, psychosocial burden, and impairment scores (P <.0001 for all comparisons; **Table 1**). Disease burden was pronounced among patients with ≥3 nights of sleep disturbance, eg, mean SCORAD exceeded 50 (the "severe" threshold), mean DLQI exceeded 10 ("very large effect" threshold), and more than half had anxiety according to HADS.

Discussion

These findings demonstrate the substantial real-world impact of AD on sleep among adults, with nearly half reporting ≥3 nights of sleep disturbance in the previous week. Increasing sleep disturbance was associated with

greater burden across all disease domains assessed, demonstrating the widespread relationship between sleep and multiple dimensions of disease burden. Collectively, these findings suggest the importance of evaluating sleep disturbance in patients with AD in daily clinical practice in addition to dermatological manifestations and itch.

Table 1. Association Between Sleep Disturbance in Previous Week and Other Measures of Disease Burden

Measure	No Nights (n=404)	1-2 Nights (n=304)	3-6 Nights (n=381)	Every Night (n=326)	*P* value[a]
EASI, mean (SD)	7.2 (9.3)	12.6 (10.7)	17.8 (12.1)	23.2 (13.5)	<.0001
SCORAD, mean (SD)	26.0 (19.4)	39.3 (16.5)	52.0 (16.5)	59.9 (16.7)	<.0001
WP-NRS, mean (SD)	2.5 (2.4)	4.8 (2.5)	6.8 (2.2)	7.6 (2.1)	<.0001
DLQI[b], mean (SD)	4.4 (5.0)	9.1 (5.6)	13.7 (6.3)	16.9 (7.5)	<.0001
SF-12 MCS[c], mean (SD)	49.9 (9.4)	46.0 (9.9)	40.6 (10.6)	37.8 (11.3)	<.0001
HADS-A ≥8[d], n (%)	91 (22.5)	113 (37.2)	210 (55.1)	194 (59.5)	<.0001
HADS-D ≥8[d], n (%)	43 (10.6)	70 (23.0)	143 (37.5)	153 (46.9)	<.0001
WPAI, (%), mean (SD)					
Absenteeism	3.5 (13.3)	7.7 (20.1)	10.7 (19.6)	19.0 (28.8)	<.0001
Presenteeism	11.9 (20.9)	23.1 (22.1)	39.8 (23.6)	48.6 (28.4)	<.0001
Overall work productivity impairment	14.3 (23.2)	26.5 (24.0)	45.3 (25.3)	53.6 (29.3)	<.0001
Activity impairment	14.4 (22.8)	28.7 (24.0)	47.6 (26.1)	58.2 (30.4)	<.0001

[a]*P* values are based on Kruskal-Wallis or chi-square test as appropriate.
[b]Lower DLQI scores correspond to higher quality of life; DLQI was assessed in patients aged ≥16 years (n=1446).
[c]Higher SF-12 MCS scores indicate better mental health.
[d]Score indicative of borderline abnormal to abnormal.
DLQI, Dermatology Life Quality Index; EASI, Eczema Area and Severity Index; HADS, Hospital Anxiety and Depression Scale; HADS-A, HADS-Anxiety; HADS-D, HADS-Depression; SCORAD, Scoring Atopic Dermatitis; SF-12 MCS, 12-Item Short Form Health Survey Mental Component Summary; WP-NRS, Worst Pruritus Numerical Rating Scale; WPAI, Work Productivity and Activity Impairment.

Abstract N°: 588

Title: Clinical Impact of Skin and Itch Severity Levels in Atopic Dermatitis: Results from a Real-world Multicountry Study

Melinda Gooderham[1], Evangelia Papadavid[2], Paul-Gunther Sator[3], Sven Lanssens[4], Henrique Teixeira[5], Shunya Takemoto[6], Brian Calimlim[5], Shirley Chen[7], Cristina Sancho Sanchez[8], Chia-Yu Chu[9]

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Introduction

Atopic dermatitis (AD) is a common, relapsing, inflammatory skin disease associated with severe skin manifestations and intense pruritus. Understanding the clinical burden of AD is critical for optimizing treatment and improving patient outcomes and quality of life (QoL). MEASURE-AD is a cross-sectional, 28-country study of patients (≥12 years of age) with physician-confirmed AD eligible for or receiving systemic therapy in clinical practice. We evaluated the impact of greater levels of skin and itch severity on clinical outcome measures among MEASURE-AD patients.

Materials and methods

Patients were enrolled in MEASURE-AD between December 2019 and December 2020. All assessments were recorded during a single office visit. Here we report post hoc analyses among adults (≥18 years of age [≥16 years for Dermatology Life Quality Index (DLQI) outcome]). Patients were stratified by skin severity levels using the following Eczema Area Severity Index (EASI) categories: clear (0.0), almost clear (0.1–1.0), mild (1.1–7.0), moderate (7.1–21.0), severe (21.1–50.0), and very severe (50.1–72.0). Patients were stratified by itch severity levels using the following Worst Pruritus Numeric Rating Scale (WP-NRS) categories: mild (0–3), moderate (4–6), and severe (7–10). Very low severity levels of both skin (EASI 0.0–1.0) and itch (WP-NRS 0–1) will also be assessed. Clinical outcomes assessed included sleep (hours slept per night in the past 7 days), QoL (DLQI), and flares (number of flares in the past 6 months). Interactions of skin and itch severity levels on clinical outcomes were analyzed using the Kruskal-Wallis test.

Results

Overall, 1434 adults were enrolled in MEASURE-AD; among these, skin and itch severity data were available for 1428 and 1426 patients, respectively. Moderate or worse skin severity was reported by 64.6% of patients and moderate or worse itch severity by 66.8% of patients. In general, worse skin symptoms and more severe itch were significantly associated with worse clinical outcomes (all $P<0.0001$), including a higher number of flares in the past 6 months (except for those with very severe skin symptoms), fewer hours of sleep per night, and worse QoL (**Table 1**). However, clinical burden was still present at lower severity levels. Even patients with mild skin severity experienced moderate itch severity (WP-NRS ≥4), a moderate effect on QoL (DLQI ≥6), and nearly 1 flare per month (5.8 flares in 6 months). Similarly, patients with mild itch severity experienced moderate skin severity (EASI ≥7.1), a small to moderate effect on their QoL, and approximately 1 flare every other month (3.6 flares in 6 months).

Discussion

Findings from this real-world study suggest that greater skin and itch severity levels are associated with worse clinical outcomes. In addition, most patients who are candidates for or receiving systemic therapy are currently experiencing moderate (or worse) skin and itch severity. Treatments and disease management plans that effectively mitigate AD skin manifestations and itch are likely to reduce the negative effects of AD on sleep, QoL, and the occurrence of flares.

Table 1. Clinical Outcomes by Skin and Itch Severity

Clinical outcome by EASI category (Leshem 2015), mean (SD)	Clear (0.0) (n=81)	Almost clear (0.1–1.0) (n=93)	Mild (1.1–7.0) (n=331)	Moderate (7.1–21.0) (n=520)	Severe (21.1–50.0) (n=386)	Very severe (50.1–72.0) (n=17)
Itch: WP-NRS	1.1 (2.0)	2.0 (2.0)	4.1 (2.8)	6.1 (2.7)	6.9 (2.4)	8.2 (1.9)
Sleep: h/night in past 7 d	7.0 (1.6)	7.2 (1.7)	6.8 (1.5)	6.4 (1.6)	6.0 (1.7)	4.6 (1.9)
QoL: DLQI score*	1.5 (2.7)	3.5 (4.3)	8.0 (6.6)	12.0 (7.1)	14.9 (7.4)	18.8 (5.5)
Flares in past 6 mo	2.3 (6.9)	2.0 (4.3)	5.8 (10.7)	6.1 (12.7)	7.6 (14.6)	3.9 (2.9)

Clinical outcome by WP- NRS itch category, mean (SD)	Mild (0–3) (n=474)	Moderate (4–6) (n=337)	Severe (7–10) (n=615)
Skin symptoms: EASI	7.3 (9.7)	14.5 (11.2)	20.9 (12.7)
Sleep: h/night in past 7 d	7.0 (1.6)	6.5 (1.5)	6.0 (1.7)
QoL: DLQI score*	5.2 (5.5)	10.3 (6.3)	15.3 (7.1)
Flares in past 6 mo	3.6 (9.6)	5.4 (8.9)	8.1 (15.0)

*Includes patients ≥16 years. DLQI, Dermatology Life Quality Index (score range: 0–30; higher scores = more impairment); EASI, Eczema Area and Severity Index (score range: 0–72, higher scores = worse symptoms); d, day; h, hour; mo, month; QOL, quality of life; WP-NRS, Worst Pruritus Numeric Rating Scale (score range: 0–10; higher scores = worse pruritus).

Abstract N°: 603

Title: Correlation of total serum IgE with disease severity in adult patients with atopic dermatitis

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Introduction Atopic dermatitis (AD) is a chronic, recurrent, inflammatory disease that occurs in the adult population with a significantly lower frequency compared to the pediatric population. Based on the test of the extent and activity of the disease, the disease can be classified into mild, moderate and severe. Elevated serum total IgE is not a narrowly specific marker for AD, but it does occur in about 80% of patients. Some studies have shown a positive correlation between elevated serum IgE values and the severity of the clinical disease activity of AD.

Materials and methods Retrospective analysis of 71 adult patients (≥ 18 years) diagnosed with AD who were hospitalized at the Clinic for Skin and Venereal Diseases in the period 2009-2019. All patients were diagnosed with AD based on the Hanifin and Rajka criteria. The clinic database was used as a data source. To assess the severity of the clinical picture, the following was used: SCORAD test (SCORingAD). Based on the age when the disease manifested, we divided the patients into 2 groups - patients with AD before and after 18 years of age. Serum total IgE values above 100 IU / ml were considered elevated.

Results 71 patients with AD were analyzed, 23 (32%) patients were women and 48 (68%) were men. The age range of patients ranged from 18 to 82 years (median 30). The manifestation of the disease before the age of 18 had 33 (47%) patients, while 38 (53%) patients had the manifestation of the disease after the age of 18. Serum total IgE was determined in all patients. Elevated values (> 100 IU / ml) were detected in 61 (86%) patients. Values ranged from 145 to 19900 IU / ml (median 1170). No statistically significant correlation was found between the total serum IgE value and the SCORAD test value. (Pearson's correlation).

The analysis of SCORAD test values in 2 groups of patients formed on the basis of age when AD was manifested (1st group before 18 years of age; 2nd group after 18 years of age) did not find a statistically significant difference. Patients in whom the disease began in in childhood, they did not have a more severe disease compared to patients with the onset of the disease in adulthood. ($p > 0.05$). Analysis of 2 groups of patients depending on the year of onset of AD showed that patients with the appearance of AD in children had statistically significantly higher IgE values compared to patients with the manifestation of AD in adults ($p < 0.05$).

Discussion In our study of 71 adult patients with AD, no statistically significant correlation was found between total serum IgE and severity of AD.

Abstract N°: 616

Title: Differences in response to dupilumab between adolescent atopic patient compared with the adult population: a real-life experience

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Introduction

Dupilumab has revolutionized the therapeutic management of atopic dermatitis. The treatment has proven to be effective and safe in adult and adolescent populations. In Italy, the use of Dupilumab in the adolescent population has been approved for about 1 year. Real-life data comparing efficacy parameters between adult and adolescent populations are not yet available.

Materials and methods

A prospective real-life study was conducted to evaluate possible differences in objective efficacy outcomes, patient's reported outcomes, and some biochemical parameters.

From October 2020 to October 2021, Dupilumab was initiated in 20 adolescent patients (12-18 yr) and 129 adult patients (>18 yr) at an initial dosage of 600 mg and subsequent injections every 14 days of 300 mg. Demographic data, total EASI and head/neck EASI, DLQI, POEMS, IgE, eosinophilia, LDH, and pruritus (number rating scale) were recorded. All patients were evaluated at 4 months (T1) and 8 months (T2). Achievement of EASI 90 and 75 at the described endpoints was also evaluated.

Results

No significant differences were found in the achievement of partial EASI and mean total EASI and head and neck region in the two populations. The same results were found for mean IgE and eosinophils and NRSpp. At T0 significant differences were found in mean LDH (400.27 vs 281.74 p=0.032), POEMS (17.1 vs 21.45 p=0.006), and DLQI (10.75 vs 14.76 p=0.022) for adolescents and adults respectively. Significant differences were found at T1 for LDH (380.14 vs 218.87 p=0.025) and POEMS at T2 (4.2 vs 7.32 p=0.02).

Discussion

Dupilumab is safe and effective in the treatment of atopic patients, whether adults or adolescents. The psychological impact of atopic dermatitis appears to be less in the adolescent population.

Abstract N°: 617

Title: Dupilumab-induced Urticaria

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Introduction

Materials and methods

Results

Dupilumab.

In February 2019 a male patient in his forties affected by AD was started with bi-weekly 300 mg injection of dupilumab, loading dose of 600 mg, after unsuccessful therapeutic courses with cyclosporine and oral steroids. Prick and patch tests were positive for olive and epoxy resin, the patient's family history was consistent for atopic dermatitis. At the beginning of the treatment, the patient presented important eczematous involvement of the body surface, with EASI equal to 24, reporting difficult sleeping and intense itching. The patient experienced complete resolution of AD lesions during the following 18 months; a single episode of urticaria was reported during the first 4 months of treatment. From September 2020, the patient complained of the appearance of pruritic wheals throughout the body surface 12 hours after each dupilumab injection with rapid resolution within the next 2 hours; no systemic symptoms or angioedema were reported. At the follow-up visit in January 2021 the patient showed control of atopic dermatitis with minimal itching, no dermographism, and wheals were detected. From the images taken by the patient, it was possible to appreciate wheals of different diameters diffuse on the trunk, abdomen, neck, and limbs. The clinical scenario was consistent with the diagnosis of drug-induced urticaria (figure 1).

Subsequent negative skin prick tests and intradermal tests (at 20 minutes, 12 and 24 hours) for dupixent® and polysorbate80, the solubilizing agent, a well-known cause of allergic reactions, used as an excipient in the drug, suggested a non-IgE-mediated urticaria, for one of the components of dupixent®.

Despite the reasonable correlation with dupilumab treatment, given the persistent efficacy in the control of atopic dermatitis, we decided to continue dupilumab, in combination with anti-allergic prophylaxis. This consisted of 20 mg of bilastine taken before each injection of dupilumab, to be repeated one hour later, with the recommendation to perform a dermatological evaluation in case of new urticaria flares.

Discussion

Abstract N°: 645

Title: Comparative efficacy and safety of monoclonal antibodies and JAK inhibitors used in moderate-to-severe atopic dermatitis: a systematic review and meta-analysis

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Introduction

Many new systemic treatments for atopic dermatitis (AD) have been developed in the recent years. Among these treatments are antibodies to specific key elements of the known inflammatory cascade i.e. dupilumab and tralokinumab as well as Janus kinase inhibitors (JAK-inhibitors) such as abrocitinib, baricitinib and upadacitinib. However, these treatments have only been compared to placebo rather than active comparators in most studies. The aim of this review and meta-analysis was to compare the efficacies of systemic treatments with dupilumab, tralokinumab and JAK inhibitors for the treatment of AD

Materials and methods

A systematic review following PRISMA guidelines was performed using Medline, EMBASE and Cochrane library. All Randomized controlled trials (RCTs) investigating the efficacy of systemic treatments for moderate-to-severe AD in adults were included. Primary outcomes were proportion of AD patients achieving 50%, 75%, and 90% in improvement in EASI score after dupilumab, tralokinumab or JAK inhibitor treatment in RCTs or head-to-head (HTH) studies.

Results

Nineteen studies totaling 6444 patients were included. In monotherapy studies, upadacitinib 30 mg once daily had the numerically highest efficacy regarding EASI-50, EASI-75 and EASI-90. In combination therapy studies with topical corticosteroids, dupilumab 300 mg once every other week had highest efficacy regarding EASI-50, and abrocitinib 200 mg once daily had the highest score regarding EASI-75 and EASI 90

Discussion

Our analysis provided evidence that dupilumab, tralokinumab and JAK-inhibitors all had an acceptable efficacy profile and resulted in clinically relevant improvements in EASI-score. Furthermore, upadacitinib and abrocitinib seem to have great potential in order to treat atopic dermatitis patients. However, further studies are needed to determine the long-term efficacy of JAK inhibitors in adults with moderate-to-severe atopic dermatitis.

Abstract N°: 663

Title: A real-world study to evaluate the effectiveness of a moisturizing cream as an adjuvant in the treatment of eczema

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Introduction

Eczema is a group of papulosquamous diseases in skin and has various types. It is a common skin condition marked by itchy and inflamed patches of skin. The main symptom of eczema is itchy, dry, rough, flaky, inflamed, and irritated skin. It can flare up, subside, and then flare up again. Eczema can occur anywhere but usually affects the arms, inner elbows, backs of the knees, or head (particularly the cheeks and the scalp). Moisturizers play an important role in the management of several skin disease as an adjunct therapy

Materials and methods

In this 2-group, real world setting study, one group received a moisturizer to be used as adjuvant, along with prescribed treatment, whereas the other group received only the prescribed treatment (steroids) prescribed by Investigator. The primary objective was to evaluate the moisturizing efficacy of a moisturizer when used as an adjuvant to the main line of treatment for eczema. The evaluation criteria included significant reduction in EASI (Eczema Area and Severity Index) scores, measuring skin hydration using MMSC (Moisture Meter-SC), reduction in itch score (5D itch score) and reduction in burning sensation. Inclusion criteria included voluntary men and women with Atopic Dermatitis, Eruptive Eczema, Chronic Lichenified Eczema, Lichen Simplex Chronicus, Discoid Eczema, Allergic Eczema, with EASI scores 8-21 or more.

Results

At the end of the study at 4 weeks, 113 out of the 120 patients enrolled completed the study. In the group with moisturizer, significant reduction in the EASI score as compared to the baseline; significant increase in skin hydration as compared to baseline and to the comparator group where moisturizer was not used; significant reduction in itching score as compared to baseline and to the comparator group where moisturizer was not used along with treatment; and significant reduction in burning sensation was recorded

Discussion

Healthy skin appearance is essential as flawed presentation may result in reduced self-esteem. Either normal skin or dermatoses with dry skin symptoms may both gain optimal benefit from proper utilization of moisturizers. Impression of skin dryness consist of visible and tactile changes of the skin as well as alteration in skin's sensory components, which presents as dry skin symptoms. These symptoms include dryness feeling and discomforts; consist of tightness, pain, itch, stinging, and tingling. Moisturizers work effectively to overcome dry skin underlying dermatoses, interrupting dry skin cycle while maintaining skin smoothness. The skin functions as a barrier, protecting underlying tissues from desiccation, infection, mechanical stress and chemical irritation. Impaired function leads to increasing trans-epidermal water loss associated with various kinds of dermatitis. Water from deeper epidermal layers moves upward to hydrate stratum corneum cells and is then lost to evaporation. Epidermal water content is essential to prevent skin dryness and maintain plasticity. In this study, Moisturizer

improved the skin hydration significantly on eczematous skin of patients and significantly reduced the itching score compared to the group of treatment where moisturizer was not used.

Abstract N°: 719

Title: Randomised, open, comparative study of the hydration effect on ex-vivo human skin of two emollient formulations with different recommended application regimes

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Introduction

Emollients are considered a key therapeutic agent in the management of dry skin diseases such as eczema and psoriasis. Some of these emollients are designed to provide a significant skin hydration benefit with just a single application, whilst some are required to be applied more frequently. The aim of this study was to compare the skin hydration effects, over a 24 hour period, of a novel gel emollient DBON when applied only once, to a standard emollient ZBE cream, with a traditional three times per day product application.

Materials and methods

In this randomised comparative study, three test zones (6 cm x 5 cm) were marked on six ex vivo skin samples. Each zone was then further divided into four test sites (3 cm x 2.5 cm) and each test site marked with the study timepoints, 1, 5, 9 and 24 hours. After equilibration at room temperature, six corneometry measurements were performed on each test zone (baseline). Each emollient (0.06 ml) was uniformly applied across each randomly allocated test zone, a third test zone was left untreated (control). The same amount of ZBE cream was further reapplied to its test zones at 4h and then again at 8h. At each study timepoint, the relevant demarcated test sites were wiped once with a tissue. Six corneometry measurements were then performed on each timepoint test site. The Area Under the Curve (AUC) for the change from baseline hydration was calculated for each treatment test site. All statistical testing was performed at a 2-sided 5% significance level.

Results

DBON gel caused hydration to increase over the whole 24-hour measurement period, remaining above baseline level, with an average AUC of 488 (Lower and upper confidence limits (CLs) at 95% level for mean AUC being 405 and 571, respectively), while ZBE cream had average AUC of 15 (CLs -67 to 98). The average AUC for the untreated control was -104 (CLs -186 to -21). The differences between DBON gel, ZBE cream and the untreated control were all statistically significant ($p < 0.0001$) indicating that, under the conditions of the test, DBON, with a single application, was better at hydrating the skin than ZBE when applied three times. ZBE cream was significantly more hydrating than untreated control ($p= 0.0463$).

Discussion

Under the conditions of the study, these results show that there were statistically significant differences in skin hydration over a 24-hour period between the emollient formulations evaluated, with a single application of DBON gel being significantly more hydrating than three applications of ZBE cream.

Abstract N°: 736

Title: TOPICAL THERAPY IN SEVERE ATOPIC DERMATITIS - DRY WRAPPING IN A BED SHEET

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Title:

TOPICAL THERAPY IN SEVERE ATOPIC DERMATITIS – DRY WRAPPING IN A BED SHEET

Introduction

Atopic dermatitis (AD) is a chronic, recurrent skin-inflammatory disease characterized by severe itching.

Topical therapy is most commonly used to treat dermatological diseases. One of the most useful techniques for applying dermatics to the skin is by wrapping in a bed sheet. It is a simple, but effective therapeutic technique. The technique is used in various dermatological diseases where a large area of skin is affected (Atopic dermatitis, Psoryasis, etc.).

Materials and methods

We used a retrospective study to observe patients (20) with AD who were treated with local therapy and the mentioned technique. The patients we observed had a larger area of skin affected on admission to the hospital and described sever itching. We used SCORAD (SCORing Atopic Dermatitis) and EASI (Eczema Area and Severity Index) to assess the skin condition and disease rate, the degree of itching and non-sleepiness was assessed by VAS (Visual analog scale). Patients were evaluated at admission to hospital and at the end of treatment. The average hospitalization was 7 days.

Results

All patients had improved skin condition. SCORAD decreased for 40%, EASI for 20% and itching for 33%. Sleeping improved by 37%. Patients who needs extensive dermatological treatment were hospitalized, which contributed to faster and more effective health.

Discussion

The changes were less pronounced or significantly reduced. They reported about reduced skin itching and they were finally able to fall asleep! Despite modern methods of treatment, the technique of dry wrapping in a bed sheet is still relevant and effective. It is useful both for hospital treatment and in the home environment.

Abstract N°: 738

Title: Efficacy and Safety of Dupilumab in Children Aged ≥6 Months to <6 Years With Moderate-to-Severe Atopic Dermatitis

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Introduction

There is a high unmet medical need in pediatric patients aged 6 months to <6 years with moderate-to-severe atopic dermatitis (AD). We present pivotal phase 3 efficacy and safety data of dupilumab in children aged 6 months to <6 years with moderate-to-severe AD.

Materials and methods

In LIBERTY AD INFANTS/PRE-SCHOOL (NCT03346434 part B), a double-blind, placebo-controlled trial, children aged 6 months to <6 years with moderate-to-severe AD inadequately controlled with topical therapies were randomized 1:1 to subcutaneous dupilumab every 4 weeks (q4w) (baseline weight ≥5–<15kg: 200mg; ≥15–<30kg: 300mg) or placebo for 16 weeks. From Day –14, all patients initiated standardized treatment with low-potency topical corticosteroids (TCS).

Results

162 patients were randomized (dupilumab/placebo groups, n=83/79); 157 (96.9%; dupilumab/placebo n=82/75) completed 16 weeks of treatment. At Week 16, 27.7%/3.9% (P<0.0001) of patients receiving dupilumab/placebo achieved an IGA score of 0–1 (clear/almost clear), and 53.0%/10.7% (P<0.0001) achieved ≥75% improvement in Eczema Area and Severity Index (EASI). Least squares (standard error) mean percent change from baseline at Week 16 in EASI and weekly averaged worst scratch/itch score in dupilumab/placebo was –70.0%(4.9)/–19.6% (5.1) (P<0.0001) and –49.4%(5.0)/–2.2%(5.2) (P<0.0001), respectively. Improvements were statistically significant by Week 4. In dupilumab/placebo groups, treatment-emergent adverse events (TEAE), serious TEAE and TEAE-related treatment discontinuation were reported in 63.9%/74.4%, 0%/5.1% and 1.2%/1.3% of patients, respectively. Incidence of conjunctivitis (narrow cluster) and skin infection was 4.8%/0% and 12.0%/24.4%, respectively. Most common TEAEs were dermatitis atopic (13.3%/32.1%), nasopharyngitis (8.4%/9.0%), upper respiratory tract infection (6.0%/7.7%), impetigo (3.6%/7.7%), and lymphadenopathy (3.6%/7.7%).

Discussion

In children (6 months to <6 years) with moderate-to-severe AD, dupilumab q4w+TCS vs placebo+TCS rapidly and significantly improved AD signs and symptoms. Dupilumab was well tolerated with a favorable safety profile.

Abstract N°: 751

Title: Family Impact of Moderate-to-Severe Atopic Dermatitis in Children Aged <12 years: Results From 732 Patients in the PEDIatric STudy in Atopic Dermatitis (PEDISTAD) Observational Study

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Introduction

To describe the real-world family impact of moderate-to-severe atopic dermatitis (AD) in children aged <12 years.

Materials and methods

PEDISTAD (NCT03687359) is an ongoing, international, non-interventional study in patients aged <12 years with moderate-to-severe AD inadequately controlled with topical therapies or for whom such therapies are inadvisable. Baseline measures of disease severity reported include Eczema Area and Severity Index (EASI; 0–72) and AD-affected body surface area (BSA). Family impact measures used include Caregiver Global Assessment of Disease (CGAD) and Dermatitis Family Impact (DFI) questionnaire (10 questions, each scored 0 [not at all] to 3 [very much]; 0–30).

Results

Among 732 children (52.2% male; mean±SD age 6.2±3.2 years), EASI (mean±SD) was 14.4±10.7 and BSA affected (%), 33.3±21.0. Proportion of caregivers reporting no symptoms/mild, moderate and severe/very severe in CGAD were 24.2%, 42.2%, and 33.6%, respectively. Overall DFI (mean±SD) score was 10.9±7.4, with many caregivers reporting their child's AD had "very much"/"quite a lot" of impact on: expenditure (46.7%), tiredness/exhaustion (40.7%), family sleep (40.7%), caregiver life due to AD treatment (38.3%), emotional distress (37.5%), housework (32.6%), family leisure (25.9%), food preparation/feeding (23.3%), and family relationships (18.4%). Overall DFI scores worsened with increasing AD severity (by EASI/BSA). Results were comparable across age groups (0 to <2, 2 to <6, 6 to <12 years).

Discussion

Caregivers of children with moderate-to-severe AD in PEDISTAD reported a multidimensional impact on caregiver/family life. Family impact also worsened with increasing AD severity. The impacts on caregivers/family should be considered when making treatment decisions for childhood moderate-to-severe AD.

Abstract N°: 752

Title: Dupilumab Provides Long-Term Improvement in Sleep Loss In Children, Adolescents, and Adults With Atopic Dermatitis

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Introduction

Atopic dermatitis (AD) is associated with impaired sleep quality. We evaluated the efficacy of dupilumab treatment on sleep up to 1 year in adults and adolescents with moderate-to-severe AD and children with severe AD.

Materials and methods

We included 73 adolescents (aged 12–17 years) with moderate-to-severe AD (NCT03054428) and 110 children (aged 6–11 years) with severe AD (NCT03345914) who were treated for 16 weeks with FDA-approved dupilumab dose regimens in a double blind randomized placebo-controlled trial (children received concomitant medium-potency topical corticosteroids), and subsequently entered the LIBERTY AD PED OLE open-label extension study (NCT02612454) and were treated with dupilumab 300 mg q4w for up to 1 year (1Y; total treatment = 48 weeks). We also included 80 adults with moderate-to-severe AD who were optimal responders to dupilumab 300 mg q2w at Week 16 of LIBERTY AD SOLO 1/2 (NCT02277743/NCT02277769) and continued dupilumab monotherapy in the LIBERTY AD SOLO-CONTINUE (NCT02395133) for an additional 36 weeks (total treatment = 52 weeks, 1Y).

Results

Patients in all age groups reported sustained improvement in sleep following dupilumab treatment for up to 1 year. Adults had a mean baseline sleep loss VAS score (range: 0 [no sleeplessness]–10 [worst imaginable sleeplessness]; recall period 3 days/nights) of 5.2, decreasing to 0.9 at Week 16, and 1.1 at 1Y. Adolescents had mean scores of 5.3 at baseline, 2.0 at Week 16, and 1.3 at 1Y. Mean scores for children <30kg were 6.7 at baseline, 2.1 at Week 16, and 1.5 at 1Y; and for children ≥30kg were 5.4 at baseline, 1.3 at Week 16, and 1.4 at 1Y. Dupilumab was generally well tolerated with an acceptable safety profile in all age ranges.

Discussion

Dupilumab treatment up to 1 year provided sustained improvement in sleep loss in children with severe AD, and adolescents and adults with moderate-to-severe AD.

Abstract N°: 785

Title: eyelid eczema: 11 cases

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Introduction

Eyelid eczema is a frequent subject of consultation in dermato-allergology. Direct application of the allergen to the eyelids is the most frequent mode. The objective of our study is to evaluate the frequency of allergic contact dermatitis of the eyelids and to identify the incriminated allergens in our context. We report a series of 11 patients presenting with eyelid eczema.

Materials and methods

This is a retrospective study conducted during 5 years (January 2017 to February 2022) in the dermatology department of CHU Ibn Rochd Casablanca of 164 patients tested by standard battery for suspected contact dermatitis of the eyelids.

Results

11 cases of contact dermatitis of the eyelids were collected. The age of the patients varied from 20 to 65 years, with an average of 37.28 years and a female predominance (79.75%). A history of personal or family atopy was noted in 29.79% of cases. The average duration of evolution was 1.2 years with extremes from a few days to 3 years. The clinical appearance of the lesions was erythematous-squamous in 42%, erythematous-vesicular in 32 %, erythematous in 21.6% and edematous in 4%. The standard battery was tested in all cases, Among the 11 patients tested, 64.18% showed a positive reaction to at least one allergen. Poly sensitisation was found in 54.16% of positive tests.

Of all the positive tests, the allergens selected were: Nickel (28%), Cobalt (22%), Formaldehyde (3%), Fragrance mix (12.6%), Peruvian balsam (5.9%) and paraphenylene diamine (PPD) (7%).

Management was based in all cases on the eviction of the allergen(s) associated with a symptomatic treatment. Patients were referred to their treating physicians for follow-up.

Discussion

Contact dermatitis is the most frequent etiology of eyelid dermatoses. The identified allergens are in agreement with the literature data on eyelids but with different frequencies. The main allergens are contained in cosmetic products, topical ophthalmic medications and occupational allergens. It is important to underline the importance of allergological exploration to confirm the diagnosis of allergy and to identify precisely the allergen involved.

Abstract N°: 786

Title: leonin facies complicating atopic dermatitis: an atypical presentation

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Introduction

Atopic eczema is a chronic inflammatory skin condition. It is characterized by dry skin and very itchy red patches that have a major impact on the quality of life of patients. The severity of the disease depends on each individual, and varies from chronic eczematous lesions to complicated forms. We present an atypical and rare complication of atopic dermatitis in a 51-year-old woman.

Materials and methods

Results

The patient was a 51-year-old woman who had suffered from asthma since childhood and was undergoing background treatment. For 20 years, she had been presenting pruritic papular lesions on both hands and the face, evolving by flare-ups and remissions developing a leonine facies. The history did not reveal any similar case in the family. Clinical examination revealed erythematous papular lesions of the face giving a leonine aspect, an infiltrated violet erythematous placard of the face and neck, associated with vegetative lesions with erosive surface on both hands and a lichenified violet erythematous placard on the back of the hands, forearms and both legs. Biological examinations were normal. Histology showed an excoriated and spongy psoriasiform dermatitis in favor of a chronic lichenified eczema. Patch testing revealed no contact sensitivity. The diagnosis of atopic eczema was evoked. The therapeutic management consisted of phototherapy and medical treatment with dermocorticoids and azathioprine. The patient refused treatment and was lost to follow-up.

Discussion

Our observation illustrates a rare complication of atopic dermatitis.

Leonine facies is a rare manifestation and occurs as chronic inflammatory diseases progress without treatment, as in this case. It corresponds to the morphological manifestation of a diffuse dermal infiltration of the face. This appearance is due to the fusion of papules into plaques, resulting in furrows and fissures on the face. It has been classically described for lepromatous leprosy. Apart from leprosy, leonine facies has been reported associated with granulomatous lesions such as cutaneous sarcoidosis, leishmaniasis, mycosis fungoides and more rarely chronic inflammatory dermatoses such as in our patient's case.

Abstract N°: 856

Title: European Standard Series Patch Test Results in Contact Dermatitis Patients in a Tertiary Care Hospital : 971 Cases

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Introduction

Patch tests is the gold standard for the diagnosis of cell-mediated hypersensitivity type IV reactions such as contact dermatitis.

The prevalence of allergen sensitivity varies from country to country due to variations in allergen exposure and local traditions and cultures.

The objectives of this work are to determine the profile of the most frequent allergens in our context in order to be able to adopt better preventive measures. But also to compare our results with data from the literature.

Materials and methods

A retrospective study over 18 years, including cases of suspected contact dermatitis that presented to the Dermatology Department of the CHU Ibn Rochd in Casablanca. Clinical information was collected on a standardized form specifying: age, sex, profession, history of atopy, onset of symptoms, clinical signs, and patch test results. These contained European standard battery allergens.

Results

971 cases of suspected contact dermatitis were collected. The age of the patients varied from 7 to 80 years, with an average of 37.5 years and a female predominance (68%). Personal atopy was noted in 42.7% and family atopy in 24% of cases. The average duration of evolution was 4 and a half years with extremes of a few days to 23 years.

The lesions were located on the hands in (60.5%) of cases, the face (14.5%), the feet (12.5%), the lips (7%) and the eyelids (6%). Eczema was generalized in (5.8%).

Of the 971 patients tested, 58.5% showed a positive reaction to at least one allergen. Polysensitization was found in 59% of positive tests.

Of all the positive tests, the allergens retained were: Nickel (37.5%), Cobalt (17.8%), potassium dichromate (13%), Fragrance mix (11.2%), Paraphenylene diamine (PPD) (6 %), Formaldehyde (5%) and Balsam of Peru (4%). A few cases of sensitivity to Textile dye mix have also been noted.

Management was based in all cases on the eviction of the allergen(s) associated with symptomatic treatment. Patients were referred to their treating physicians for follow-up.

Discussion

In our series, we note a high rate of positive tests which is explained by the strong selection bias of the patients. The most frequently found allergens were Nickel, Potassium dichromate and Cobalt, which is comparable to the majority of published series. Their ubiquity makes total eviction difficult and explains the chronicity of certain

contact eczemas. Regulations aimed at reducing Nickel releases and high chromium levels, as in certain countries, could have positive effects on the prevalence of contact dermatitis.

Abstract N°: 901

Title: Blood clotting changes in eczema patients

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Introduction. In the problem of eczema, the vascular component of its pathogenesis is of the topical importance. It has been established that the immune conflict condition is accompanied by the intensification of production or release of a wide range of substances exhibiting vasoactive effect as well. In such cases, one can consider changes in the vascular wall with subsequent activation of the thrombocytic-vascular and coagulation links of the haemostasis. Disagreement of literature data, as well as the need for therapeutic correction of haemocoagulation disorders in eczema patients necessitated further in-depth study of this process.

Materials and methods. We examined 21 patients (11 males – 52.3%, 10 females – 47.7%) suffering from the generalized eczema (acute stage) aged from 17 to 58, the duration of disease being from 3 to 11 years.

The following haemostasis parameters were studied (apart from mandatory tests): Lee-White clotting time, autocoagulation test (ACT) at the 2nd (A1), 10th minute (T1), total fibrinogen, thrombin time (TT), fibrinogen degradation products (FDP), blood clot retraction (BCR), spontaneous fibrinolysis (SF) and euglobulin lysis (EL).

Results. The patients exhibited hypercoagulation (increased A parameter (50.51±3.80% p<0.001), decreased T1 (2.22±0.20 min.p<0. 001) ACT, a dramatic increase in fibrinogen (4.93±0.33g)/L p<0.001) positive ethanol and beta-naphthol tests, a slight shortening of Lee-White clotting time (444.0±17.8 p<0.01) and prolongation of TT (17.31±0.40s p<0.05). Some decrease in fibrinolytic activity was evidenced by the following parameters: a slight increase in BCR (79.11±1.90% p<0.01) and a decrease in SF (13.82±1.59% p<0.02), a marked prolongation of EL (468.0±19.7 min p<0,001). No changes in the anticoagulation system were observed. Increased levels of FDP (7.80±1.51 p<0.001 μl/mL) were detected in all subjects.

Discussion. The study of haemostasis in eczema patients indicates activation of the coagulation component of haemostasis, activation of fibrinolysis system, appearance of FDP that testifies to the development of hypercoagulation phase of the disseminated intravascular coagulation (DIC). High level of blood fibrinogen, which serves as a marker of the intensity and extent of the inflammatory process is a specific feature of laboratory parameters in eczema patients. Against the background of high hyperfibrinogenemia, FDP levels are elevated insignificantly, which is logical, since intravascular coagulation in patients is of localized pattern.

Hence, a comprehensive study of the system of coagulation, anticoagulation and fibrinolysis in eczema patients proved the mandatory involvement of haemostasis in their pathogenesis. In the practical activity of a dermatologist determining the prevailing links of DIC development in each case, following the dynamics of the disease course and its treatment, is crucial for the skilful manoeuvring using various therapeutic interventions confirming their elimination.

Abstract N°: 930

Title: Dupilumab improves liver profile in patients with atopic dermatitis

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Introduction

Dupilumab, a fully human monoclonal antibody that binds specifically to the shared α chain subunit of the interleukin-4 and interleukin-13 receptors, is anf effective treatment for atopic dermatitis (AD) but there is scarce information about its impact on the liver. So the objective of this study is to evaluate the effect of dupilumab on liver profile in patients with AD.

Materials and methods

A prospective observational study was conducted. Adult patients with AD starting dupilumab treatment were included and were evaluated at baseline and after 16-week follow-up. Patients with moderate/severe psoriasis and with moderate/severe AD were included. The Eczema Area and Severity Index (EASI) was used to assess disease severity. Bilirubin, alanine aminotransferase (ALT), gamma-glutamyl transferase (GGT) and alkaline phosphatase (ALP) were included to assess liver profile.

Results

The study included 43 patients with AD with a mean age of 30.19 (13.28 SD) years, being females 58.1% (25/43) of them. EASI decreased in all patients after the follow-up (26.27 vs 6.73, $p<0.001$). A tendentially decreased in bilirubin values were observed after the follow-up (0.55 vs 0.39 mg/dL, $p=0.062$). ALT (16.33 vs 19.17 U/L), GGT (17 vs 16 U/L) and ALP (62.17 vs 58.17) were also reduced after 16-weeks dupilumab treatment.

Discussion

Dupilumab could improve the liver profile in patients with atopic dermatitis, reflected in reduced bilirubin and transaminases values.

Abstract N°: 990

Title: Atopic dermatitis in Morocco children : A study of 319 cases

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Introduction

Atopic dermatitis (AD) is a chronic pruriginous skin disease, which usually begins during early life. The prevalence of AD appears to have increased over the past three decades in Western countries. However, only few studies have addressed this issue in region of North Africa. Our objective is describe the epidemiological, clinical and therapeutic characteristics of Atopic dermatitis in Morocco children.

Materials and methods

We conducted a retrospective study between October 2016 and August 2021. All patients diagnosed with AD according to United Kingdom Working Party criteria were included.

Results

Of 2304 patients, 319 patients with AD met the criteria for this study, thus giving a prevalence of 13,8%. 195 were males (61,1%) and 124 were females (38,8%) with a sex ratio 1,75. A distribution of patients according to age group was 57,3% of patients were less than 2 years old, 23,5% of children whose age between [2-5 years old] and 16% of patients were more than 5 years old. Exclusive breastfeeding up to 6 months observed in 10% of cases and food diversification before the age of 6 months was in 5% of. A family history of atopy was in (36%) patients. A personal history of asthma found in 16.4% of cases, personal allergic rhinitis and personal allergic conjunctivitis in 10.6% and 8.1% of cases, respectively. A food allergy was in 8 patients (2,5%). The mean age at diagnosis was 34 months (range 2 months-184 months). A mean disease duration was 14 months. Two hundred forty-six of patients (77 %) came from urban areas and passive smoking found in 25% of cases. The clinical presentations of AD were, common eczema (67,1%), lichenified eczema (33%). pruritus was constant. The commonly minor features were, xerosis in all patients, Dennie-Morgan Fold in (18%), Pityriasis alba in (6,5%), atopic chelitis in (1,6%). The location was face in (61,7%) cases, flexural fold in (40%) cases, trunk in (23%) cases, back in (15%) patients, forearm in (14,6%) cases, legs in (8%) cases. Infective complications included impetiginized dermatitis observed in (14,2%), viral infection in (3,7%). nine patients had primary immune deficiency associated with atopic dermatitis, two of whom had Wiskott-Aldrich syndrome and seven had hyper-IgE syndrome. Topical corticosteroids was the most effective method of treating DA, associated with emollient and antihistaminic drugs.

Discussion

Atopic dermatitis (AD) is a common pruritic inflammatory skin disorder that may present as acute, subacute or chronic eczema. AD is self-limiting, predominantly occurring in infants and children and punctuated by relapses and remissions. The prevalence of AD has been rising steadily over the years in Western countries, and current estimates suggest that 9–12% of children have AD. We do not have national epidemiological studies but the various monocentric studies report a hospital incidence varying from 6,9% to 6,4%. The frequency of AD seems lower in Morocco compared to Western countries. Comparing the prevalence of AD in France and Tunisia, with that of our study. We notice the prevalence in this study seems low, compared to that of France and high

compared to that of Tunisia, with a predominance of mild forms of the disease. Other studies are need to confirm these results and to determine the prevalence of atopic dermatitis in Morocco.

Abstract N°: 1038

Title: Self-reported eczema in (ultra)endurance runners: the AQUA questionnaire study

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Introduction

There is little research on the prevalence or impact of eczema on athletes. Skin diseases can affect performance in endurance athletes [Conklin RJ,1990]. Eczema was reported in 8% of 201 runners participating in the 2010 London marathon [Robson-Ansley P, *et al*, 2012]. Physician-verified eczema was reported in 9.3% of endurance athletes [Alaranta A, *et al,* 2005]. In this study, we aimed to assess the frequency of eczema in athletes, with a special focus on (ultra)endurance athletes.

Materials and methods

The recruitment of athletes was carried out via distribution of flyers at the Moscow Marathon 2020 and via email announcements at the athlete groups/associations between September 2020 and February 2021. The study inclusion criteria were age over 18 years and previous participation in a running event for short, medium, long, or ultra-long distances. All participants completed a web-based Allergy Questionnaire for Athletes (AQUA®) (Bonini M *et al*, 2009). Prior to the survey, AQUA® was forward- and back-translated from English to Russian by two independent translators. Permission from the copyright holders for using the AQUA® questionnaire was obtained. Subgroup analysis was carried out using a nonparametric Mann-Whitney test.

Results

Of 100 respondents, 73 (73%) were male. Of the total, 38 (38%) respondents were endurance athletes and 23 (23%) – ultra-endurance athletes. Almost half (49%) reported itchy skin rashes. The median total AQUA® score for respondents with or without itchy skin rashes were 11 [IQR, 6.25 -14.75] and 2.5 [IQR, 1-6.5], respectively (Mann-Whitney, $p<0.001$). Six (6%), including three endurance and one ultra-endurance athletes, had eczema. All participants with self-reported eczema had AQUA score above 5 with the median total AQUA® score of 13 [IQR, 12.25-17.5].

Discussion

Based on AQUA® survey, self-reported eczema was noted in 6% of athletes participating in running events, including endurance and ultra-endurance athletes. Study respondents with self-reported itchy rashes had higher AQUA scores. Athletes with a self-reported eczema should be referred to an allergy specialist for a thorough evaluation of causative factors, in particular with regard to concomitant food and/or contact allergy. Further research into the effects of eczema on athletic performance in (ultra)endurance athletes and personalized treatment is also needed.

Abstract N°: 1088

Title: Effects of emollient creams on the skin barrier of patients with atopic dermatitis

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Introduction & Objectives The imparied skin barrier plays a pivotal role in the pathogenesis of Atopic Dermatitis (AD) and it has been shown that mutations affecting the *FLG* gene is a risk factor for AD. The use of moisturisers in AD is emphasised by healthcare personnel, also when the eczema is cleared. However, the role of moisturizers in AD progression remains unclear. The aim of the study was to compare the barrier-strengthening properties of a new moisturiser, containing 2% urea and 20% glycerol (test cream), to a glycerol containing cream, a cream without humectants and no treatment.

Materials & Methods An observer-blind prospective within-subject multilateral randomised controlled study in adults with a personal history of AD. Enrolled participants were instructed to treat the lower or upper parts of the lower volar forearms (i.e. four treatment areas, includes no treatment control, randomized allocation) with the three products twice daily. After four weeks of treatment, all four areas were challenged with the irritant 1 % sodium lauryl sulphate (SLS). The primary outcome was skin sensitivity to the irritant. In addition, a sub-group of patients with mutations in the *FLG* gene were analysed.

Results 49 patients completed treatment and were included in the analysis. The primary objective was met; the test cream was shown to be superior to no treatment and to the two reference creams with respect to reduction of TEWL and skin redness after induction of skin irritation. Skin capacitance measurements showed that the test cream had a hydrating effect compared to no treatment and was superior to the cream without humectants. Skin surface dryness as measured with 3D skin images was reduced after treatment with the test cream compared to no treatment and compared to the cream without humectant. The natural moisturizing factor levels after four weeks' treatment with the test cream was higher than in untreated skin and in skin treated with cream without humectant. The study treatments were all well tolerated. There were 11 patients with *FLG* mutations. The effect size of test cream vs no treatment was almost two times greater in the mutation group compared to the wildtype group. This difference was even greater when comparing test cream to cream without humectants.

Conclusions The study highlights that not all creams have positive influence on the skin barrier function. Treatment for four weeks with the test cream showed significant protection from SLS-induced skin irritation compared to the untreated control and the two reference creams. The effect was even greater in carriers of *FLG* mutations. By helping to correct a major pathophysiological process in this condition, the test cream has the potential to improve the long-term control of AD.

Abstract N°: 3

Title: Efficacy of Non-Cultured Epidermal Cell Suspension versus Extracted Hair Follicle Outer root sheath Cell Suspension in the Surgical Management of Stable Vitiligo: A Randomized Controlled Trial

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Introduction: Stable vitiligo is best treated with surgical modalities of which melanocyte transfer is a promising treatment of replenishing the melanocyte pool. With various newer surgical treatments, it is now possible to cover larger areas of vitiliginous skin with a smaller donor skin sample. This randomized controlled trial was conducted with an aim to find and compare the efficacy of non-cultured epidermal cell suspension (NCES) versus extracted hair follicle outer root sheath cell suspension (NC-HF-ORS) in the management of stable vitiligo and find the surgical modality of choice amongst both.

Materials and methods: A total of 90 cases of stable vitiligo {Vitiligo Disease Activity Index (VIDA): 0 or -1} with 200 patches were included in the study. The patches were randomly divided to receive NCES or NC-HF-ORS technique. An ultrathin split thickness graft was obtained from outer thigh of individual and epidermal cell suspension was made for NCES. Hair extraction followed by trypsinization and ORS cell suspension preparation was done for NCES-HF-ORS. The suspension was transplanted on to superficially dermabraded recipient vitiligo lesion. Repigmentation was defined as excellent, good and poor with >90%, 50-90% and <50% pigmentation respectively following the intervention.

Results: Excellent repigmentation was observed with NCES in 66% cases, while NC-HF-ORS had 50% with excellent pigmentation. 30% and 20% had good pigmentation with NCES and NC-HF-ORS respectively.

Discussion: NCES technique may be considered as an effective treatment modality in cases of stable vitiligo. We found this technique to be more efficacious than NC-HF-ORS; however, both are time consuming and requires special lab setup and may be costlier. Both the treatments can cover larger area of vitiliginous skin with smaller donor skin graft and should be used only in stable cases i.e., VIDA (Vitiligo Disease Activity Score) score of -1 or 0.

Abstract N°: 7

Title: A case of vitiligo associated with metastatic melanoma

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Introduction

Melanoma is a skin malignancy caused by a proliferation of atypical melanocytes, while vitiligo is an acquired disorder of depigmentation characterized by the loss of melanocytes of epidermis. There have been reports of vitiligo during the course of malignant melanoma. However, the association between vitiligo and melanoma is not fully understood.

Materials and methods

A 59-year-old man presented with an amorphous hypopigmented patches on his face that had progressively increased in size for a month. He also complained of foreign body sensation in his throat. On physical examination, his neck was asymmetrically enlarged. He had no underlying disease. Laryngoscopy showed polypoidal, pigmented mass in supraglottis.

Results

Neck CT and MRI revealed suspicion of supraglottic cancer with metastatic lymph nodes and bone metastasis. Later, fine needle aspiration biopsy was done from the lymph node on his right neck. Biopsy suggested metastatic malignant melanoma. Wide excision was performed, and the specimen from the mass revealed atypical, epitheloid cells with hyperchromatic and pleomorphic nuclei. The tumor cells were positive for Melan-A, S-100 protein and HMB-45. Based on the clinical and histopathological findings, he was diagnosed with malignant melanoma of the larynx. The PET-CT suggested metastasis in neck lymph nodes, vertebral bodies and femur.

Discussion

There have been cases of vitiligo associated with melanoma, since it was first reported 50 years ago. Such relationship is considered to be the result of autoimmune response against melanocytic antigen which implies a good prognosis. Herein, we report a rare case of vitiligo associated with metastatic melanoma.

Abstract N°: 30

Title: Phenotypic Effects of Genetic Loss of Function in Tyrosine Kinase 2 (TYK2) Using Large-Scale Biobanks

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Introduction

We used a naturally occurring germ-line genetic variant in tyrosine kinase 2 (*TYK2* [P1104A, rs34536443]), which has been shown to cause partial loss of function and protect against autoimmune disease, to survey the phenotypic consequences of reduced TYK2 function.

Materials and methods

We performed phenome-wide association studies (PheWAS) in 2 large biobanks (FinnGen and UK Biobank) and across public case-control genetic studies using Open Targets Genetics.

Results

This study found additional support for a protective effect (odds ratio [OR] ≤0.8, $P<1x10^{-4}$) of TYK2 partial loss of function in multiple autoimmune diseases, including rheumatoid arthritis, psoriasis, psoriatic arthritis, systemic lupus erythematosus, sarcoidosis, type 1 diabetes, inflammatory bowel disease, and hypothyroidism. We did not observe any novel phenotypic associations that could highlight safety concerns for TYK2 inhibition. Additionally, we used well-powered and focused analyses to demonstrate that TYK2 partial loss of function is not associated with nonselective Janus kinase inhibitor safety concerns in any of the genetic studies. Our meta-analysis across the included studies showed no association with increased risk of cardiovascular disease (OR=0.97; *P*=0.02; 258,279 cases / 549,387 controls), venous thromboembolism (OR=0.97; *P*=0.52; 11,966 cases / 260,704 controls), and lymphoma (OR=1.06; *P*=0.47; 2687 cases / 220,721 controls).

Discussion

TYK2 P1104A, a partial loss-of-function polymorphism, enables assessment of TYK2 involvement in immune-mediated disease and other pathologies. Loss of function in TYK2 reduces risk of immune-mediated disease but does not significantly increase risk of cardiovascular disease, thromboembolism, or lymphoma.

Abstract N°: 45

Title: Bullous herpes zoster in a lupus nephritis patient treated with rituximab: A case report and literature review

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Introduction

N/A

Materials and methods

N/A

Results

Herpes zoster is a clinical syndrome associated with reactivation of varicella zoster virus (VZV), often occurring years after VZV infection, and characterized typically by painful grouped vesicles in a dermatomal distribution. Bullous Herpes Zoster, an atypical presentation of herpes zoster, is relatively rare, with only eight reports in the literature. We present a case of a 59-year-old female with lupus nephritis who presented with grouped vesicles evolving into large bullae 4 days after the first dose of rituximab therapy. The diagnosis of bullous herpes zoster was made based on clinical presentation and the presence of multinucleated giant cells on Tzanck smear. The bullae were drained and dressed, and the patient was treated with valacyclovir and pregabalin. After 7 days of antiviral treatment, there were no new lesions, and pain improved. Recognizing this atypical presentation of a common disease, especially in patients with an immunocompromised state, highlights the importance of prompt recognition and treatment.

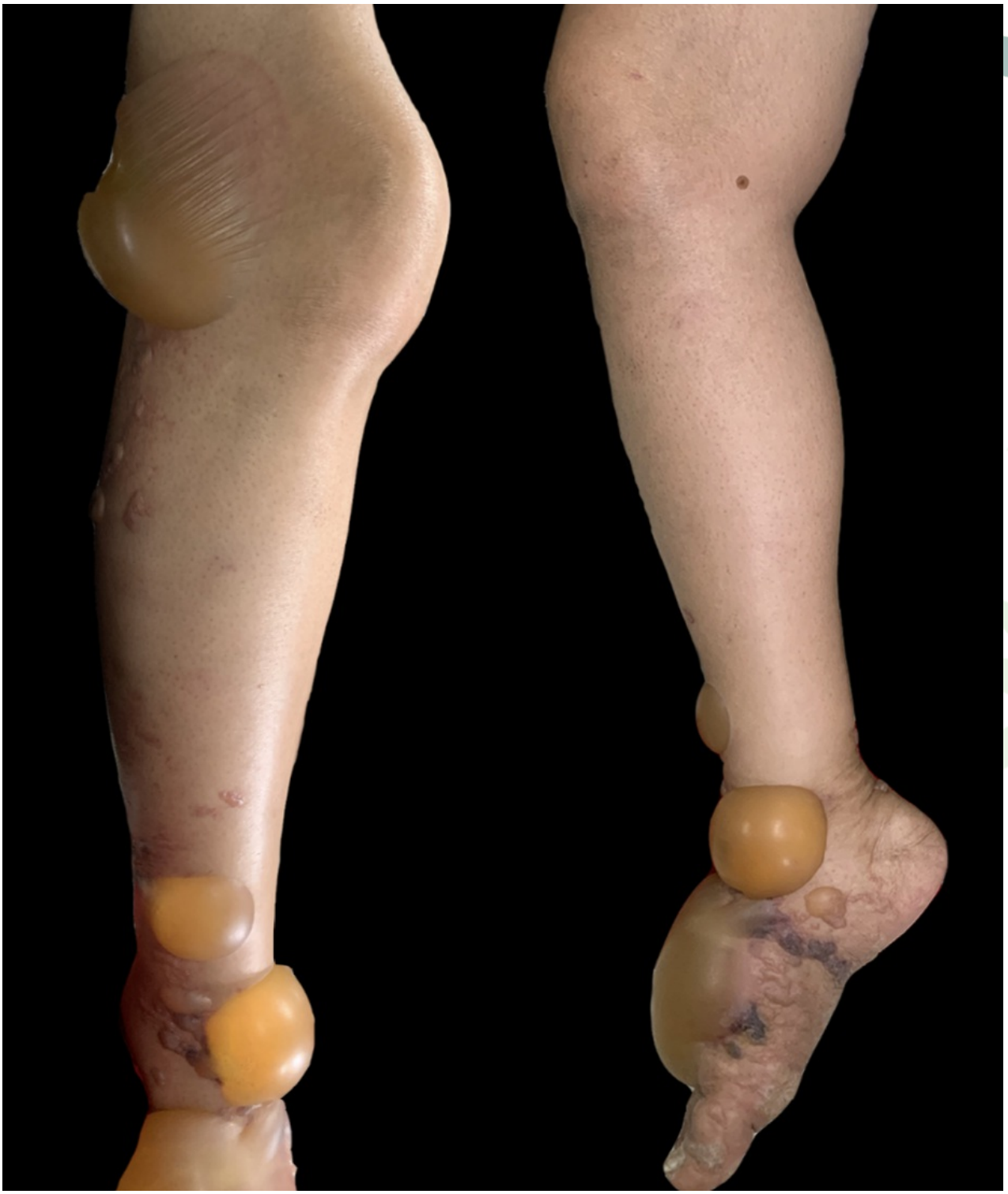

Figure 1. Clinical appearance of bullous herpes zoster, showing lateral (1a) and medial (1b) aspects of the right leg.

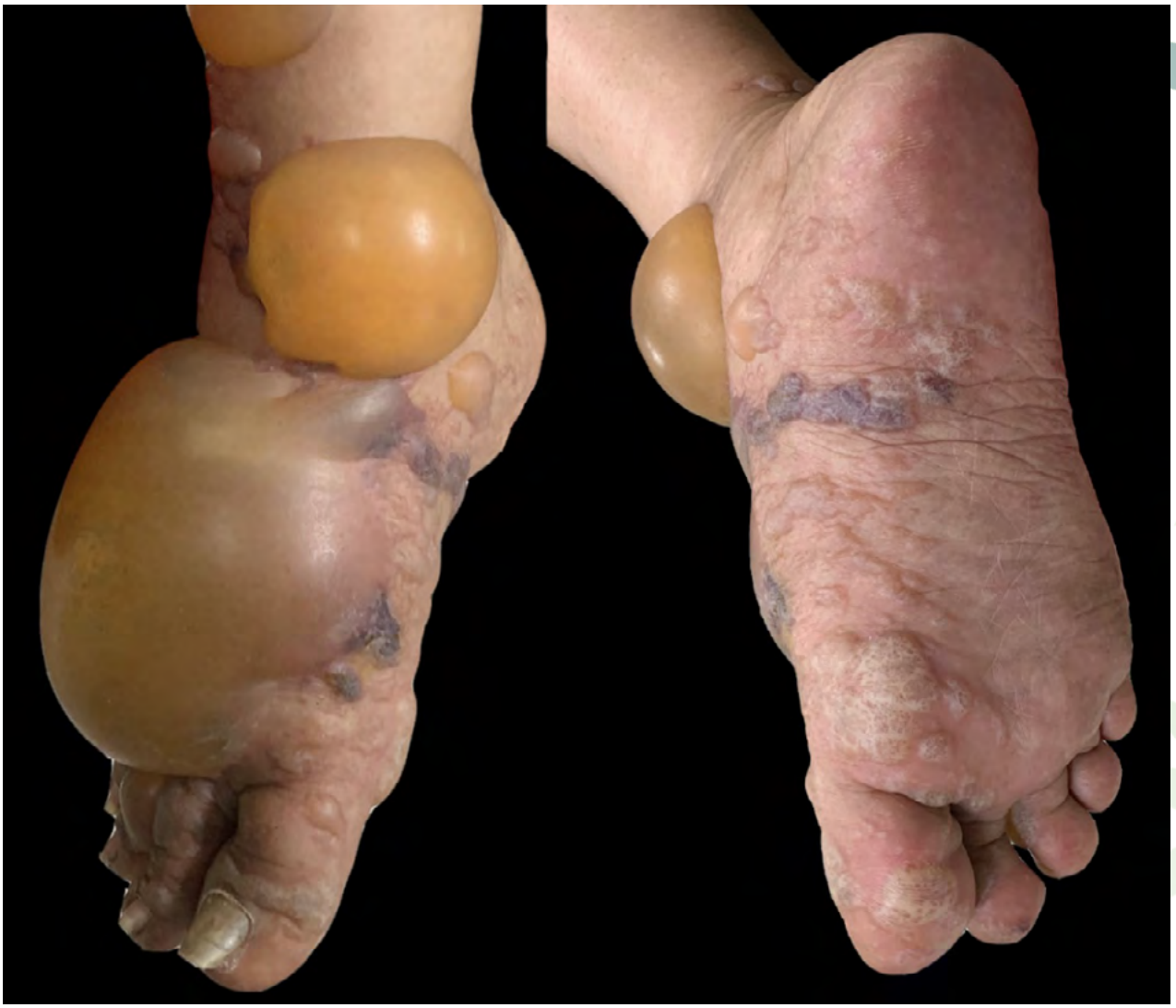

Figure 2a and 2b. Clinical appearance of bullous herpes zoster, showing dorsal (2a) and ventral (2b) aspects of the right foot.

Discussion

N/A

Abstract N°: 110

Title: Long-term Efficacy, Safety, and Tolerability of Efgartigimod PH20 Subcutaneous in Adult Patients with Pemphigus Vulgaris (PV) and Pemphigus Foliaceus (PF): ADDRESS+, a Global, Multicenter, Phase 3, Open-Label Extension (OLE) Clinical Trial in Progress

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Introduction

Efgartigimod is an engineered Fc fragment that inhibits the activity of the neonatal Fc receptor, thereby reducing levels of circulating IgGs, including pathogenic autoantibodies. PV and PF are autoimmune mucosal and/or cutaneous blistering diseases driven by autoantibodies against the desmoglein proteins, Dsg-1 and Dsg-3. In a phase 2 trial in patients with mild-to-moderate PV or PF (NCT03334058), intravenous efgartigimod rapidly decreased serum levels of anti-Dsg-3 and Dsg-1 IgGs, with an associated reduction in disease activity and disease progression. Adverse events reported were predominantly mild or moderate.

Materials and methods

A phase 3 prospective, multicenter, randomised, double-blind trial (ADDRESS, NCT04598451) is evaluating the safety and efficacy of efgartigimod PH20 subcutaneous (SC) in 150 patients with moderate-to-severe PV or PF. Participants are randomised to 30-week treatment with efgartigimod PH20 SC (2,000 mg for the first two weeks, 1,000 mg weekly thereafter) or placebo PH20 once weekly, with a starting dose of 0.5 mg/kg/day of oral prednisone. The primary endpoint is the proportion of patients with PV who achieve complete remission on minimal prednisone therapy (CR_{min}) within 30 weeks. Patients from ADDRESS are eligible to rollover to the 60-week ADDRESS+ OLE trial (NCT04598477). Based on the clinical status of the participant at the time of rollover, the following regimens will be applied: no treatment if CR_{min} has been achieved, weekly efgartigimod PH20 SC if CR_{min} has not been achieved, and the start of a new treatment cycle in case of treatment failure or flare after CR_{min}. Safety and long-term remission will be studied in ADDRESS+ OLE.

Results

The ADDRESS trial is ongoing.

Discussion

This ongoing Phase 3 trial will determine the safety and efficacy of efgartigimod PH20 SC for the treatment of

individuals with PV or PF.

Abstract N°: 126

Title: Variability in Phenotype Clusters in Behçet's Syndrome: A Systematic Review

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Variability in Phenotype Clusters in Behçet's Syndrome: A Systematic Review

Introduction: Behçet's syndrome (BS) is a multisystem variable-vessel vasculitis. The presence of distinct clinical phenotypes with clustering of certain organ manifestations is well-recognized. Differences in demographic features, treatment response, and possibly inflammatory pathways involved in the pathogenesis of different phenotypes have been proposed. However, studies from different cohorts have shown variability in the phenotypes that were defined. This finding challenges the concept of phenotype clusters since organ manifestations that cluster together would be expected to be uniform across cohorts. We aimed to explore the causes of variability in clinical phenotype clustering across different countries and cohorts.

Materials and methods: An electronic search was carried out in PubMed to find articles published in or before November 2021, using the keywords of Behcet, cluster and factor analysis. Two reviewers independently performed a screening of titles, abstracts, and full-texts using Covidence.

Results: Amongst 496 articles searched, 30 full-texts were assessed, and 10 studies were identified as relevant for data extraction. Ten articles studied 12 different cohorts, 3 from China, 3 from Turkey, 2 from Japan, 1 from South Korea, 1 from Israel, 1 from Greece, and 1 from Italy. 9 out of 10 studies demonstrated clustering of organ manifestations (11 cohorts); whereas no clusters were identified in one study. Clusters including skin/mucosa manifestations, uveitis, and gastrointestinal /vascular involvement were common in most of the studies. A cluster including more than one type of major organ involvement was observed in only 3 cohorts. Moreover, major organ involvement was negatively correlated with all or some mucocutaneous manifestations in 3 of the cohorts. Papulopustular lesions and arthritis showed a positive correlation in 4 cohorts whereas these manifestations were negatively correlated in 1 cohort. Factors we have identified as potential causes of differences in clusters in these studies were: a. study design (database vs multicenter vs single-centre cohort), b. statistical analysis method (hierarchical cluster analysis vs factor analysis) c. patient population (pediatric vs adult), d. setting (dermatology vs rheumatology), e. diagnostic criteria (ISG vs ICBD), f. disease duration, g. definition of organ involvement (such as papulopustular vs folliculitis, or parenchymal nervous system involvement vs dural sinus thrombosis, h. ascertainment of manifestations (confirmed gastrointestinal involvement vs any diarrhoea), i. time interval (manifestations throughout the disease course vs manifestations that were active during the last 3 months), and j. change in the natural history of BS over decades.

Discussion: Differences in phenotype clusters may result from differences in study characteristics rather than real geographic or ethnic differences. A large multi-national study with uniform inclusion criteria is needed to better understand phenotype clusters and their implication towards management strategies in BS.

Abstract N°: 157

Title: Lipodystrophy associated with juvenile dermatomyositis:30-year single center experiance

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Introduction: Lipodystrophy is a rare and underreported complication of Juvenile Dermatomyositis (JDM). We retrospectively analyze differences in lipodystrophy phenotype associated with JDM.

Materials and methods: Between January 1st 1991 and December 31st 2020, at a tertiary center for Pediatric Dermatology, 3/18 (16.6%) JDM patients developed lipodystrophy. We evaluate course and long-term outcome (mean time of follow-up 11.2 years) of these three children.

Results: Three girls, aged 8, 8, and 14 year, presented with typical cutaneous lesions of JDM, proximal muscle weakness and elevated muscle enzymes. Despite elevated antinuclear antibodies, standard dermatomyositis-specific antibodies were negative. Lipodystrophy developed 19-21 months after the first symptoms of JDM. All patients had decreased body mass index and low serum vitamin D3 levels. None had elevated fasting glucose levels, hyperinsulinemia and hypertriglyceridemia, malignancy or visceral involvement. One patient had monocyclic JDM, the second had bicyclic disease, and the third had chronic JDM. At the end of follow-up, two girls had generalized and one had focal LD. Cheek(s), gluteal regions and upper extremities were most severely affected. Two patients with generalized lipodystrophy, developed it despite standard treatment of JDM. The third patient, 19 months after diagnosis of focal lipodystrophy developed calcinosis on the left cheek.

Discussion: Our study demonstrates that lipodystrophy is a rare, relatively late, but significant complication of JDM. At the presentation of lipodystrophy all patients had decreased body mass index, but without metabolic complication. Despite JDM remission, lipodystrophy had progressive course in all our patients. New, more efficient treatment protocols are needed for lipodystrophy associated with JDM.

Abstract N°: 248

Title: Omalizumab for treatment of bullous pemphigoid in oncologic patients

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Introduction

Materials and methods

Results

Even though the cancer is not a risk factor for BP, patients with cancer may develop BP before or after cancer diagnosis. This poses a significant dilemma for BP treatment. In addition, these patients have many comorbidities that contraindicates the systemic corticosteroids and the immunosuppresants.

We report a case of a 78-year-old male man diagnosed with BP since 2019. At the time of diagnosis, the patient had diabetes mellitus type 2 treated with gliptine (vildagliptin), hypertension and prostate hyperplasia. Despite the interruption of vildagliptine, and systemic therapy with methylprednisolone 0,5mg/kg/day, 3 months later the patient still complained of itch and more than 10 new blisters every week. He also was hospitalized for gastric hemorrhage, so methylprednisolone was replaced by dapsone. At the end of another 3 months of therapy, dapsone was stopped as considered ineffective. Meanwhile the patient was diagnosed with prostate cancer with bone, lung and liver metastases. In addition to the bullous rash, urticarial lesions covering large skin areas were observed.

We decided to treat the patient with omalizumab and topical corticosteroids. Three weeks after the first dose of 300mg omalizumab and using daily topical corticosteroids the skin had no itch, no blisters and only epithelizing regions. At the present, the patient is treated by the Oncologist for disseminated prostate cancer and is continuing the therapy with omalizumab, remaining free of BP.

BP commonly affects older adults. Systemic corticosteroids, the mainstay of therapy, may cause significant adverse effects. The corticosteroids-sparing therapy, consisting in immunosuppressive drugs, such as azathioprine, mycofenolate mofetil, cyclophosphamide, and methotrexate, are not applicable in patients with cancer. Therefore, safer therapeutic options are being sought. Omalizumab seems to be one of these options.

Discussion

Abstract N°: 343

Title: Mid-dermal elastolysis: a new case with associated autoimmunity.

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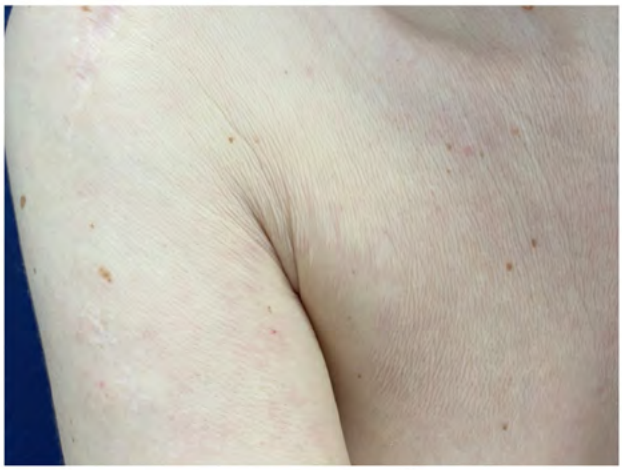
Mid-dermal elastolysis (MDE) is a rare, acquired skin condition, first described in 1977 and characterized by a selective loss of elastic fibers in the mid-dermis. Its pathophysiology remains unknown but an association with several autoimmune diseases has been observed. Here we report the case of a MDE associated with a positive antinuclear antibody titer (ANA), a false-positive serology for Lyme disease and a cryoglobulinemia, all together supporting the involvement of an autoimmune process in this disease.

A 32-year-old woman consulted in our Dermatology Clinic for cutaneous lesions that progressed over the past 3 years and associated with mild arthralgia symptoms and a dry eye syndrome. She had a personal history of spontaneous miscarriage. In the family, her mother, presented a porokeratosis and 7 similar miscarriage episodes; her father as well as her two paternal grandparents have had phlebitis. Clinical examination revealed flesh-colored, non-inflammatory, fine wrinkled plaques of the neckline, sub-clavicular fossa, anterior part of the shoulders and dorsal hand area (fig. 1). MDE was suspected and a skin biopsy was performed. Histologically, Verhoeff's Van Gieson coloration showed a complete loss of the middle dermis elastic network, confirming the diagnosis of MDE (fig. 2). Further biological assessment revealed positive ANA at 1/320 with no anti-dsDNA, nor anti-ENA. cANCAs without specificity, polyclonal hypergammaglobulinemia at 15.8 g/l, low cryoglobulinemia (monoclonal kappa IgG-polyclonal IgM) and mildly increased free kappa light chains were present. Lyme disease serology testing was false-positive with an isolated elevated IgM titer, stable at the second control after three months. Thrombophilia assessment including testing for proteins S, C, antithrombin III, Factor V Leiden and antiphospholipid antibodies as well rheumatoid factor testing were all within normal range. Eventually, a hydroxychloroquine-based treatment was proposed to the patient.

105 cases of MDE have been reported to date. Female patients are involved over 80%, with a mean age of 34 years old. In 86.7 % of cases, the lesions affected the trunk and extremities with associated clinical or histologic inflammation in only 41.9 % of patients. Although MDE diagnosis is based on histological assessment, a particular elastic fiber staining should be requested as the alterations of the mid-dermis seen with the Hematoxylin and Eosin (H&E) staining are minimal (fig. 2). We should note, that before establishing the current diagnosis, a first biopsy conducted in another clinic came back normal, as the H&E staining used could possibly not demonstrate the damage of mid dermal elastic fibers.

MED is often associated with other autoimmune conditions, including rheumatoid arthritis, thyroiditis, diabetes mellitus type 1, antiphospholipid syndrome, lupus and other autoimmunity stigmas such as positive ANA testing. Besides our case, only 2 other cases associated with a false-positive Lyme serology have been reported to this day. To our knowledge, our case is the first one to be associated with cryoglobulinemia which, in addition to positive ANAs and a false-positive Lyme serology, supports the autoimmune etiology of this condition.

To conclude, the diagnosis of MDE, which is often difficult to establish clinically, should be well-known and suspected by dermatologists as it often makes it possible to detect an associated autoimmunity, in particular lupus.



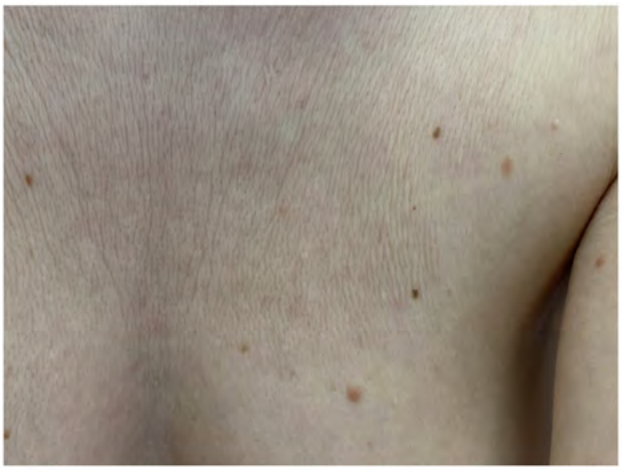
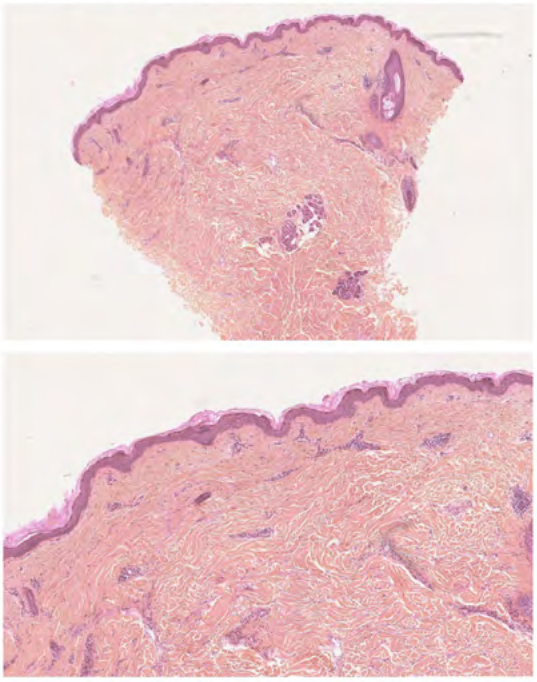
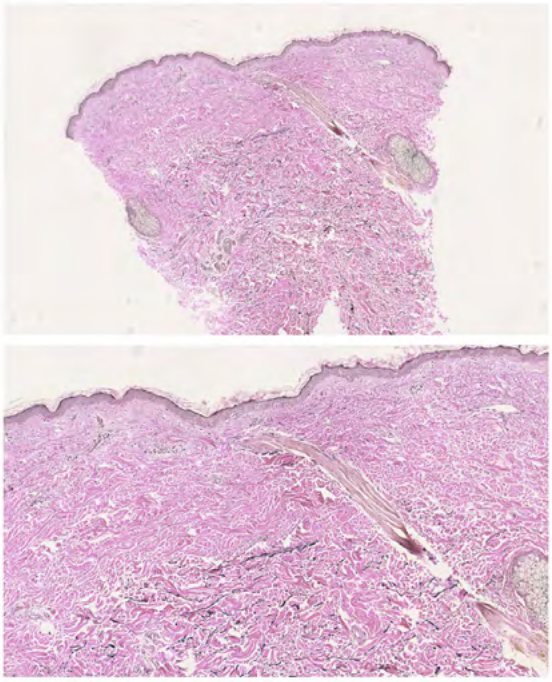


***Figure 1* - Clinical aspects of the patient at 32 years of age:** flesh-colored, non-inflammatory, fine wrinkled plaques of the neckline, sub-clavicular fossa, anterior part of the shoulders and dorsal hand area.

***Figure 2* - Pathology features:** lack of histologic alteration with H&E staining (2a) but complete loss of the mid-dermal elastic network shown with Verhoeff's Van Gieson staining (2b).



2a: Hematoxylin & Eosin staining



2b: Verhoeff's Van Gieson staining

Abstract N°: 416

Title: Lichen planus pemphigoides occurring in a patient with history of lichen planus and lichen planopilaris - Case report

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Lichen planus pemphigoides occurring in a patient with history of lichen planus and lichen planopilaris – Case report

Introduction

Lichen planus pemphigoides (LPP) is a very rare acquired autoimmune dermatosis that was originally assumed to be a variant of either lichen planus (LP) or bullous pemphigoid (BP). A rising collection of data suggest that it is a distinct disease entity. The gold-standard for diagnosing LPP is demonstrating autoantibody deposition along the dermal-epidermal junctional zone in perilesional skin biopsies, in addition to the eruption consisting of lichenoid plaques and tense blisters.

Results

A 72-year-old patient with stage II hypertension, mixed dyslipidemia, type 2 diabetes, chronic kidney disease, chronic tubulointerstitial nephropathy, chronic venous insufficiency, and gonarthrosis, with a recent history of disseminated LP and LPP, presented to our clinic for intensely pruritic bullae with serocitrin content and post-bullous erosions on intact skin, disseminated on the scalp, trunk, and limbs. The scalp also showed areas of cicatricial alopecia. The lesions appeared 3 months previously, without an obvious trigger. The patient underwent systemic treatment with H1 antihistamines and topical corticosteroid and antibiotic treatment, without clinical improvement.

Laboratory findings were unremarkable, except for a mild inflammatory syndrome, hyperglycemia, and increased cholesterol and triglycerides levels. The histopathological examination of the lesional skin biopsy revealed moderate orthokeratosis, epidermal atrophy, subepidermal blistering, a band-like moderate lymphocytic inflammatory infiltrate at the dermo-epidermal interface, dilated vessels, edema, and collagen homogenization in the papillary dermis, leading to the diagnosis of lichen planus – bullous type.

The patient was recommended systemic corticosteroids, which led to complete remission of the signs and symptoms. Relapse occurred upon dose tapering and a second biopsy was performed. The histopathological picture was that of a subepidermal bullous dermatitis, with mild superficial perivascular inflammatory infiltrate with lymphocytes and a few eosinophils, a subepidermal blister filled with serum and a few eosinophils and neutrophils, the predominant cell being the eosinophil, consistent with the diagnosis of poor cellular bullous pemphigoid. Direct immunofluorescence supported this diagnosis as the sample displayed a continuous junctional linear deposition of IgG and C3c, with the particularity of continuous linear deposition of IgA, which may occur in

some cases of bullous pemphigoid.

Discussion

Given the potential overlap between clinical, histological and immunological characteristics between LPP, LP and BP, it can be difficult for the physician to establish the correct diagnosis. In this particular case, the clinical presentation and the first skin biopsy supported the diagnosis of bullous lichen. The accurate diagnosis was only established when direct immunofluorescence examination of a perilesional skin biopsy revealed the particular deposition of autoantibodies at the dermo-epidermal junction. As the successive development of disseminated LP, LPP and BP in the same patient is highly unusual, we wish to discuss the underlying mechanisms and the optimal therapeutic strategy in such rare cases.

Abstract N°: 450

Title: The difficulty of differential diagnosis in a pacient with lupus erythematosus tumidus - case report

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Introduction

Lupus erythematosus tumidus (LET) represents a rare subset of chronic cutaneous lupus erythematosus. Extreme photosensitivity and effective response to antimalarial treatment are characteristic to LET. Opposed to other clinical forms of lupus erythematosus, LET has a higher incidence in men and a peak of onset from 40 to 50 years of age. The clinical presentation is highlighted by erythematous and edematous nonscarring plaques on sun-exposed areas.

Results

We present the case of a 72-year-old man, who was admitted to our clinic with erythematous-violaceous, edematous, infiltrated, and nonscarring plaques on the face (malar, temporal, frontal, upper lips, and chin). On the malar areas, several erosions were observed. The onset of the lesions was five months ago. At this time the patient was treated with local and systemic glucocorticoids but had many recurrences when the treatment was tapered. The diagnosis of lupus erythematosus tumidus was confirmed by the histopathological exam that showed moderate perivascular and focal periadnexal lymphocytic infiltration and interstitial mucin deposition in the reticular dermis. Compact orthokeratosis and parakeratosis, acanthosis with a prominent granulous layer, and eroded areas (lichenification) were also seen. No thickening of the basement membrane or fungi was observed. Hematological investigations, renal function, and immunological investigations were normal. The patient had a good response to antimalarial treatment in association with local corticosteroids, with remission of lesions and no recurrence.

Discussion

The clinical aspects, extreme photosensitivity, histopathological findings, the lack of systemic involvement, and good response to antimalarials are characteristic of lupus erythematosus tumidus. Throughout the process of diagnosis, it is very important to differentiate LET from other variants of chronic cutaneous lupus erythematosus, Jessner's lymphocytic infiltration of the skin, mycosis fungoides, pseudolymphoma, and reticular erythematous mucinosis.

Abstract N°: 475

Title: Pemphigus vulgaris presenting as a solitary lesion on the face

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Introduction

Pemphigus vulgaris (PV) is an autoimmune bullous disease characterized by lesions on the skin and mucosal surfaces. Generally, the disease manifests initially with mucosal (oral) lesions that may later be accompanied by cutaneous blisters and erosions. PV with solitary lesions localized to glabrous skin is rarely seen.

Materials and methods

Here, we present a case of PV presenting as a solitary eroded and crusted on the face in a female adult.

Results

A 65-year-old women presented with a 3-month history of an eroded lesion on the right cheek. The patient's medical history included diabetes. She had no history of drug intake or topical treatment application. Physical examination revealed a well-delimited, eroded and crusted lesion of about 2 x2 cm in size with regular margins. There were no other skin lesions, and examination of nails and mucous membranes was normal. Mycologic and parasitologic investigations were negative. Histopathological evaluation of the biopsy specimen demonstrated a suprabasal cleavage with acantholysis. Direct immunofluorescence showed intercellular deposits of IgG and C3. Thus, based on these findings, a diagnosis of PV was made. The patient was treated with topical corticosteroid and achieved clinical remission within a period of four weeks. There was no relapse during a follow-up of one year.

Discussion

Pemphigus is a group of chronic vesiculobullous anti- body-mediated diseases that typically manifest with generalized lesions. Localized presentations are less frequent, and various clinicopathologic forms have been reported in the literature. The most common form is that of localized PV involving the oral mucosa. A solitary lesion involving the glabrous skin is a highly unusual presenting sign. According to the literature, solitary Lesions generally develop after surgery, irradiation, trauma or on burn scars, and are attributed to a Koebner-like phenomenon. The involvement of only the exposed skin in our case suggests that PV can be triggered or maintained by light exposure. A familial variant of localized PV was reported in a Turkish family and was shown to be linked to a DR4 haplotype. We aim by reporting this case of PV revealed by an unusual solitary lesion, to increase awareness of this condition among practitioners because this condition may be easily misdiagnosed.

Abstract N°: 489

Title: Treatment barriers in a patient with severe pemphigus of the scalp

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Introduction

Pemphigus vulgaris is a skin condition characterized by the appearance of intraepithelial blisters on the skin or mucosa, secondary to acantholysis. This cutaneous disease presents some key features, such as the formation of autoantibodies directed against desmoglein 1 and 3, the involvement of both mucosal and cutaneous surfaces, although in some cases the mucosa is the only one affected, and also the appearance of suprabasal acantholytic blisters. Although in this day and age, there are a lot of treatment options, such as glucocorticoids, immunosupressants, immunoglobulins or monoclonal antibodies (Rituximab), none of these are curative therapies, moreover there are some cases that remain refractory to therapy.

Materials and methods

We present the case of a 45-year-old woman with pemphigus vulgaris, who for the last 5 years has been receiving prednison for her condition. At the moment of presentation, she had extensive lesions, with blisters localized on both the anterior and posterior trunk, both legs and arms and also having severe scalp involvement. However, no mucosal lesions were noted. She was admitted in the dermatology department and initial therapy included dexamethasone, followed by methylprednisolonum and oral dapsone. The patient interrupted the medication due to adverse effects and returned to the hospital a few months later with more severe lesions. We decided to put her on Rituximab, followed by oral corticotherapy.

Results

Before starting Rituximab, we tested her for infectious diseases, and discovered that she had latent hepatitis B. Bearing in mind the possible reactivation of the virus secondary to Rituximab therapy, we reffered her to an infectious disease specialist and with his approval, her medication now included Azathioprine and methylprednisolonum. Moreover, the patient received topical treatment with silver sulfadiazine. While her lesions on the body progressively remitted under therapy, her scalp was still refractory to treatment.

Discussion

Despite the wide variety of available treatment possibilities nowadays, when it comes to patients with multiple comorbidities, options are limited, thus maintaining a remission status of the disease becomes a challenging journey.

Abstract N°: 571

Title: Linear Ig A Bullous Dermatosis- like Bullous Pemphigoid : A case

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Introduction

Materials and methods

Results

Bullous pemphigoid (BP) is an acquired, chronic, autoimmune, subepidermal skin disease that predominantly affects the elderly.

Although the exact etiology is unknown, it has been reported that BP is induced by drugs and is associated with other autoimmune and neurological disorders. Its potential relationship with malignancies is still controversial.

BP is typically characterized by tense bullae on a normal or erythematous background that develop after the prodromal phase accompanied by pruritic urticarial plaques. In addition, many variants of Bullous pemphigoid have been reported, and some of these variants show atypical clinical features, but annular bullous lesions mimicking other dermatoses have been reported very rarely in the literature.

A 65-year-old male patient was admitted to our clinic with the complaint of itchy red lesions on his trunk, arms and legs for 1 month. In the dermatological examination of the patient, there were tense bullae on the erythematous ground on the dorsum of the hands and feet, peripheral vesiculobullous lesions resembling "pearl strings" in the trunk, arm, leg, shoulder, neck and intertriginous regions, accompanied by erythematous middle violaceous annular plaques. An intact bullae was observed on the erythematous background of the diseased hard palate.

The patient was previously given topical corticosteroid and oral antihistamine treatments in an external center, but there was no response.

Based on clinical and histopathological findings, the patient was diagnosed with linear IgA bullous dermatosis-like bullous pemphigoid.

Systemic steroid and oral dapsone treatment was started. In the first month of treatment, the lesions largely regressed with post-inflammatory changes.

We found it worth sharing our case, which has a rare clinical presentation and was successfully treated with alternative treatment options.

Discussion

Abstract N°: 575

Title: Lupus and vitiligo vs vitiligoid lupus

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Introduction

The frequency and type of autoimmune diseases associated with vitiligo are variable, the coexistence of vitiligo and systemic lupus discoid erythematosus has been rarely reported. Achromic and hypochromic lesions can be observed in lupus erythematosus, especially in the discoid forms, defining the vitiligoid form of lupus which is rare and sometimes generalized.

Here we report two observations.

Results

Case 1:

A 38-year-old patient with phototype IV, has had erythematous lesions on the face for 10 years with residual hyperpigmentation and arthralgia. On clinical examination: hypopigmented and hyperpigmented vitiligo annular lesions, atrophic and scaly in places. The rest of the body is the seat of alternation between hypo and hyperpigmented lesions (interarticular, back, upper limbs). With telogen effluvium. The assessment showed normochromic normocytic anemia, with lymphopenia, high blood sedimentaiton, high antinuclear and anti DNA antibodies with decreased C3 and C4. Skin biopsy showed interface dermatitis suggestive of lupus erythematosus.

Case 2: 44-year-old patient with phototype IV, followed for systemic lupus erythematosus with skin and joint involvement under hydroxychloroquine, presents with achromic macules on the cheeks and the dorsal side of the hands evolving for 2 years. On clinical examination: slightly atrophic butterfly-wing lesions on the forehead and chin, with peri-lesional hyperpigmentation with lupus discoid lesions on the nose and cheeks. On dermoscopy: an absent pigment network is found with perilesional hyperpigmentation in favor of progressive vitiligo. On autoimmunity assessment there was no diabetes or dysthyroidism.

Discussion

Vitiligo is part of a systemic process of autoimmune dysregulation with genetic susceptibility, as 30% of cases present with associated autoimmune disorders. In particular, the NALP1 genetic region on chromosome 17p13.

In the literature, the majority of patients with simultaneous lupus and vitiligo resided in regions of high sun exposure. Thus, photosensitivity and sun exposure may serve as a trigger, although it is unclear whether the formation of lupus in vitiligo represents a transformation or a collision of two conditions. The vitiligoid form of cutaneous lupus discoid is exceptionally described, it can lead to confusion with vitiligo on lupus, hence the importance of a good diagnostic approach.

Abstract N°: 625

Title: Bullous Systemic Lupus Erythematosus: a diagnosis not to be missed.

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Introduction

Bullous lupus erythematosus is rare representing less than 5% of lupus cases. It is a subepidermal autoimmune bullous disease which can be confused with other autoimmune bullous dermatoses, and bullous drug eruptions. We report a case of bullous lupus erythematosus.

Case report

A 39-year-old woman was being followed in the department of internal medicine since 2012 for systemic lupus with dermatological, articular, hematological and cardiac involvement. She was initially treated with oral corticotherapy (1mg/kg/day) and hydroxychloroquine with good evolution. Corticotherapy was then reduced until cessation. The patient stopped on her own hydroxychloroquine 3 months before the symptomatology. She presented with a cutaneous relapse of pruritic macular lesions evolving for 15 days and becoming bullous 2 days before, associated with photosensitivity and without arthralgia. Clinical examination revealed erythematous plaques, urticarial in places, and surmounted by vesiculo-bullae arranged in rosettes in places on the trunk and limbs. Nikolsky's sign was negative. We thought of bullous lupus, bullous drug eruptions, autoimmune bullous dermatosis or vasculitis. Cutaneous biopsy showed an acanthosis epidermis, dermal-epidermal junctional detachment, dermis with inflammatory infiltrate of neutrophils, eosinophils and lymphocytes. Direct immunofluorescence was in favour of lupus. The biological workup showed an inflammatory anemia without hypereosinophilia, lymphopenia or thrombocytopenia. The renal and hepatic workup was normal with a negative 24-hour urine protein. Antinuclear antibodies were positive and anti-DNA, C3, C4, CH50 negative. The diagnosis of bullous lupus was made on the basis of the presence of 5 ARA criteria, bullous lesions, histological appearance and the presence of the lupus band on direct immunofluorescence. The patient was put on hydroxychloroquine, dermocorticoids, and antihistamines with a good evolution in one week.

Discussion

Skin manifestations are common in systemic lupus erythematosus but bullous lupus is rare, accounting for less than 5% of lupus cases. It mainly affects young women. The main manifestations are bullae or vesiculo-bullae, often generalized and of sudden onset, appearing on erythematous or healthy skin, in UV or non UV-exposed areas. Bullous lupus erythematosus may be the first sign of systemic lupus erythematosus with severe visceral involvement, particularly renal, which fortunately wasn't the case of our patient. The treatment is based on Disulone. Nevertheless, while waiting for the result of the skin biopsy, our patient had a good evolution under dermocorticoids and hydroxychloroquine.

Abstract N°: 674

Title: Cutaneous sarcoidosis mimicking a vitiligo

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Introduction

Materials and methods

Results

Introduction

Sarcoidosis or Besnier-Boek-Schumann disease is a systemic granulomatous disease of unknown etiology. Sarcoidosis mainly affects the lungs and lymph nodes, and cutaneous localizations are less frequent and are observed between 25 and 35% of cases. Many cutaneous clinical forms have been described but the hypopigmented forms remains exceptional.

We report a case of cutaneous sarcoidosis simulating a vitiligo.

Case report

A 42-year-old female patient with a history of pulmonary sarcoidosis 5 years ago treated with oral corticosteroid for 2 years presented with a 5-month history of hypopigmented lesions.

Physical examination revealed well-circumscribed circular hypopigmented lesions measuring few millimeters, located on the dorsal side of both hands associated to a hypopigmented lesion of the of the right eyebrow.

Laboratory test showed normal levels of serum angiotensin-converting enzyme and calcium. The chest X-ray was normal.

Histological examination of a skin biopsy on the hypopigmented macula of the hand revealed a non-caseating epithelioid granuloma.

The diagnosis of cutaneous sarcoidosis was made based on clinical and histological findings, the patient was treated with hydroxychloroquine 400mg/day and local tacrolimus 0.1%.

The cutaneous lesions of the hands regressed within 4 weeks.

Discussion

The skin is the second most common organ affected by sarcoidosis, and skin lesions of sarcoidosis are divided into specific and non-specific lesions. However, misleading forms have also been described such as psoriasiform, erythrodermic or dyschromic forms specially hypopigmented on which is the case in our patient.

Cutaneous sarcoidosis lesions mimic various common dermatologic conditions, causing great confusion for the diagnosis. Awareness of these various morphologic presentations is essential for the early diagnosis and

management of the master mimicker cutaneous sarcoidosis.

The diagnosis is confirmed by the presence of non-caseating epithelioid granulomas in histological finding

Even though the treatment of the depigmenting form of sarcoidosis is not codified, numerous therapeutic options are available: hydroxychloroquine, topical tacrolimus, oral corticosteroid, minocycline, etc.

Discussion

Abstract N°: 680

Title: Results of Antibodies Detection to Desmogleins in Patients with Acantholytic Pemphigus

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Introduction Pemphigus is a severe autoimmune disease, the etiology and pathogenesis of which have not yet been fully elucidated. A number of foreign and domestic researchers have shown that an autoimmune process is noted in the pathogenesis of true pemphigus, characterized by the binding of autoantibodies to target proteins, which leads to a violation of intercellular adhesion - acantholysis.

The aim of the study was to assess the state of autoantibodies to desmogleins-1 and 3 in patients with acantholytic pemphigus.

Materials and methods We examined 32 patients with acantholytic pemphigus aged 15 to 67 years. There were 8 males and 24 females. According to the clinical form, all patients were diagnosed with acantholytic pemphigus.

All patients underwent clinical, cytological, biochemical and ELISA studies. Determination of antibodies to desmoglein was carried out by the ELISA research method ("Human desmoglein 1 IgG"; Melson Medical, China). Statistical processing of the obtained data was carried out using the Student's criterion using the "Microsoft Office Excel" and "Биостатистика 4.03" programms. $P<0,05$ served as a criterion for statistical significance.

Results The results of the ELISA study showed that autoantibodies to desmogleins-1 were detected in the blood serum of 19 among 32 patients with AP, which amounted to 59.4%, while autoantibodies to desmogleins-3 - in 20 (62.5%), respectively. Whereas 11 among 29 patients in the group of healthy individuals had antibodies to desmoglein-1, which amounted to 31.03%, while 9 out of 29 patients had antibodies to desmoglein-3, which amounted to 31.03% of cases.

Analysis of the quantitative characteristics of autoantibodies to desmogleins revealed an increase in serum concentration in patients with pemphigus. Thus, the level of autoantibodies to desmoglein-1 averaged 21.01 + 1.5 ng/ml, and for desmoglein-3 - 19.8±1.3 ng/ml, which was 6.2 and 5.6 times higher than in the group of healthy individuals. The results obtained were statistically significant. ($P<0.05$).

Discussion Thus, the results of the ELISA study showed that there was an increased concentration to desmoglein-1 in 59.4% of cases, and increased concentration to desmoglein-3 in 62.5% of cases in patients with AP. A simultaneous increase in the concentration of antibodies to desmoglein types 1 and 3 was observed in 14 out of 32 patients with AP, which accounted for 43.7% of cases. The results obtained indicate that there is a risk of developing a vegetative form of AP.

Abstract N°: 692

Title: Dicoid lupus erythematosus: Epidemiological and clinical study

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Introduction

Discoid lupus erythematosus (DLE) is a chronic inflammatory skin disease associated with severe aesthetic and psychological impact when affecting exposed zones. Although the diagnosis of classical DLE is generally clinical, dermoscopy and immunohistopathological study of skin biopsy are helpful to confirm the diagnosis. Our aim is to study the epidemiological and clinicopathological features, dermoscopic aspects and therapeutic options.

Materials and methods

This is a retrospective study over a period of 20 years (from 2000 to 2021). All patients diagnosed and treated for DLE in our department of dermatology were included. Data was collected from medical files.

Results

We collected 60 patients (27M/33F). The median age was 48 years old. Mean duration of the disease was 3 years and 6 months. The main location was the face with 41 lesions affecting nose (14), cheeks (9), forehead (6), ears (5), inner canthus (2). Mucosal lesions were seen in 5 patients (lips). Other locations included scalp (30), dorsum of hands (9), trunk (4), limbs (7). Clinical manifestations were mainly erythematosquamous and hyperkeratotic plaques. Atrophy was found in 20 cases, whereas dyspigmentation was seen in 18 patients. Purpuric lesions and telangiectasia were seen within 7 lesions. Regarding lesions on the scalp, we found atrophic scarring alopecia (all of patients) with dyspigmentation (24 patients) and erythema (20 patients). Two patients presented a scarring alopecia resembling pseudopelade of Brocq. Dermoscopy was performed in 12 patients showed white structureless areas (8), arborizing vessels (7), pink-white background (6), white scales (5), follicular keratotic plugs (2), absent follicular openings (2), and perifollicular scaling (2). Histopathology was performed in 32 cases, and showed characteristic features of DLE in 26 cases. Of total 19 direct immunofluorescence performed, findings were positive in 12 cases showing positive lupus band test. Antinuclear antibody testing was done and positive in only 3 cases (2 cases had systemic lupus erythematosus and one case had mixed connective tissue disease). Topical corticosteroids were prescribed in 13 cases with photoprotection in all patients. Antimalarial drugs were prescribed in 39 patients. Ocular complications detected in five patients leading to treatment discontinuation. One patient was treated with methotrexate (10 mg once-weekly).

Discussion

DLE remains the most common form of cutaneous lupus erythematosus. Female predominance was noted similarly to several others studies. Most of our patients had a disease onset at 3rd to 5th decade. The classical clinical presentation is an erythematosus plaque, that resolve with atrophy, scarring and pigmentary changes, occurring in sun-exposed areas. The face and scalp were the most commonly involved sites in our study, in concordance with the literature. Dermoscopy is a useful tool for the early diagnosis. Biopsy of the involved skin typically shows interface dermatitis with deposits of IgM and IgG in the dermoepidermal junction. Correlation of histopathological findings with clinical diagnosis was 80% in our study. Early treatment is necessary to prevent scarring. Up to 5 to 17% of patients with DLE may eventually develop systemic lupus erythematosus, as well as the

adverse events of antimalarial drugs, which requires a close follow-up of these patients.

Abstract N°: 725

Title: Bullous pemphigoid in association with psoriasis treated successfully with anti-IL-17-A

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Bullous pemphigoid in association with psoriasis treated successfully with anti-IL-17 A

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Introduction: Autoimmune blistering diseases of the skin have all been reported in psoriatic patients, bullous pemphigoid (BP) being the most frequently observed. The exact nature of the association BP/psoriasis remains unclear. Early reports discussed the triggering role of topical anti-psoriatic treatments or phototherapy. Recent observations suggest common immunogenetic mechanisms. Chronic psoriatic inflammation was considered able to induce autoimmunity against BP antigens through cross reactivity and "epitope spreading". Having in mind the probable common autoimmune processes in the pathogenesis of these skin disorders a suitable treatment regimen should be applied for their parallel control.

Materials and methods: We report a 65-year-old man who presented with widespread, pruritic blistering eruption of three weeks duration. The patient suffered from a long-lasting psoriasis vulgaris, the latter being treated with topical corticosteroids, photo- and thalassotherapy, as well as systemic administration of methotrexate. Due to a recent flare of his psoriasis the patient subjected himself to extensive sun exposure which was followed by the apparition of tense bullae with transparent or haemorrhagic contents on both healthy and psoriatic skin. Mucous membranes were not affected. Besides the thorough medical and drug history the diagnostic algorithm included routine laboratory tests, histological examination, direct immunofluorescence (DIF) and immunoserologic tests for serum circulating auto-antibodies.

Results: Routine laboratory demonstrated inflammation and slightly elevated liver enzymes. Histological findings from a psoriatic plaque and blister were compatible with psoriasis and subepidermal bullous dermatosis, respectively. DIF from peribullous skin demonstrated linear deposits of IgG and C3 along the dermo-epidermal junction. ELISA BP 180 was positive, while ELISA BP 230 was negative. Based on these data the diagnosis of BP was confirmed. Systemic corticosteroids were avoided due to the underlying psoriasis. Topical emollients and potent corticosteroids led to slight improvement. Secukinumab at initial weekly administration of 300mg during the first month and subsequent monthly application achieved complete control of both skin disorders.

Discussion: The reported case reflects the therapeutic dilemma in the association of diseases with controversial treatment regimens. Systemic corticosteroids used in the treatment of BP may precipitate erythroderma or severe pustular flare in psoriasis. Conversely, phototherapy which is beneficial for psoriasis may induce or exacerbate BP. No formal guidelines exist for the management of the combination of BP and psoriasis but methotrexate, cyclosporine, retinoids, dapsone or biologicals have been successfully implicated. Recently it was suggested that

IL-17 A, a well-established cytokine in the pathogenesis of psoriasis, plays a functional role in the inflammation process of the skin in BP. Based on these findings, the inhibition of IL-17A appears as a potential novel therapeutic strategy for BP.

Abstract N°: 728

Title: Comorbidities and complications of pemphigus patients

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Introduction

Pemphigus is a potentially lethal group of rare autoimmune bullous dermatoses affecting the skin and the mucosa. Data concerning comorbidities and complications are not firmly established, due to the scarcity and inconsistency of the different published observational studies. Thus, we aim through our work, to lift the veil on these data in patients with pemphigus in the Eastern region of Morocco.

Materials and methods

Our work is a retrospective descriptive mono-centric study including all patients hospitalized for pemphigus in the Dermatology Department of the Mohammed VI University Hospital of Oujda, Morocco between June 2014 to January 2022.

Results

A total of 60 patients were included. The mean age was 58.22 +/- 14.5 years with age extremes ranging from 26 to 88 years. A female predominance was noted with a sex ratio F/H of 1.06.For comorbidities, diabetes was present in 13.3% of the cases, followed by arterial hypertension in 11.7% of the cases, a history of tuberculosis was observed in 10% of the patients and 1.7% of the cases had an underlying neoplasia. The mean duration of symptoms before consultation was 13.7 months. Pemphigus vulgaris was the most common type, followed by pemphigus foliaceus, erythematous and lastly paraneoplastic pemphigus. 40.7% of the patients were put on systemic corticosteroids combined with immunosuppressants, 20.4% were put on Rituximab and systemic corticosteroids and 16.7% of the patients were treated with a combination of Rituximab, systemic corticosteroids and plasma exchanges. The most serious complication in patients was infection, present in 63.7% of cases, mainly bacterial with 11 deaths following septic shock, 5 patients presented a overinfection of the plasmapheresis catheter, viral infections were also noted, with only one case of death following a COVID infection. Corticosteroid-related side effects were cortisone-induced osteoporosis (41.8%), weight gain (21.1%), cortico-induced cataract (16%), diabetes (14%) and psychiatric complications (13.8%). Sixteen patients died, half of whom had pemphigus vulgaris, 11 patients died from septic shock, 2 from strokes, 1 from COVID infection, and 2 died at home.

Discussion

Pemphigus is a heterogeneous group of autoimmune dermatoses affecting the skin and the mucosa, reflecting the presence of antibodies (Abs) directed against desmosomes, the adhesion of these Abs causes a loss of epidermal adhesion, resulting in acantholysis with the formation of cutaneous and mucosal lesions.In our series, the peak incidence was observed in the fifth decade of life, with a clear female predominance similar to what is reported in similar studies, which can be explained in our context by the use of some traditional products such as Henna and Souak, in addition to hormonal and genetic factors. More than 35% of our patients had comorbidities, the most frequent were diabetes and hypertension, pulmonary tuberculosis was also noted, probably in relation to our tuberculosis endemic context.Recent studies have shown that overall mortality in patients with pemphigus is 2.4 times higher than in the general population, mainly due to infections with a statistically significant risk of death

from infection, especially pneumonitis or sepsis, and vascular disease. Cortisone-induced osteoporosis, weight gain, cataract, diabetes, and psychiatric disorders were the most common side effects of corticosteroid therapy in our series, comparable to previously published data.

Abstract N°: 747

Title: Erythema multiforme in Systemic Lupus Erythematous - an ongoing discussion

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Introduction

Materials and methods

Results (case report)

The occurrence of erythema multiforme (EM) like lesions in association with lupus erythematosus (LE) is often referred to as "Rowell syndrome" (RS). Since its first description, various diagnostic criteria have been suggested, while some have questioned its nosographic independence from LE.

We describe the case of a 35-year-old female, with a 7-year history of systemic lupus erythematosus (SLE), treated with hydroxychloroquine and prednisolone 30mg/day, that presented with a 1-week history of a nonpruritic erythematous macular skin rash. The dermatosis had initially appeared on her chest and progressed to involve almost the full extension of her trunk and upper limbs. It consisted of dusky erythematous macules, some forming atypical targets, that coalesced, as well as a few flaccid bullae and erosive plaques, mainly across her abdomen and infra-mammary region. There was mucosal sparing and little involvement of the face and lower body. The patient denied fever, but reported asthenia, dyspnea and looked unwell. There were no identifiable pharmacologic or infectious triggers nor typical EM location (acral and mucosal). The dermatosis begun during weaning of prednisolone and the patient referred three previous identical episodes in the last year, two with no apparent trigger, while the first had coincided with a hospitalization in the intensive care unit due to a severe SARS-Cov2 infection.

Laboratory investigation revealed anemia (Hb 10,7g/dL), increased erythrocyte sedimentation rate (60mm/h), positivity for anti-nuclear antibody in a speckled pattern, anti-double stranded-DNA, anti-Ro/SSA and anti-La/SSB, as well as complement (C3 and C4) consumption. Anti-phospholipid antibodies were negative. Two punch biopsies from dusky patches in her arm were consistent with EM, while direct immunofluorescence (DIF) from peri-lesional skin showed band-like IgA and IgG deposits in the basement membrane.

Given the recurrent EM lesions in a patient with SLE, a diagnosis of RS was considered. Increase of prednisolone to 50mg/day and local wound care led to a significant improvement in the systemic symptoms, number of skin lesions, and local tenderness. Azathioprine was subsequently started as a corticosteroid sparing agent.

Our patient meets the diagnostic criteria for RS defined by Zeitouni et al, but not by Torchia at all, who considered RS to be an independent chronic LE subtype, including the presence of chronic lupus erythematous lesions (discoid or chilblain) as obligatory major criteria. Given the ongoing debate regarding the classification of RS, we believe the report and discussion of atypical cases to be paramount, increasing the knowledge of the different presentations of SLE and perhaps of distinct entities.

Discussion

Abstract N°: 813

Title: Dyshidrosiform bullous pemphigoid induced by ustekinumab

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Introduction

Dyshidrosiform pemphigoid (DP) is an unusual variant of localized bullous pemphigoid (BP), characterized by persistent bullous lesions on the soles and/or palms which resembles dyshidrosiform eczema. DP has been unfrequently reported in the literature. Here, we report a case of DP induced by ustekinumab in a 62-year-old Caucasian man with a 7-year history of ulcerative colitis. According to the WHO-UMC system the causal relationship between DP and ustekinumab was classified as probable. Treatment with highly potent topical steroids and dapsone 50 mg once/day led to a massive improvement of the skin lesions.

Discussion

DP is an unusual form of localized BP that was first described by Levine et al. in 1979. Localized BP has been classified into 3 subtypes: the first (Brunsting–Perry type), characterized by scarring bullous lesion on the neck and the head; the second, characterized by non-scarring bullae at the pretibial area; the third type with palmoplantar, dyshidrosiform lesions. Furthermore, two different subsets of DP have been described. In the first DP variant, blistering lesions initially develop on the palmoplantar areas and later spread over the body. The second DP variant is characterized by bullous lesions exclusively on the palms and/or soles throughout the course of disease. Drug-induced BP (DBP) accounts for a small proportion of the total cases of BP. DBP can be triggered by several drugs, including amoxicillin, losartan, sulfasalazine, spironolactone, and monoclonal antibodies, among others nivolumab and pembrolizumab. Furthermore, ustekinumab, a humanised monoclonal IgG1 antibody that binds the p40 protein subunit of interleukin 12 (IL-12) and IL-23, was reported as trigger drug in a few BP cases. In the EudraVigilance EMA database 14 cases of BP associated with ustekinumab have been reported, but only 4 have been published in the literature.

Abstract N°: 816

Title: Captopril-induced pemphigus foliaceus

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Results

Pemphigus foliaceus is autoimmune, subcorneal acantholytic blistering disorder characterized by autoantibodies against desmoglein 1. It occurs in idiopathic, endemic or drug- induced forms. Pemphigus foliaceus is rarely described in the patient who uses oral ACE inhibitor for the treatment of hypertension.

Case report

This is case report of a 52 year old Caucasian man; on admission to our Department the patient had erythematous plaques with scale-crust and erosions on the nose and malar area of the face. On the shoulders, presternal, persisted superficial crusty erosions. On the anterior and posterior of the thrunk there was scaly, erosive erythematous papules and plaques. The Nikolsky sign was positive. No mucosal lesions were detected. The patient confirmed that he used captopril tablets (oral ACE inhibitor for the treatment of hypertension). Personal medical history confirmed that patient did not have any other serious diseases.

The patient was treated for suspected staphylococcal impetigo by primary care physician with systemic antibiotics and topical corticosteroid therapy. After sun exposure patient's skin condition worsened. He was admitted to our Department. He did not respond to topical steroids, and we started treating him with oral prednisone 60mg daily, and the condition flared up when high dose oral steroids were tapered. We continued treating him with oral prednisone 20 mg daily and azathioprine tablets 100 mg daily, followed with supplementary calcium and vitamin D, and also we treated patient with Pantoprazole tablets 2x40 mg. Topical corticosteroid (betamethasone) and emollient therapy were administered too. The internist excluded captopril from therapy and the patient started Losartan tablets 1x50 mg (angiotensin II receptor antagonist). He had no new lesions, and his blood pressure was normal.

Diagnostic procedures

Routine laboratory analysis had been within the reference values. Microbiological studies were all negative. Direct immunofluorescent test revealed IgG and complement component C3 in the inter-cellular substance of epidermis thus indicating a diagnosis of autoimmune pemphigus. Indirect immunofluorescence test was positive with a titer of 1:160. Antinuclear antibodies are not identified in the serum. Histological studies of a lesion revealed epidermal hyperkeratosis and acanthosis whereas in the corneal layer subcorneal clefts were observed with acantholytic cells. Dermal blood vessels were surrounded by lymphocytes and eosinophils. Histology was consistent with pemhigus foliaceus.

Discussion

Systemic corticosteroids are the treatment of choice (1-2 mg/kg/day). Sometimes treatment with Immunosuppressants may be necessary, including systemic 0corticosteroids, azathioprine, cyclophosphamide, cyclosporin A, antimalarials (hydroxychloroquine and chloroquine), sulfonamides or rituximab.

Differential diagnosis

Initialy the clinical diagnosis may be other forms of pemphigus, subcorneal pustular dermatosis, seborrheic dermatitis, lupus erythematosus or bullous impetigo.

Conclusion

Cases of pemphigus associated with the use of drugs are incommon. Our patient showed complete remission two months after captopril therapy was abolished. Most, but not all, patients with drug-induced pemphigus go into remission after the offending drug is discontinued.

Abstract N°: 830

Title: In Bulgarian population the OSMR rs2278329 and rs2292016 polymorphisms do not represent a risk factor for development of dermatomyositis and systemic lupus erythematosus

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Introduction

Dermatomyositis (DM) and systemic lupus erythematosus (SLE) share a similar pathogenesis. Various genetic, hormonal, and environmental factors are known to trigger the autoimmune process. This case-control study investigates the association between the Oncostatin M receptor (OSMR) rs2278329 (Asp553Asn) and rs2292016 (-100G/T) polymorphisms and the susceptibility to dermatomyositis and systemic lupus erythematosus in Bulgarian patients.

Materials and methods

Altogether 126 patients, 64 with DM and 62 with SLE, and 95 unrelated healthy controls were included in this study. The analysis was performed by TaqMan genotyping.

Results

The frequency of the minor alleles was low. None of the polymorphisms showed an association with SLE, DM, or their clinical parameters.

Discussion

Our results indicate that the OSMR variants do not represent a risk for dermatomyositis and systemic lupus erythematosus in Bulgarian patients. Further investigations in a larger cohort are needed as the limited number of patients and controls in the present study probably affect the significance of the results.

Abstract N°: 872

Title: Lupus and Familial Mediterranean Fever in a child

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Introduction

Lupus erythematosus is an autoimmune disease rarely seen in children. Familial Mediterranean fever is a hereditary auto-inflammatory disease often revealed in childhood. The association between these two pathologies is very uncommon. We report a rare case of cutaneous lupus associated with familial Mediterranean fever in a 5-year-old child.

Case report

A 5-year-old child from a first-degree consanguineous marriage developed malar erythema associated with hair loss, photosensitivity, inflammatory arthralgias, abdominal pain, and diarrhea evolving by relapse and remission in a context of fever since the age of one.

The clinical examination revealed an asthenic patient with erythematous-squamous lesions on the cheeks, with lesions on the frond, eyebrows, ear pavilions, and the retro auricular region, oral ulcerations, and cheilitis with crusts on top. He also had erythematosquamous lesions with atrophic centers on the trunk and limbs. The scalp was the site of erythematous-squamous lesions with an atrophic center and alopecia.

Lupus or superinfected atopic dermatitis was suspected.

A skin biopsy showed lichenoid dermatitis in favor of a lupus erythematosus.

The biological workup showed a microcytic hypochromic anemia with neutropenia. The coombs test was negative. The sedimentation rate was accelerated to 65. The immunological workup found positive antinuclear antibodies, positive anti-SM antibodies, positive anti-RNP antibodies, positive anti-SSA antibodies, anti-DNA and anti-cardiolipin antibodies were negative. C3, C4, CH 50 supplements were not consumed. The 24-hour proteinuria was negative.

The diagnosis of cutaneous lupus erythematosus was retained and the patient was put on hydroxychloroquine 50 mg /d and photoprotection. Antibiotic and antiviral therapy was also instituted for the superinfection, then dermocorticoid was starting.

The evolution was marked by dermatological improvement with a healing of the skin lesions, but the persistence of fever, arthralgia, abdominal pain, and diarrhea evolved by relapses-remissions. The increase in the sedimentation rate also persisted. Therefore, we suspected familial Mediterranean fever, so the patient was put on colchicine 1mg/d with good improvement and since then he has not presented any more attacks.

A genetic study for the MEFV mutation revealed the p.Ala744Ser mutation in the heterozygous state in exon 10 of the MEFV gene.

The diagnosis of familial Mediterranean fever associated with cutaneous lupus was retained.

Discussion and conclusion

The originality of our observation resides in the rarity of the association of these two diseases: lupus erythematosus and familial Mediterranean fever, especially in children.

Although coexistence is very rare, a patient with SLE who presents with abdominal pain and episodes of arthralgia that do not respond to appropriate treatment should be investigated for other associated autoinflammatory diseases.

Abstract N°: 882

Title: Chronic cutaneous lupus mimicking vitiligo

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Introduction

Lupus erythematosus is an autoimmune disease that may be exclusively cutaneous or associated with systemic involvement. We report an atypical case of chronic cutaneous lupus mimicking vitiligo in a 46-year-old female patient.

Case report

A 46-year-old female patient presented with achromic lesions of the face associated with photosensitivity, hair loss, inflammatory polyarthralgias, without respiratory or digestive signs.

The clinical examination revealed an asthenic patient with achromic lesions with an atrophic background on the face, the auricles, the back of the hands, and the knees. The patient presented a rarefaction of hair without alopecic plaque.

therefore, cutaneous lupus or vitiligo was suspected.

The skin biopsy was in favor of lupus erythematosus. The epidermis was atrophic with orthokeratotic hyperkeratosis and vacuolation of the basal layer. The superficial dermis was fibrous with pigmentary incontinence and a moderate perivascular inflammatory infiltrate of lymphocytes and histiocytes. The reticular dermis was the seat of important mucin deposit.

A systemic workup was performed. The blood count was normal, showing no hematological involvement. Anti-nuclear and anti-DNA antibodies were negative. C3, C4, CH50 complements were preserved. The 24-hour proteinuria was negative.

We retained a chronic lupus erythematosus.

The patient was put on hydroxychloroquine 400mg/day, dermocorticoide on the lesions, and photoprotection with good improvement.

Discussion and conclusion

The originality of our case resides in the atypical presentation of chronic cutaneous lupus mimicking vitiligo.

Lupus is a chronic disease, which occurs most often in adult women.

Depigmented lesions have been described in areas previously damaged by inflammation in lupus erythematosus.

In the absence of typical lupus lesions, distinction from other achromic diseases can be difficult.

Abstract N°: 927

Title: Pemphigus foliaceus with neutrophilic bullae - case report

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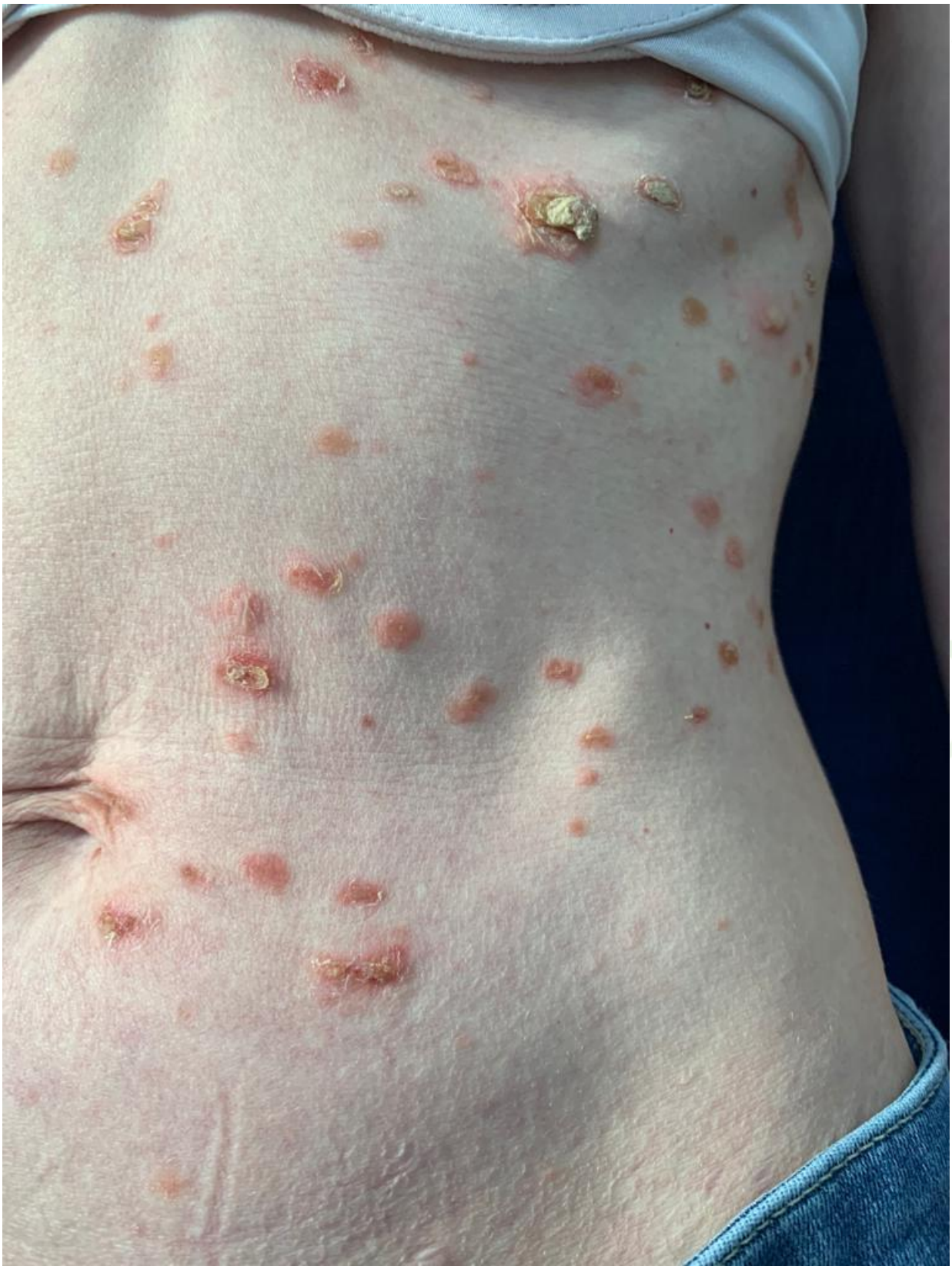
Introduction

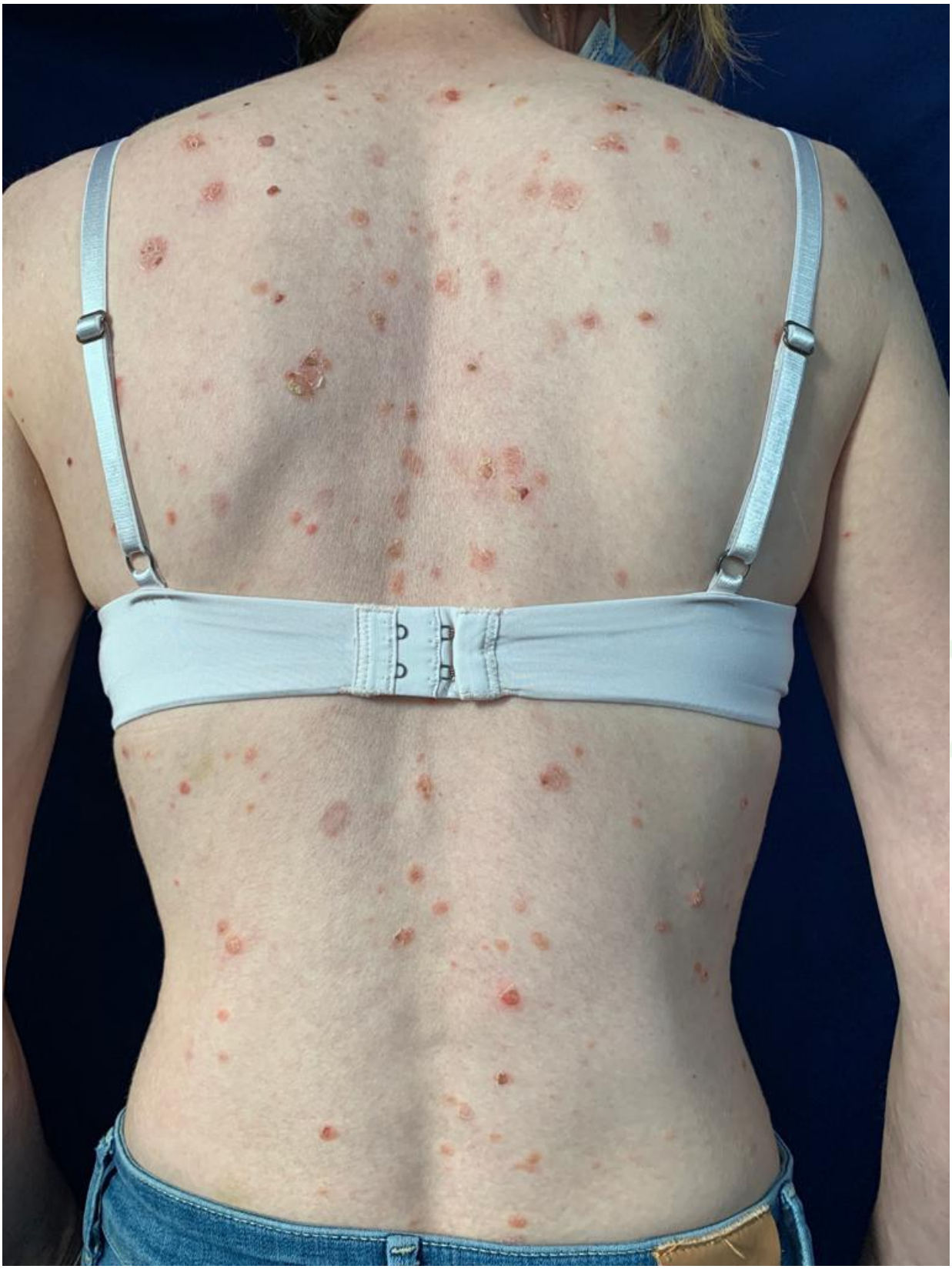
Materials and methods

Results

Pemphigus foliaceus is a type of superficial pemphigus endemic in South America and North Africa, but extremelly rare encountered in Europe. It is a benign variety of pemphigus caractherized by superficial blisters induced by immunoglobulin G (Ig G) autoantibodies directed against desmoglein 1. Skin lesions are flacid bullae or superficial crusted erosions, typically in a seborrheic distribution. Usually, mucosae are spared. On histology there is subcorneal acantholysis and direct immunofluorescence reveals IgG on the keratinocyte cell surface.

An otherwise healthy 46-year-old female patient presented with multiple bullae and erosions predominantly located on her torso and abdomen. The eruption debuted several weeks before presentation and was asymptomatic. On clinical examination multiple erosions were present, some of them covered with scales or crusts and few scattered bullae were observed. Nikolsky sign was negative. There were no mucous membrane lesions. Medical and surgical history and systematic review were unremarkable.





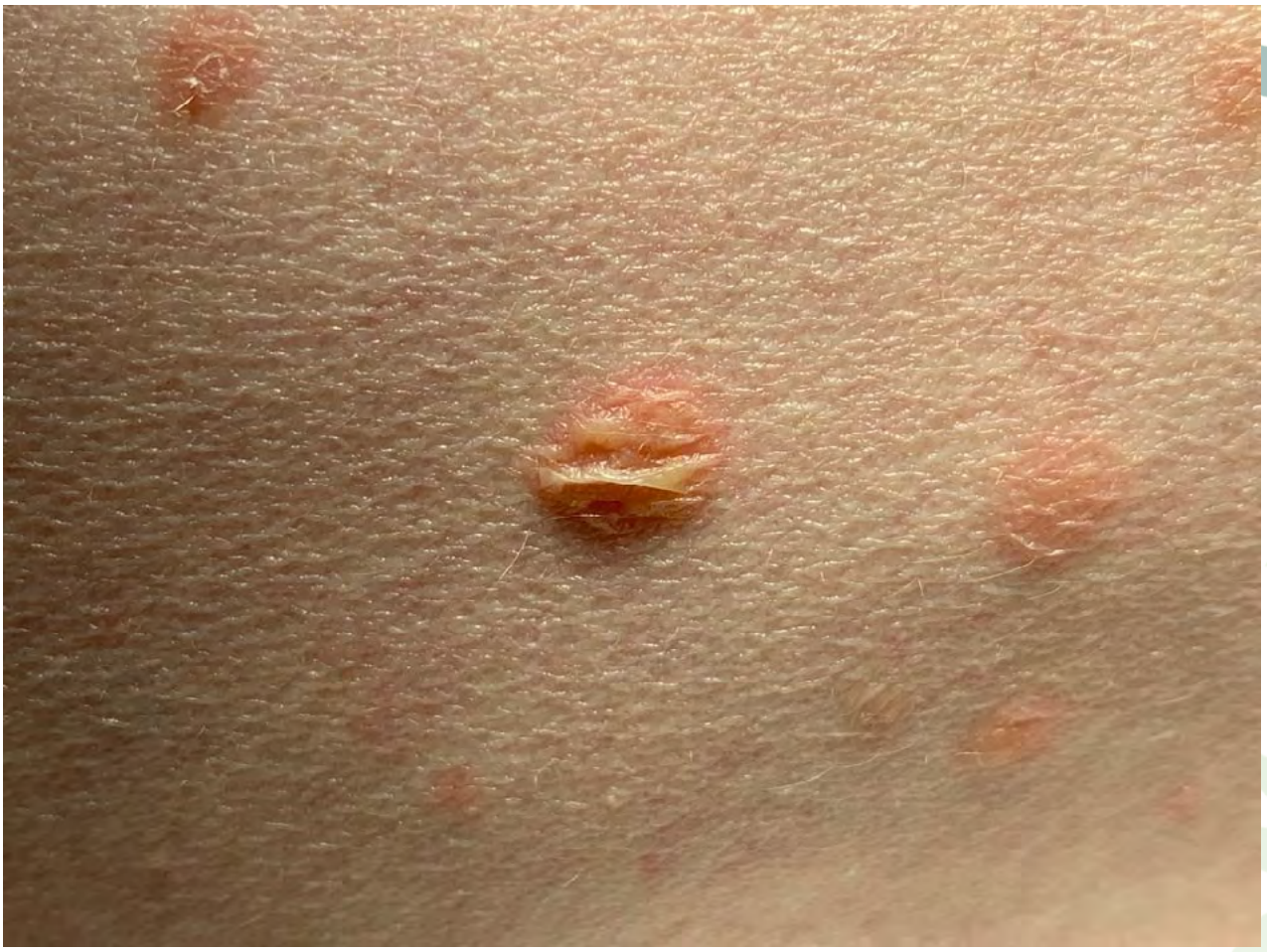


Figure 1- Pemphigus foliaceus- clinical aspect

In order to confirm clinical diagnosis of pemphigus foliaceus, a 4 mm punch biopsy was performed from a fresh bulla. Histologic findings revealed a subcorneal cleft filled with serofibrinous exudate, acantholytic keratinocytes and neutrophils. Subcorneal pustular dermatosis and IgA pemphigus were excluded based on clinical presentation and histologic findings.

Giving the fact that the area of skin involved was limited and the prognosis of pemphigus foliaceus without systemic therapy is good, topical clobetasol propionate 0,05% was the prefered treatment. Disease control was obtained after 1 month of treatment.

Even though pemphigus foliaceus is a superficial bullous disease in this partcicular case the Nikolsky sign was negative and the patient had multiple intact bullae at presentation. Another particularity of the case was the abundance of neutrophils on histologic examination.

Discussion

Abstract N°: 949

Title: bullous pemphigoid: A case report

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Introduction

Non scarring forms of localized bullous pemphigoid (LBP) are uncommon. We describe a novel case of intertriginous LBP with a benign course.

Materials and methods

Results

A 64-year-old woman with medical history of high blood pressure and gout, presented to our dermatology department with a 3-day history of localized blistering eruption. She reported mild pruritus. On examination, we identified multiple agglomerated tense bullae in the right axilla. Two infracentimetric erosions were found on the left axilla. Blisters with the same aspect were found over internal aspects of groins bilaterally. The underlying skin showed no erythema. Nikolsky sign was negative. No mucosal nor nail involvement were found. She denied any topical treatment use or trauma preceding the eruption in the affected sites. Histopathology showed subepidermal bulla associated with mixed-type cell infiltrate made of neutrophils, lymphocytes and eosinophils in the dermoepidermal junction (DEJ) and dermis. Direct immunofluorescence (IFD) of the perilesional skin revealed linear deposits of IgG and complement C3 along the DEJ. Diagnosis of localized bullous pemphigoid (LBP) with intertriginous localization was made. Treatment with topical clobetasol propionate at a dose of 20mg daily on lesional skin was started for one month. The patient achieved total clinical remission within one week. Topical steroid was gradually tapered for three months. No relapse was seen with treatment withdrawal.

Discussion

Non scarring forms of LBP are uncommon. To the best of our knowledge, only one case of flexural LBP similar to our patient, has been described. In such cases, several factors triggering the autoimmune process are usually found. LBP following radiotherapy, chemical or thermal burns and in trauma sites have been described. No koebnerization phenomenon was found in our case. Regarding our patient, exclusive intertriginous distribution of the disease could be explained by high expression of bullous pemphigoid (BP) antigens in these sites. Though LBP shares the same immunopathogenic features of the classic form of the disease, evolution to extensive BP is not constant. The relatively benign course is supported by our case as no relapse was seen after short topical steroid treatment. Regular monitoring of these patients is yet recommended to detect a transformation into a widespread form.

Abstract N°: 950

Title: Dermatitis herpetiformis in association with immune thrombocytopenic purpura

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Introduction

Dermatitis herpetiformis (DH) is a rare acquired autoimmune blistering disease (AIBD), characterized by a chronic intensely pruritic papulovesicular eruption, subepidermal granular IgA deposition, and association with a variable degree of gluten-sensitive enteropathy (GSE) identical to that seen in coeliac disease. Apart from GSE, DH has frequently been reported in relation with a number of other autoimmune disorders such as thyroid autoimmune disturbances, type I diabetes or pernicious anemia. Such relationship is suggestive of a possible common prerequisite autoimmune background. We present a case of association of DH with immune thrombocytopenic purpura (ITP).

Materials and methods

The patient was a 40-year-old Caucasian obese woman with a history of DH diagnosed in our dermatology department 12 years ago based on the presence of a typical polymorphous symmetrical eruption on the trunk and the extensor surfaces of the limbs, the direct immunofluorescence microscopy findings of granular IgA (+++) and C3 (+) at the dermo-epidermal junction, and positive serum anti-tissue transglutaminase and anti-deamidated gliadin peptides antibodies. The patient had been treated with dapsone (75-100 mg/daily) and followed a gluten-free diet (GFD) which resulted in clinical remission, with the sporadic appearance of oral aphthae as the only clinical complaint. Meanwhile, the patient discontinued the maintenance dose of dapsone 50 mg/daily due to its shortage in our country. One week later she progressively developed hemorrhagic diathesis: menorrhagia, epistaxis, gingivorrhagia, and multiple cutaneous hemorrhages.

Results

Laboratory tests demonstrated thrombocytopenia (4g/L). Treatment with methylprednisolone (1 mg/kg daily) led to a temporary effect and the patient was referred to the hematology ward with thrombocytopenia 29 g/L and leukocytosis 12.7 g/L. The myelogram showed normocellular bone marrow and greatly increased megakaryocytes with left shift, the rest of bone marrow cell types were normal. Chest x-ray and abdominal ultrasonography were normal. Based on these findings the patient was diagnosed with ITP associated with a known underlying AIBD - DH. Because of the partial clinical response and significant side effects from the long-term corticosteroid therapy, the patient underwent a splenectomy, which resulted in a rapid increase of the platelet count (650-856 g/L). The treatment with dapsone was reintroduced and continues currently. The patient is periodically monitored by a hematologist and remains in good health with platelets within normal ranges.

Discussion

ITP is an autoimmune disorder characterized by immune-mediated accelerated platelet destruction and impaired

platelet production. It can present either as an isolated (primary) condition or may develop secondarily in the setting of other autoimmune disorders as in the present case with a pre-existing AIBD. The occurrence of ITP in the setting of celiac disease has been reported before but its coexistence with DH is extremely rare. In a series of 264 patients with DH, essential thrombocythemia accounted for only one case among the associated autoimmune diseases. The occurrence of more than one disease of autoimmune origin may be regarded as a simple coincidence or as the result of common pathogenic mechanisms in the context of the so-called multiple autoimmune syndrome but such association still remains debatable.

Abstract N°: 961

Title: An unusual presentation of systemic lupus erythematous

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Introduction

Materials and methods

Results

Unusual presentation of systemic lupus erythematosus- case presentation

Systemic lupus erythematosus (SLE) is a chronic systemic autoimmune disease with a variety of clinical manifestations and immunological and laboratory abnormalities. This inflammatory disease can affect almost any organ system, although it mainly involves the skin, joints, kidneys, blood cells, and central nervous system. The exact pathogenesis of this condition remains unclear. Still, it is generally accepted the involvement of a multifactorial interaction among various genetic and environmental factors. Recent studies suggest that SLE is far less common in Europeans with higher rates reported in blacks and Hispanics. It is affecting primarily women accounting for more than 90% of cases of SLE, frequently starting at childbearing age.

We present the case of a 64 year old male from urban area who present for symmetrical, polyarticular arthralgia that involved the small joints of the hands and psoriasis-like patches located on both hands. The cutaneous eruption consisted of small erythematous scaly patches, well demarcated located on the small joints of the hands and some painful fissures on the surface. The onset of the articular and cutaneous manifestations started 6 months prior to presentation with progressive exacerbation. The family history was negative but the patient worked as a coroner assistant. He was known with tuberculosis since 2013, hypertension and cataract of the left eye. The patient is a heavy smoker (2 packs per day for over 40 years).

The diagnosis was based on the immunological abnormalities and clinical manifestation. The laboratory data showed anti-dsDNA antibody, low C3 and low C4, proteinuria; the chest x-ray showed nodular lesions located apical-sub-clavicular on the right lung while the hands radiography showed nonerosive arthritis.

This case represents a diagnostic challenge due to unsual presentation of a male with the onset of systemic lupus erythematous within the 6 decade of life.

Discussion

Abstract N°: 1024

Title: Myelodyspalstic syndrome in a patient with down syndrome revealed by psoriasis

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Introduction

Psoriasis is a chronic inflammatory dermatosis which can be associated with other systemic diseases but more rarely with malignant hemopathy. We report here a rare case of myelodysplastic syndrome revealed by a flare-up of psoriasis

Observation:

This is a 28-year-old patient, with Down syndrome, followed for vulgar psoriasis for 14 years, traited by dermocorticoid and emollient preparation, admitted for a flare-up of psoriasis evolving in a context of impaired general condition.

On examination: Confluent erythematous-scaly lesions impetiginized in places and bleeding in others, based on an exanthema affecting 45% of the body surface, positive bloody dew sign, lesions of onycholysis and paronychia of the fingernails and feet with a scaly helmet of the scalp.

Paraclinical assessment revealed pancytopenia with myelodysplastic syndrome

Discussion

The interest of our case is to highlight a rare association of psoriasis and myelodysplastic syndrome in a 28-year-old patient with Down syndrome, thus familiarizing the practitioner with the links between myelodysplasia and autoimmunity.

Several studies have investigated the risk of developing MDS in the presence of an autoimmune disease. The prevalence of autoimmune diseases preceding the onset of MDS ranges from 8 to 23.3%.

Several cohort studies and numerous case reports attest to the emergence of MDS in some patients with autoimmune diseases. Similarly, patients suffering from certain autoimmune pathologies have an increased risk of also suffering from MDS.

A Swedish study demonstrated a strong association between chronic immune stimulation and susceptibility to MDS. There is growing evidence for the role of activated innate immunity and inflammation as well as immune dysregulation in the pathogenesis of MDS

In a nested control design study, patients with any autoimmune disease diagnosed over 10 years had an increased risk of MDS, suggesting that MDS may represent a late manifestation of chronic inflammation.

Conclusion

In the event of appearance or worsening of peripheral cytopenia in a patient with autoimmune disease, the possibility of MDS should be considered and, if necessary, a hematological opinion should be sought.

Abstract N°: 1062

Title: Pemphigoid Gestationis, a rare gravidic dermatosis to know: A case series of 11 patients

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Introduction

Pemphigoid Gestationis (PG) is a rare autoimmune bullous dermatosis that can occur at any stage of pregnancy. Herin, we describe the epidemiological, clinical and evolutionary profile of Pemphigoid Gestationis in the Department of Dermatology at Ibn Rochd University Hospital.

Materials and methods

This is a retrospective descriptive study conducted in the Dermatology Department between January 2014 and January 2021. The selected files were analyzed according to an exploitation form including epidemiological, clinical, paraclinical and therapeutic data.

Results

Over a period of 7 years, eleven cases were collected, 7 multiparous and 4 primiparous. The average age of onset was 26 years, the onset of clinical signs was in the 3rd trimester in 7 cases, 2nd trimester in 2 patients and postpartum in 2 patients. Pruritus was inaugural with periumbilical onset in all patients. Clinically, 10 patients had urticarial lesions and 9 had bullous lesions; the lesion site was on the trunk in all patients, upper and lower limbs in 5 patients and on the face in only 2 patients. Skin biopsy coupled with direct immunofluorescence confirmed the diagnosis in all patients. Treatment was based on systemic corticosteroid therapy in all cases. The evolution was favorable in all patients with only 1 case of fetal death reported.

Discussion

PG is an autoimmune subepidermal bullous dermatosis, which most often affects multiparous women and can occur at any stage of pregnancy, including immediate postpartum. The main antigen involved is collagen XVII present in the skin and placenta; its presence triggers an inflammatory response leading to the phenotype. It is initially manifested by intense pruritus followed by the appearance of urticarial plaques with or without bullous lesions generally beginning in the periumbilical area. The therapeutic arsenal is based on local and general corticotherapy.

Abstract N°: 33

Title: The use of guselkumab in psoriathic arthritis: our clinical experience

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Introduction

Psoriatic arthritis (PsA)) is a chronic inflammatory disease of the joints, spine and enthesis from the group of spondyloarthritis that develops in patients with psoriasis. Guselkumab is a biological drug, an inhibitor of interleukin 23, which has been shown to be effective in the treatment of plaque psoriasis and PsA.

Objective

To evaluate the effectiveness of guselkumab in the treatment of patients with PsA.

Materials and methods

The study included 16 patients with PsA. All patients received 100 mg of guselkumab subcutaneously at weeks 0, 4, 12, 20. Disease activity and treatment efficacy were assessed at weeks 0, 12 and 24 using the DAS28, ASDAS, BASDAI, DAPSA activity indices, the index of the extent and severity of psoriasis PASI.

Results

During treatment, patients with PsA showed a pronounced positive dynamics of the indices of disease activity and an improvement in the skin condition. Before the treatment with guselkumab, the mean value of the DAS28 index was 4.26±0.64, DAPSA – 37.94±9.45, ASDAS – 2.7±0.65, and BASDAI – 5.49±1.39, after 12 weeks of treatment these indicators decreased to 3.03±0.49; 17.06±4.58; 1.64±0.33 and 3.48±0.66, respectively, and after 24 weeks (after the 4th injection) – to 2.32±0.18; 11.31±2.18; 1.22±0.27 and 2.62±0.78, respectively ($p<0.05$ for all cases). Before treatment, the average PASI index reached 30.99±15.43, after 12 weeks – 4.55±4.82 and after 24 weeks – 1.05±1.46 ($p<0.05$). During treatment, a significant improvement in the main manifestations of the disease was noted. The treatment was well tolerated during 24 weeks of study and no serious adverse events were reported.

Conclusions

Guselkumab has been shown to be highly effective and safe in the treatment of PsA.

Abstract N°: 222

Title: Omalizumab for treatment of Bullous Pemphigoid in Oncogenic Patients

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Omalizumab for treatment of Bullous Pemphigoid in Oncologic Patients

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Introduction

Even though the cancer is not a risk factor for BP, patients with cancer may develop BP before or after cancer diagnosis. This poses a significant dilemma for BP treatment. In addition, these patients have many comorbidities that contraindicates the systemic corticosteroids and the immunosuppresants.

Materials and methods

We report a case of a 78-year-old male man diagnosed with BP since 2019. At the time of diagnosis, the patient had diabetes mellitus type 2 treated with gliptine (vildagliptin), hypertension and prostate hyperplasia. Despite the interruption of vildagliptine, and systemic therapy with methylprednisolone 0,5mg/kg/day, 3 months later the patient still complained of itch and more than 10 new blisters every week. He also was hospitalized for gastric hemorrhage, so methylprednisolone was replaced by dapsone. At the end of another 3 months of therapy, dapsone was stopped as considered ineffective. Meanwhile the patient was diagnosed with prostate cancer with bone, lung and liver metastases. In addition to the bullous rash, urticarial lesions covering large skin areas were observed.

Results

We decided to treat the patient with omalizumab and topical corticosteroids. Three weeks after the first dose of 300mg omalizumab and using daily topical corticosteroids the skin had no itch, no blisters and only epithelizing regions. At the present, the patient is treated by the Oncologist for disseminated prostate cancer and is continuing the therapy with omalizumab, remaining free of BP.

Discussion

BP commonly affects older adults. Systemic corticosteroids, the mainstay of therapy, may cause significant adverse effects. The corticosteroids-sparing therapy, consisting in immunosuppressive drugs, such as azathioprine, mycofenolate mofetil, cyclophosphamide, and methotrexate, are not applicable in patients with cancer. Therefore, safer therapeutic options are being sought. Omalizumab seems to be one of these options.

Abstract N°: 334

Title: The Role of Immunotherapy in the Treatment of Cutaneous Squamous Cell Carcinoma

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Introduction

Many countries have a rising incidence of cutaneous squamous cell carcinoma (cSCC) but there is a distinct lack of effective treatments available when the disease becomes advanced. PD-1 inhibitors have gradually been changing the treatment landscape for cSCC. It is important to understand the efficacy and safety profile of these drugs, as they now herald a new era for immunotherapy in the treatment of advanced cSCC.

Materials and methods

Our aim was to review the overall response rate (ORR) to treatment, disease control rate (DCR), 1-year overall survival (OS) and 1-year progression-free survival (PFS) in cemiplimab, pembrolizumab and nivolumab. We looked at whether tumour PD-L1 expression influenced treatment response and the proportion of patients who suffered serious treatment-related adverse effects.

A primary literature search was conducted with the PubMed, Cochrane Library, EMBASE databases and clinicaltrials.gov through 21st June 2021 to include studies on the use of PD-1 in patients for cSCC. Two reviewers independently performed study selection and data extraction.

Results

ORR of PD-1 inhibitors ranged from 31.5 -78%. The ORR was consistent within clinical trials and varied in real-world studies. DCR ranged from 50-83% with the majority of patients in all studies having either a partial or complete response.

The 1-year PFS rates ranged from 47-59% and were mostly comparable between patients within and outside of the clinical trial setting. The 1-year OS rates ranged between 46-93%. Many of the higher values were seen with cemiplimab, but further data is needed to determine if this has any significance. Data on whether PD-L1 positivity led to better response rates were conflicting. Treatment-related adverse effects (CTCAE grade 3 or higher) were seen in 7-35% of patients and more serious adverse effects were found to correlate with better responses to the drugs.

Discussion

All of the PD-1 inhibitors demonstrated good overall response rates and disease control rates in both clinical trials and real-world patients. The majority had either a partial or a complete response. Results for 1-year OS were largely similar and 1-year PFS were inconclusive. All three drugs have an acceptable safety profile. Whether response can be based on factors such as PD-L1 expression is equivocal.

Abstract N°: 342

Title: Clinical outcomes and safety of secukinumab in Thai patients with moderate-to-severe plaque psoriasis: a real-world study in Thailand

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Introduction

There were few real-world studies on the effectiveness and safety of secukinumab in Thai patients with moderate-to-severe psoriasis. The effectiveness may differ in patients with various treatment patterns. This study was aimed to assess clinical outcomes and safety of secukinumab in a real-world setting and subgroup analyzed by adherence rate of secukinumab injection.

Materials and methods

This was a multicenter retrospective chart review study among adult patients with moderate-to-severe plaque psoriasis at 7 psoriasis centers in Thailand. Eligible patients initiated secukinumab treatment (with or without an approved regimen) during September 2017 to April 2021 and had baseline Psoriasis Area and Severity Index (PASI) score. Improvement in PASI scores was assessed at week 4 and week 16 after secukinumab initiation. Safety was also evaluated.

Results

A total of 163 patients were included in this study. Their mean (SD) age was 44.0 (14.0) years. The median (IQR) psoriasis duration was 72.8 (131.2) months. The median (IQR) baseline PASI score was 14.8 (15.2), ranging from 0.8-42.7. Majority of patients (62.0%) were previously treated with oral systemic drugs with a median (IQR) duration of 60.0 (132.7) months. Thirty-five patients (21.5%) previously received biologics with a median (IQR) duration of 6.2 (19.3) months. Most patients (88.3%) received suboptimal doses of secukinumab. Among patients with PASI scores at weeks 4 (n=94) and 16 (n=62), PASI 75/90/100 responses were achieved in 36.2%, 21.3%, and 8.5% of patients at week 4 and 74.2%, 67.7% and 58.1% at week 16, respectively. There were higher percentages of patients achieving PASI75/90/100 in those with higher adherence rates. Secukinumab was well tolerated, with only 8.6% with reported adverse events, and most of them were of mild severity.

Discussion

Secukinumab, a fully human monoclonal antibody that targets IL-17A, is one of the biologic agents that offer promising outcomes in managing psoriasis. Its efficacy and safety profile have been well demonstrated in several clinical trials; however, data on its real-world effectiveness among patients with distinct characteristics and various treatment patterns are still limited. In this real-world study in Thailand, PASI 75/90/100 responses were achieved in 74.2%, 67.7%, and 58.1% of patients, respectively, at week 16. These response rates were slightly different from the CLEAR phase III clinical trial where 93.1%, 79%, and 44.3% of patients achieved PASI 75, PASI 90, and PASI

100, respectively, at week 16. This real-world study suggested good clinical outcomes and safety of secukinumab in Thai patients with moderate-to-severe plaque psoriasis, especially among those with a higher adherence rate, although a majority of patients received suboptimal doses of secukinumab.

Abstract N°: 397

Title: Impact of Modern Biologic Agents IL- 17 and IL- 23 Inhibitors on Quality of Life of Psoriatic Patients with Moderate to Severe Psoriasis

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Introduction

Psoriasis is a chronic, inflammatory disease that affects 2-3% of general population. It is a systemic disease with predominant skin signs of erythema and scaling. The visibility of the disease, which is often followed by stigma, as well as its most frequent symptoms such as pruritus and pain result in decreased quality of life. Psoriasis can manifest at any age but most commonly develops in younger patients and lasts for their entire life, with exacerbation and remission periods. Since the development of the first biologic agents, such as TNF-α inhibitors and IL- 12/23 inhibitors, the future of most patients with moderate to severe psoriasis completely changed for the better. The purpose of this study, however, is to assess the success of newer biologic therapy of interleukin- 17 and interleukin- 23 inhibitors and their superior impact on improvement of quality of life.

Materials and methods

We conducted a retrospective study on 73 patients in our Clinic diagnosed with moderate to severe psoriasis that have received biologic therapy at least 12 months ago, 36 of them received interleukin- 17 inhibitors secukinumab or ixekizumab and 37 of them received interleukin-23 inhibitors guselkumab or risankizumab. According to our national guidelines biologic therapy of psoriasis is indicated for patients with moderate to severe disease who have failed to show sufficient improvement, did not tolerate, or had contraindications towards at least two different conventional systemic options. To determine the severity of the disease we evaluated PASI score and to measure patients' perception of the effect of skin disease on his/her daily life we collected DLQI and then compared the data before and after drug initiation.

Results

Prior to drug initiation patients' average PASI score before IL- 17 inhibitors was 21,1 and average DLQI was 16,8. Average PASI score before initiation of IL- 23 inhibitors was 17,6 and average DLQI was 14,1. We evaluated our patients 16 weeks after drug initiation and then again after 6 and 12 months. A marked drop in PASI and DLQI was noted 16 weeks following introduction of both IL- 17 and IL-23 inhibitors with almost all patients reaching PASI 90- 100 response and DLQI 0-1. After 6 and 12 months we repeated the evaluation and almost all patients remained in complete remission and presented with clear skin without pain and pruritus.

Discussion

Although psoriasis is not a life- threatening disease, it still has a significant negative impact on patients' life, affecting them physically, psychologically and socially. Older biologic agents already proved to be much more effective than conventional systemic therapy and they improved patients' quality of life, however, they still did not meet patients' expectations and needs. Our study showed that administration of newer biologic agents IL- 17 and

IL-23 inhibitors even more rapidly improved our patients' skin and significantly improved quality of life. Furthermore, after 6- and 12-months patients still remained in good condition proving that newer biologic agents provide a satisfactory long- term solution.

Abstract N°: 428

Title: Erythema dyschronicum perstans in the course of bimekizumab treatment

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Introduction

Materials and methods

Results

Erythema dyschromicum perstans (EDP) is an acquired disease, rare in the Caucasian race, with characteristic by well circumscribed round to ovall greyish, ashy- coloured skin lesions. It is a form of acquired dermal macular hyperpigmentation. The aetiology of the disease is unknown. The lesions may be symetrical or unilateral. The patient is otherwise well with no associated diasease or blood test abnormalty. The most common theories have included genetic susceptibility, contact allergy, Whipworm infestation, side effects of drugs and medications. A 54-year old woman with Psoriasis in medical history, in clinical trial with Bimekizumab was admitted to the Ward for the diagnostic of macular grey pigmentation of the trunk and the limbs skin. Most of lesions were located in places where patient presented Psoriasic plaque before treatment with Bimekizumab and new lesions occured after next doses of the drug. During the phisical examination the patient did not present any active symptoms of psoriasis.. The laboratory tests were in range. The patient did not report any suffers. Dermoscopy findings reveled pigmented dots, globules and diffuse areas that spare ecrin and hari follicle opening and promienet pseudoreticular pigmentary network. Based on the histopathological examination of leg and back skin, the erythema dychronicum perstans was diagnosed. Erythema dychronicum perstans is rather resistant to currently available treatments. It may persist unchanged for years although some cases eventually clear up by themselves. Due to high probability of occuring EDP as a side effect of Bimekizumab treatment we suggested to the patient to stop administrating the drug, which she did not agree to, because of good long term results of treatment and no psoriatic lesions since two years.

Discussion

Abstract N°: 777

Title: Efficacy and safety of the biological therapy in children with severe atopic dermatitis in clinical practice

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Introduction The atopic dermatitis (AD) severity symptoms in children are linked to psychological problems, especially peer interactions and sleeping difficulties, which significantly decreases the quality of life of all family members. The high level of both topical and systemic immunosuppressive therapy does not always secure AD control. Since the type 2 inflammatory cytokines, including IL-4 and IL-13, are considered to be important in the AD pathogenesis, the target therapy with fully human monoclonal IgG4 antibody directed against the alpha submit of the IL-4 receptor is discussed to be successful in AD children.

Materials and methods 17 children (6 boys, 11girls), aged from 6 to 17 years with severe AD, 7 of which had unsuccessful previous treatment with cyclosporine, were observed in our clinical practice. All the children were clinically diagnosed with AD based on mandatory and additional criteria. The severity of the disease was determined by the value of the SCORAD index. The dupilumab was used in initial dose of 400 - 600 mg followed by 200 or 300 mg injected every other two weeks (by now – one year treatment).Clinical parameters and the SCORAD index before and during treatment were used to evaluate the efficacy. Determination of the total IgE level was carried out by means of the enzyme immunoassay. Also blood eosinophilia was monitored. Safety outcomes of dupilumab were evaluated based on incidence, type and severity of adverse events and laboratory investigations.

Results All patients already after one-month dupilumab treatment experienced disappearance of pruritus and refused to have corticosteroid topical therapy, which was followed by significant SCORAD index reduction from 75.5±6.9 to 11.5±2.9. As for adverse events in 1 girl after four month treatment we observed conjunctivitis, which required ocular steroid therapy, that later on was not repeated. In one girl once there was injection-site reaction. We did not observe nasopharyngitis, headache, skin infections in response to dupilumab therapy. But we noted local hyperemia of the face, neck and shoulders in 6 patients after the second dupilumab injection. This local hyperemia was also observed after the next injections and topical antifungal therapy was required. One patient had single episode of transient peripheral eosinophilia after second injection that later on was not repeated. In general, the mean blood eosinophil count was not significantly affected during treatment. We observed significant reduction ($p<0,001$) of the total IgE level from 1422 [481; 5010] to 712 [140; 872] me/ ml during treatment.

Discussion It has been established that one-year dupilumab treatment in children with severe atopic dermatitis was highly effective and safe. Meanwhile it is necessary to study the notion of such adverse event as local hyperemia of the face, neck and shoulders in AD children during treatment.

Abstract N°: 900

Title: Everolimus and vascular anomalies

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Introduction

Vascular anomalies constitute a large group of malformative and tumor pathologies. Mammalian target of rapamycin (mTOR inhibitors) are promising new treatments for these anomalies.

Materials and methods

We report a series of 4 patients treated with Everolimus for different vascular anomalies.

Results

Case 1: A 17-year-old patient from a 2nd degree consanguineous marriage presented with a verrucous hemangioma of the nose and upper lip treated with Everolimus at a dose of 2.5mg daily for one year. He had subsidence and regression of lesion size and a decrease in oozing and pain.

Case 2: A 44-year-old woman with a history of thrombophlebitis of the left lower extremity (MIG) presented with klippel trenaunay syndrome of the MIG treated with Everolimus at a dose of 5mg daily for 6 months with a decrease in the hypertrophy of the extremity. Treatment was stopped due to unavailability.

Case 3: A 3-year-old girl had a mixed hemangioma of the face treated with Everolimus 1.25mg daily for 6 months with a decrease in cheek erythema, collapse of the lesion at the labial level and feeding became possible.

Case 4: A 4-year-old girl with klippel trenaunay syndrome was initially treated with Avlocardyl without improvement. A treatment with Everolimus at a dose of 2.5mg per day for 1.5 years was initiated with a stationary state of the lesions.

Discussion

The management of vascular anomalies is difficult, adapted on a case-by-case basis, and decided during multidisciplinary consultations. The mTOR inhibitors seem to be very effective, especially in the presence of a lymphatic component. This action is explained by their antiproliferative, immunosuppressive, and especially antiangiogenic and lymphangiogenic properties. They are also very effective for bleeding complications that are resistant to the usual treatment. They are mainly used for the treatment of angiomyolipomas and astrocytomas related to Bourneville's tuberous sclerosis, and for the prevention of graft rejection in transplant patients, particularly in kidney transplant patients. Several other wide-ranging indications have been tested. More than 100 observational publications on their effect in various vascular anomalies have appeared since 2011. Preclinical and clinical data have shown that they can offset the progression of vascular defects and significantly improve the quality of life of patients. Everolimus is a protein kinase inhibiting antineoplastic agent and a selective immunosuppressant. Recent preclinical and clinical data have demonstrated that sirolimus can offset the progression of vascular malformations and significantly improve patient quality of life. A November 2014 review

of the use of mTOR inhibitors in vascular anomalies including all original articles with no time or language limitations. Sirolimus was used in 83 cases, Everolimus in one case; 35.7% of these anomalies were vascular tumors and 64.3% were malformations. The treatments were rapidly effective, with a median time to effectiveness of 2 weeks. They were well tolerated, the main adverse effect being oral abnormalities (ulcerations, mucositis). In one case report, a neonate with a giant hepatic hemangioma with Kasabach-Merritt syndrome treated with 0.3 mg/kg/day everolimus with decreased blood flow to the hepatic hemangioma and resolution of thrombocytopenia.

Abstract N°: 987

Title: Anti IL4Rα and IL-23p19 biologic treatment of severe erythrodermic ichthyosis with atopic dermatitis

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Introduction

Materials and methods

Results

Abstract

Anti IL-4Rα and IL-23p19 biologic treatment of severe erythrodermic ichthyosis with atopic dermatitis

Fahad Al-Marri[1,#], Radi Al Chalabi[1], Uwe Gieler[1], Joerg Buddenkotte[1, 2], and Martin Steinhoff[1-5*,#]

Autosomal recessive congenital ichthyosis (ARCI) refers to a group of rare inherited disorders of keratinization and defective epidermal barrier resulting in varying clinical presentations and severities ranging from harlequin ichthyosis to congenital ichthyosiform erythroderma (CIE). Secondary atopic dermatitis (AD) can aggravate the disease state for CIE patients leading to recalcitrant CIE/AD with potentially unfavorable prognosis. Here, we report a 38-year-old male patient with severe CIE as well as AD over the last 30 years treated successfully with biologics combination.

The patient presented with severe cutaneous inflammation, pruritus and recurrent infections for decades without disease control. Family history revealed ichthyosis and AD in four children and first-degree relatives. Genetic testing revealed an R243H mutation in the CYP4F22 gene indicative of inherited erythrodermic ichthyosis. Physical exam showed generalized erythema to erythroderma with severe scaly hyperkeratotic ichthyosiform plaques on lower extremities, hyperkeratotic palms and soles, and severe lymphoedema SCORAD(81) (Figure1).Multiple therapies failed to improve his severe condition over 30 years, with some having intolerable adverse events, among them were topical steroids and keratolytics, cyclo-sporinA, methotrexate and acitretin. We initially treated the atopic dermatitis with Dupilumab (targeting IL-4Ra, 300mg q2w) which partially controlled the pruritus SCORAD(55), but only the combination of Dupilumab with Guselkumab (anti-IL23p19) controlled both CIE and AD with markedly reduced inflammation, itch and recurrent infections to a SCORAD(6.6).

Treatment of CIE, especially when associated with atopic dermatitis is still a challenge in dermatology. Because ichthyosis cytokine profile resembles that of psoriasis, targeting IL-17 and IL23 is a rationale option to treat ichthyosis. Dupilumab alone was not sufficient to improve either eczematous lesions or ichthyosis in our patient, despite improving the itch. We tried Ixekizumab (anti-IL-17A) which has improved patient's ichthyosis, however, worsened his fungal infection. Then we switched to Guselkumab (anti-IL23p19) which resulted in a rapid, significant improvement of both ichthyosis and AD with good tolerability, together with dupilumab. Notably, this significant improvement was observed after 10 weeks of combined therapy and stable over 80 weeks without side effects

No reports so far exist about the use of Guselkumab in CIE, nor double therapy with two biologics for erythrodermic CIE and severe AD. Guselkumab alone was not sufficient to treat the severe CIE/AD, neither was Dupilumab, in this patient.It will be important to further investigate the efficacy of Anti Il-23 therapy for both and combined disorders in prospective and controlled studies, as well as mono- therapy in milder forms or children.

Discussion

Abstract N°: 993

Title: Patient with immune checkpoint inhibitors induced atopic dermatitis successfully treated with Dupilumab

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Introduction

Materials and methods

Results

Patient with Immune checkpoint inhibitors induced atopic dermatitis successfully treated with Dupilumab

The development of immune checkpoint inhibitors is revolutionary for the treatment of multiple cancers. Their unique mechanism of action which is mediated by the triggering of cytotoxic CD4+/CD8+ T cell activation may lead to immune related adverse effects (irAEs) which can affect any organ. Cutaneous toxicities appear to be one of the most prevalent adverse effects and they are observed in more than one-third of the treated patients. The mechanism of dermatologic irAEs is not fully understood. However, it is thought to be related to T cell activation mediated by inhibiting the PD-1/PD-L1 and CTLA-4 pathway.

Eczematous reactions accompanied by pruritus are among the commonest cutaneous irAEs. These toxicities may prompt clinicians to add systemic steroids since they can be resistant to topical steroids and antihistamines. However, systemic steroids cannot be administered for long time due to side effects and possible negative impact to immunotherapy's efficacy. The management of skin toxicities is important in order to prevent exacerbation of the lesions, avoid discontinuation of life saving immunotherapy and limit impairment of the quality of life. Consequently, the need of new treatment options is imperative.

Dupilumab is a human monoclonal antibody that blocks interleukin-4 and interleukin-13 and has shown significant efficacy and a favourable safety profile in moderate-to-severe atopic dermatitis The safety profile of dupilumab is superior to common immunosuppressive drugs, such as cyclosporine or methotrexate.

We report a case of a 72-year-old Caucasian man whose atopic dermatitis and pruritus, induced by immunotherapy, was successfully treated with Dupilumab.

The patient had history of atopic dermatitis since his childhood. The last years he had intermittent disease and he was treated with topical steroids, antihistamines and topical calcineurin inhibitors. His treatment included tricyclic antidepressants such as doxepin and systemic steroids for the flares. He also received phototherapy. The disease was in remission for 2 years when the diagnosis of metastatic NSCLC was made. He was commenced in immunotherapy in March 2021. Soon after the initiation of treatment there was reappearance of the skin disease (Grade II dermatitis IGA-4) and debilitating pruritus (VAS scale 10). Since the use of Cyclosporin and other immunosuppressants would affect the efficacy of immunotherapy, we asked the approval of Dupilumab to treat the skin irAEs. He was treated according to the protocol for atopic dermatitis (600mg loading dose and 300mg

every two weeks thereafter). The patient had excellent response. The dermatitis and pruritus significantly improved after the second dose. Two months after the treatment the rash and pruritus completely subsided. No delays or interruption of immunotherapy occurred because of skin irAEs and the patient continued to have partial response to his oncological treatment.

To our knowledge, this is the first case in literature reporting successful treatment of the immunotherapy related atopic dermatitis and pruritus with Dupilumab.

As immunotherapies become the mainstay of metastatic cancer treatment, ongoing studies will be crucial for the management of irAEs. Further cases need to be treated with Dupilumab in order to establish its efficacy.

Discussion

Abstract N°: 12

Title: Is there a place for chlorhexidine in the European Baseline series?

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Introduction

Chlorhexidine, considered a weak allergen, is a biguanide topical antiseptic widely used in the healthcare setting and gaining use as a preservative in cosmetics. It has been responsible for allergic contact dermatitis and also for immediate hypersensitivity, especially when contact occurs through the mucosae.

Currently, chlorhexidine is included in the American Contact Dermatitis Society baseline series, but not in the European baseline series (EBS) and its utility in a baseline series remains controversial.

Materials and methods

To evaluate the utility of routinely patch-testing chlorhexidine, we conducted a study in a tertiary Dermatology Department from January 2009 to December 2020. Patch testing with chlorhexidine gluconate (0.5% aqueous) (Chemotechnique Diagnostics, Vellinge Sweden) was performed in all consecutive patients according to European Society of Contact Dermatitis (ESCD) recommendations, and strength and relevance of the positive results were retrospectively analyzed.

Results

Out of the 4035 patients studied (2987 women and 1048 men), a positive patch reaction to chlorhexidine was observed in 15 (0.37%), aged 20-78 years (mean age 54), mostly weakly positive reactions (1+) (n=9, 60%), and especially in patients with leg dermatitis (n=6, 40%). In a minority of cases (n=3, 20%), reactions were considered relevant related to a dexpanthenol-containing cream and skin disinfectants commonly used in ulcer care. All patch test-positive patients showed concomitant reactivity to other contact allergens.

Discussion

Despite the generalized use of chlorhexidine, the frequency of contact sensitization does not seem to be increasing. A contact allergy rate between 0.5 to 2% has been described in different studies, with our inferior value eventually related with the use of the gluconate salt only, which has showed less frequent reactions in a Danish study.

In conclusion, this 12-year study supports the low contact sensitization rate to chlorhexidine, which, therefore, may not have a place in the EBS. Attention should be directed mainly to leg dermatitis, without forgetting the possible relation with cosmetics that was not found in the present study.

Abstract N°: 396

Title: A Case of Chilblains Localized to Bilateral Thighs

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Results

A 22-year-old male patient presented with pruritic and erythematous scaly papules on medial sides of bilateral thighs that started 1 months ago. The lesion accompanied pain, but tenderness was absent on physical examination. The patient was express delivery man, usually wearing thin trousers and rides motorcycle for 12 hours every day. The pain aggravated when he was exposed to cold weather. On clinical suspicion of panniculitis, histiocytosis, and chilblains, punch biopsy was performed. A histopathology revealed perivascular and periadnexal infiltrate of lymphocytes and histiocytes in upper and deep dermis, and finally diagnosed with chilblains. Antihistamine, analgesics, and topical corticosteroid showed symptomatic improvement.

Chilblains, also known as pernio or perniosis, are cutaneous inflammation induced by exposure to cold, but not freezing temperature. It occurs frequently in women less than 40 years old, and skins of toes, fingers, ears, and face are commonly affected. "Equestrian chilblain", a special subtype of chilblain, typically occurs after horse-riding activities or riding motorcycle and shows unusual predilection sites such as hips or thighs. This case demonstrates that inquiring about social history, such as patient's job or exposure to certain environments, can be an important and critical clue in dermatologic diagnosis.

Abstract N°: 1011

Title: Contribution of patch tests in occupational contact dermatitis

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Introduction

Contact dermatitis is the most frequent occupational skin disease; it often localized to the hands. They include irritant contact dermatitis, allergic contact dermatitis, and protein contact dermatitis. They caused by direct contact, hand-held or airborne, with low molecular weight substances or proteins in the workplace. Our objective is to study the clinical, etiological and allergological characteristics of occupational eczema.

Materials and methods

A retrospective study of 35 cases of occupational contact dermatitis collected from the CHU Casablanca dermatology department between 2017 and 2021

Results

Of 164 patients, 35 patients had occupational dermatitis with female predominance (63%). Which is a prevalence of (21%). The mean age was 36.7 years. A mean duration of evolution was 3.7 years. Cutaneous lesions are dominated by scaly erythematous patches (63.8%) mainly located on the hands (74%), face (5%), cheilitis was observed in (11.5%) patients. The sector most responsible for eczema was the health sector (34%), followed by the electrical industry and textile sector (17%), then the construction, mechanical and cleaning sector (8.5%).) and finally the food industry sector (5.7%). The European standard battery was tested for all patients, 54% showed a positive reaction to at least one allergen. The most incriminated allergens were metals (28.5%) which the nickel represents (20%) and cobalt (8%), rubber additives (17%), followed by resins and their derivatives (8.5%), potassium dichromate and textile dye mix (5.7%), and finally the Conservatives (2.8%). Patch tests deemed relevant in 66.5% of cases. This dermatosis justified an adaptation of the workstation in half of the patients and a transfer to another workstation in two cases.

Discussion

Occupational dermatoses and in particular contact dermatitis are frequent occupational pathologies. In our study the clinical, etiological and allergological aspects are similar to European data and those of Tunisia. The high-risk sectors of activity are, food processing, construction, cleaning, mechanics, metallurgy, the health sector, the chemical industry, electronics, agriculture, hairdressing and aesthetic. The patch testing with the European standard series is one of the major means of exploration in allergic pathologies. Nickel was the predominant. Occupational allergic contact dermatitis remains responsible for considerable occupational and social handicaps, requiring strict compliance with rules and preventive means, in order to reduce their repercussions.

Abstract N°: 1017

Title: Allergic contact cheilitis to Nickel

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Introduction

Allergic nickel contact cheilitis is an inflammation of the lips secondary to contact with Nickel Sulfate. The Nickel Sulfate is the most common allergen found in allergological tests. We report a case of an isolated macrocheilitis. Revealing an allergic contact cheilitis to Nickel.

Case report

A 60-year-old female patient with no specific pathological history had chronic isolated macrocheilitis of the upper lip for 3 years. Clinical examination revealed fissural macrocheilitis without macroglossia, facial paralysis, plicated tongue or digestive disorders. The patient did not report the use of cosmetics or an occupational exposure. The questioning revealed that the patient had placed a dental amalgam few months before the onset of the symptomatology. The patch tests were positive for Nickel sulfate (2 +). The patient was readmitted to her dentist for amalgam removal and replacement. She was put on dermocorticoids (CLOBETASOL PROPIONATE 0,05 %) with beginning of improvement.

Discussion

Allergic contact cheilitis is a relatively common condition but its prevalence remains underestimated. Some published series report an incidence in the order of 25 to 34% of cheilitis. The diagnosis of allergic contact cheilitis is based on the allergological investigation completed by patch-tests. The products most responsible for the occurrence of allergic contact cheilitis are cosmetics in 55.6% of cases, followed by topical medications, foods and metals, including nickel. Nickel sulfate is the most common allergen found in patch tests of contact dermatitis. It is an extremely widespread metal, used in the composition of many alloys and is widely used in industry. The treatment of allergic contact cheilitis is based on symptomatic measures (topical corticosteroids) and avoidance of exposure to the offending allergen. This can be difficult in the case of nickel allergy due to its ubiquitous nature.

Abstract N°: 80

Title: Facial rejuvenation by micro needling of irradiated amniotic liquified extract compared to platelet rich plasma

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Introduction

Many modalities are used for treatment of facial wrinkles, such as micro-needling that enhances new collagen production, and platelet-rich plasma (PRP) which contains concentrated levels of platelets and growth factors. The human amniotic membrane isolated from the placentae of donors (during elective cesarean sections) has high levels of growth factors that help in skin rejuvenation by improving the proliferation and migration of dermal fibroblasts and epidermal keratinocytes as well as increased collagen synthesis.

Materials and methods

The present study included 20 patients with facial wrinkles divided into 2 groups using split face technique: Group A subjected to micro-needling with topical Irradiated Amniotic Liquefied Extract (IALE) on the right side of the face. Group B subjected to micro-needling with topical PRP on the left side of the face. Patients received 6 sessions 2 weeks apart. Photos by Antera camera and skin biopsy were taken to evaluate the clinical results.

Results

There was statistically significant improvement in patients treated with IALE more than those treated with PRP using micro-needling in both sides as proved clinically, pathologically and by Antera camera.

Discussion

Micro-needling using IALE could be considered an effective and safe method for facial rejuvenation.

Abstract N°: 98

Title: Factors Affecting Perceived and Felt Age in Facial Aging

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Introduction: Looking young has been a universal demand throughout history. For this reason, with the developments in technology and medicine, aging risk factors and rejuvenation methods have drawn attention in recent years. It is known that some environmental and genetic factors play a role in the aging process. However, it is a matter of debate which factors have a decisive effect on the appearance of young or old for one's age. Recent studies have also revealed that the felt age is an important indicator of general health status. This study aimed to determine the factors associated with perceived age and felt age in Turkish women.

Materials and methods: We included 250 female patients aged 40-70 years. A team of ten raters determined the perceived ages of the patients using standardized facial photographs. Fifteen anthropometric measurements were performed on all participants; 9 were perioral, and six were periorbital regions. We evaluated environmental factors and anthropometric measurements related to looking young or old according to the chronological age. In addition, we examined the relationships of the felt ages with environmental factors and perceived ages.

Results: Exercise (p=0,001), early-stage (1-2) photodamage (p=0,001), and the use of sunscreen (p=0,001) were found to be environmental factors associated with looking young. Among the anthropometric measurements, the length of the palpebral fissure (p=0,043) and the height of the upper vermilion (p=0,019) were associated with looking young. Exercise (p=0,001) and cosmetic procedures (p=0,003) were associated factors with feeling young. While 62,2 % of those who felt younger seemed younger than they were, 59,1% of those who felt older looked older than they were (p=0,001).

Discussion: The results of this study; reveal that environmental factors such as exercise habit, photoprotection, and sunscreen use, as well as several anthropometric measurements such as palpebral fissure length and upper vermilion height, play a role in looking young. Exercise, photoaging, sunscreen use, and lip height were previously found to be associated with perceived age. Our results, along with supporting the role of these factors on perceived age, also indicate the power of influence. As far as we know, the relationship of the length of the palpebral fissure with looking young and the relationship of exercise habit and history of cosmetic procedures with feeling young is reported for the first time.

Abstract N°: 269

Title: Efficacy of cryotherapy in the treatment of plantar warts: A systematic review and meta-analysis of randomised controlled trials.

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Introduction

Plantar warts are a common type of benign hyperkeratotic foot lesions resulting from human papillomaviruses (HPV). It often causes pain and frequently recurs, which reduces the patients' quality of life. The regression of these warts poses a clinical challenge as they are often refractory to treatments. Cryotherapy, a treatment using liquid nitrogen, is considered one of the most common forms of management and destroys virus-infected cells through cold injury and the stimulation of immunoinflammatory process. However, to date, no evaluation of cryotherapy's effectiveness as a remedy for plantar warts has ever been conducted.

Objective: Therefore, we aim to determine the efficacy of cryotherapy as a treatment for plantar warts and compare it with other modalities of treatment.

Materials and methods

A systematic review and meta-analysis were conducted on randomized controlled trials by comparing participants with plantar warts receiving either cryotherapy or other interventions. Systematic electronic searches (Ovid Embase, Ovid Medline, Web of Science, Cochrane Library) were conducted in June 2021. Certainty of the evidence was assessed using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) framework.

Results

Seventeen studies were included (n = 1461; cryotherapy, n = 763; other interventions, n=681). The pooled cure rate of cryotherapy was 50.7% (95% confidence interval 31.4-70.1). The efficacy of plantar wart treatment with cryotherapy was inferior to other treatments with a pooled risk ratio (RR) for cure of 0.84 (95% confidence interval 0.72-0.99). However, further analysis of patients treated with cryotherapy compared to keratolytic medication, ablative treatment and antimitotic treatment showed no statistical significance of these subgroups of treatments, with pooled risk ratios of 0.92 (95% confidence interval 0.75-1.14), 0.68 (95% confidence interval 0.44-1.04) and 0.65 (95% confidence interval 0.36-1.15), respectively. In terms of recurrence, plantar warts are 2.65 times more likely to recur when treated with cryotherapy than with other interventions (95% confidence interval 0.81-8.62). Pain and blister formation were common adverse effects of cryotherapy.

Discussion

Despite cryotherapy not being as effective to other anti-wart armamentarium, it can still be an efficacious treatment of plantar warts to reduce disease severity and increase quality of life. Benefits of cryotherapy include its relatively low cost and a faster treatment session compared to other interventions. However, this review should stimulate future research to better estimate its efficacy.

Abstract N°: 270

Title: what role does social media play in patients'lives of Dermatologists and Plastic Surgeons?

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Introduction

The share of social media users continues to grow. On average, 72% of connected consumers worldwide use social media at least once a day. Social networks (Instagram, Facebook, YouTube, etc.), convey beauty tips—sometimes good, often wrong, and even dangerous. It is fortunate that—for the past few years—dermatologists and plastic surgeons have been flocking to social networks to provide much better advice to subscribers, thus Influencing their health behaviors. However, few studies have evaluated the role of dermatologists, plastic surgeons, and public engagement on different platforms. Our study aimed to fill this gap.

Materials and methods

An online questionnaire was chosen to target the general population and assess the public's engagement with these platforms and the influence of digital marketing on social network users. The collected data were entered into Excel and then analyzed with SPSS. A p-value < 0.05 was considered statically significant.

Results

Of the 500 respondents, 77.8% were female and 22.2% were male. Furthermore, 48.8% were under 30 years of age; 51.2% were over 30. Responses revealed that 97.4% of the study participants had accounts on different platforms. Among women, the most used platforms were *Facebook, Instagram, and Snapchat* versus *Facebook and YouTube* among men (**P < 0.001**). Instagram was mostly used among young people between 18 and 30 years (**P < 0.001**). The preferred content for women was mostly aesthetic and cosmetic; for men, It was mainly pathological (**P < 0.00**). Privacy was mostly of interest to non-academics (**P < 0.001**). Women used different platforms to obtain information regarding skin diseases and problems (**P = 0.03**). The most used platform for both genders was Google; among young people, Instagram was also popular (**P < 0.001**). The preferred source of information for academics was doctors, whereas for non-academics, influencers, opinions, and experiences of patients were generally preferred (**P < 0.00**). About 45% of the respondents, mostly women and non-academics (**P = 0.03**), admitted to using non-prescription drugs or cosmetics seen on social networks. Finally, the results of cosmetic procedures posted on social networks pushed women and young people aged 18–30 years (**P < 0.001**) to perform similar procedures to a greater extent than other groups

Discussion

This work aimed to determine the degree of influence and impact of social media on the clinical practice of dermatologists. We found that 88% of the participants followed at least 1–5 dermatologists. Women and patients with higher levels of education were more likely to seek out medical information. Our results showed that most participants chose a doctor known previously by a friend or family member, while the choice for women and young people was based mainly on social media recommendations. Legislation regarding the advertising of

medical professions prohibits self-promotion in Morocco and also applies to social networks. Physical appearance is an important aspect of personal identity, and the sociocultural environment can influence perceptions of attractiveness. Perfect photos shared on social networks have an impact. The findings of our study confirmed that aesthetic gestures posted on social networks drive women and young people in the age range of 18–30 years (**P < 0.001**) to perform similar procedures to a greater extent than other groups surveyed. This fact has already been published.

Abstract N°: 276

Title: Evaluation of the safety and efficacy of a biosimilar Abobotulinum toxin type A, in treating moderate to severe glabellar lines: A non-inferiority randomized control trial

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Introduction

Injection of botulinum toxin type A for cosmetic purposes is a well-established practice.

This study was conducted to assess the efficacy and safety of an investigational biosimilar abo botulinum toxin type A (test product) compared to the standard abobotulinum toxin (active control) for improvement of moderate to severe glabellar lines.

Materials and methods

This study was a double-blinded, randomized, controlled, non-inferiority, phase III clinical trial. Volunteers with moderate to severe glabellar lines according to Glabellar Line Severity Score (GLSS) were randomized in a 1:1 ratio to treatment with intramuscular injection of 40-60 units of either the test or control abobotulinum toxins type A . The response rate was defined as the percentage of volunteers with at least one grade improvement in GLSS at maximum frown and rest states 30 days after injection, which was assessed by 2 blind physicians. Secondary outcomes included the improvement of GLSS at maximum frown at 14, 60, 90 and 120 days after injection, as well as the side effects of the treatment.

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Results

To detect 15% non-inferiority margin for test product, 126 volunteers were enrolled in the study (62 and 63 volunteers in test and control groups respectively). No statistical difference was detected in age and baseline GLSS between two groups.

Thirty days after injection, the response rates were 75.44% (68.49-88.88) and 76.67% (69.30-89.31) at maximum frown state, and 87.7% and 88.89% at rest state, in the test and control groups (p values of 0.88 and 9.92), respectively.

120 days after injection, the response rates were 36.11% (24.15-47.06) and 37.14% (25.20-49.07) at maximum frown state, in the test and control groups respectively (p values of 0.90). Adverse events were similar in both groups and mild, transient and well tolerated

Discussion

Treatment of moderate to severe glabellar lines with biosimilar abobotulinum toxin type A was effective, tolerable, and non-inferior compared to the standard treatment in the 4-months follow up period.

Abstract N°: 583

Title: LED's efficacity in the treatment of radiodermatitis

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Introduction

Radiotherapy has revolutionized the management of several cancers, however one of its most frequent and disabling side effects is radiodermatitis, LED :Light-emitting diode is a process by which specific sequences of low energy light are used to regulate cellular activity without thermal effect.

The aim of this study is to evaluate the contribution of LED in the treatment of radiodermatitis.

Materials and methods

- It is a prospective study carried out at the dermatology department of Chu Ibn Rochd Casablanca in collaboration with the Mohamed 6 cancer treatment center from June 2021 to January 2022
- Were included all patients with chronic or acute radiation dermatitis regardless of grade
- All these patients received LED sessions :2 sessions per week, according to the following protocol : total fluence: 36J/cm2, total energy: 21.6 KJ, total time: 8 min
- The evolution was judged from the data of the clinical examination and photography: the regression of the cutaneous lesions and the functional signs, as well as the satisfaction of the patients

Results

20 patients were included in this study, 15 patients were followed for breast cancer, 4 for cavum cancer and 1 for cervical cancer

-The average total number of radiotherapy sessions was 30 [15-40 sessions]

-The total dose prescribed varied between 40 and 70 Gy depending on the neoplasia, with an average of 2.67 Gy per session

-The irradiated sites in order of frequency was the breast and the axillary area (n:15), the cervical region (n:4) and the pelvis (n:1)

Radiodermatitis's characteristics (RD):

- 3 patients had chronic radiodermatitis
- 17 patients had acute radiodermatitis: 9 patients presented RD grade 1, 7 patients with RD grade 2, 1 patient with RD grade 3
- The lesions appeared after 10 sessions on average : cumulative dose of 26.7 g

Evolution after LED treatment:

- For chronic radiodermatitis: no significant improvement was noted

- For acute radiodermatitis:

-Radiodermatitis Grade 1: regression of erythema and skin whitening was observed after an average of 3 sessions (2 to 5 sessions)

-Radiodermatitis grade 2: epidermization of the lesions was observed after an average of 6 sessions (4 – 8)

-Radiodermatitis grade 3: the patient healed her lesions after 8 LED sessions

-Radiation therapy wasn't suspended in any of these patients

Discussion

LED is known to have a fibroblast-stimulating effect. In vitro studies have demonstrated that LED accelerates wound healing by increasing procollagen synthesis, and decreasing inflammatory mediators, in our study we have noticed a good improvement in patients with acute radiodermatitis regardless of the site or the underlying neoplasia, however no improvement has been observed in patients with chronic radiodermatitis

Conclusion: the LED can be a good therapeutic alternative in the treatment of acute radiodemitis, however other studies with a larger sample are necessary

Abstract N°: 788

Title: efficacy of LEDs in patients with rosacea: 2 cases

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Introduction

Rosacea is a common chronic cutaneous disorder which is characterized by flushing, erythema, papulopustules and telangiectasia. Therapeutic approaches to rosacea are focused on symptom suppression by means of antiinflammatory agents. More recently, photodynamic therapy, especially light-emitting diodes, has been introduced as a valid alternative to conventional therapy. We report the efficacy and safety of light-emitting diode therapy for the treatment of two patients with papulopustular rosacea.

Materials and methods

Results

Two women aged successively 21 and 34 years, without any particular pathological history, had consulted for a papulo-pustular eruption of the face evolving by flare-ups and remissions aggravated by heat, associated with dryness and ocular burning in the 2nd patient. These flare-ups are sometimes triggered by sun exposure, heat and the application of certain cosmetic products. Clinical examination revealed papular lesions dotted with a few pustules on an erythematous base with fine telangiectasias located on the forehead and chin of the 1st patient and on the nose and chin of the 2nd patient. The diagnosis of rosacea at the papulo-pustular level was retained. These cases were previously treated with hygienic dietary measures and medical treatment with oral cyclins and local metronidazole. Both patients reported a reduction in symptoms such as burning, itching and pustules and persistence of erythema and papules. He was subjected to LED therapy twice a week for a total of ten sessions. The therapy was coupled with topical metronidazole 0.75%. A good response and complete reduction of symptoms was achieved for both patients after ten sessions.

Discussion

The particularity of our observation lies in the utility of LED therapy for the treatment of patients with rosacea. Several therapeutic approaches are currently available for treating rosacea and they are mainly aimed at controlling disease symptoms. In general, the reduction of oral therapy in

favor of topical or physical therapy is desirable in order to reduce side effects for patients and increasing the safety of treatment. LEDs acts on the regulation and down-regulation of key inflammatory mediators of rosacea, such as cathelicidin, TLR2, and kallikreins and it could also have an impact on the etiopathogenesis of rosacea and on the modulation of the immune response. This kind of treatment could represent an effective, safer, and welltolerated approach for the treatment of such kinds of condition.

Abstract N°: 20

Title: Granulomatous reaction at PRP/Fat injection sites after recovering from SARS-C0-V2: A case report

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Granulomatous reaction at PRP/Fat injection sites after recovering from SARS-Co-V2: A case report

Results: Currently, combination protocols including injection of insulin, stromal vascular fraction or platelet rich plasma (PRP) with autologous fat transfer have gained popularity. Reports on using PRP in pro-survival strategy of fat graft have suggested positive effect on grafts with low rate of complications. We present a woman with subcutaneous nodules which have developed 2 months after PRP and fat co-transplantation. Three weeks prior to the occurrence of the lesions the patient was SARS-Co-V2 positive and treated appropriately. Histopathological examination revealed granulomatous lymphohystiocytic infiltration with multinucleated giant cells in the upper and lower dermis. Here, we discuss this rare complication of autologous fat transfer and its possible causal association with coronavirus infection.

Abstract N°: 24

Title: Cutaneous manifestations of Covid-19 from Nepal : First largest series of case reports

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Introduction

COVID-19 (Coronavirus Disease 2019) is an illness caused by SARS-CoV-2 which was first identified from respiratory tract.[1] It was declared as a public health emergency by WHO and Nepal.[2]

More systematic, methodologically sound case series on cutaneous manifestation of COVID-19 from Nepal is required. Till date a case series of four patients from a Government Hospital of Kathmandu has been published.[7]

DISCUSSION

Cutaneous rash can be present in a fairly high number of patients suffering from COVID 19 with varying cutaneous features.[5] Case series of large population on Cutaneous manifestations of COVID-19 are yet to be reported from Nepal.[7]

Here we report 14 cases of COVID-19 with cutaneous manifestation, all of which presented with rash before or after COVID-19 virus infection.

The unique phenomenon of onset of urticarial rash prior to onset of fever and its diagnosis was gratifying as early isolation and prevention of chain of transmission was possible.

In our study, 4 patients had chronic urticaria. Urticarial lesion was seen in 73 patients (19%) with COVID-19 in a nationwide study from Spain which lasted for a shorter period (average= 6.8 days). [6]

Symptomatic dermatographism can be diagnosed in the time of COVID-19, as the dermatographic urticaria could be induced by the personal protective equipment used in COVID-19 care.[9]

In our study, one COVID-19 recovered patient had urticarial vasculitis. Urticarial vasculitis can occur in several viral infections and case reports of urticarial vasculitis in COVID-19 recovered patients have been published.[10]

In our study, two patients had maculopapular eruption. Maculopapular rash was the commonest skin manifestation (47%) in a nationwide study done in Spain.[6]

Similarly, in our study, herpes zoster was seen in 1 patient of COVID-19.

Acneiform eruptions were seen in 2 patients in our study.

Similarly, cases of COVID-19 infection leading to Systemic Lupus Erythematosus (SLE) have also been reported.[13]

In our case series, 3 patients were consulted via tele dermatology using Rakuten Viber mobile application, as patients were on home isolation.

CONCLUSION

COVID-19 can cause varying degrees of illness in different organ systems and patients can often present without fever.

Abstract N°: 31

Title: Exuberant lichenoid eruption after Oxford-AstraZeneca COVID-19 vaccine

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Introduction

Due to the significant impact of COVID-19 on public health, several vaccines have been developed, providing a good level of safety. However, cutaneous reactions after COVID-19 vaccination have been increasingly reported. Local injection-site reactions have been pointed out as the most common cutaneous adverse events. Less common reactions include urticaria, maculopapular eruption, chilblain-like lesions, pityriasis rosea-like rash, erythema multiforme, or lichen planus (LP). These cutaneous adverse effects of Moderna and Pfizer-BioNTech mRNA COVID-19 vaccines have been described recently, but the literature lacks similar reports concerning the Oxford–AstraZeneca, a viral vector COVID-19 vaccine.

Materials and methods

We describe a particular disseminated lichenoid eruption after the Oxford-AstraZeneca COVID-19 vaccination.

Results

A previously healthy 66-year-old man presented to our dermatology emergency room for a 2 months history of a disseminated pruritic eruption. Lesions had appeared 5 days after the first dose of the Oxford–AstraZeneca COVID-19 vaccine, developing on the back and extending to the scalp, trunk, and limbs. He denied symptoms of infection or changes in medication in the previous months. Physical examination revealed disseminated erythematous and psoriasiform confluent papules and plaques, symmetrically distributed on the integument. Dermoscopy revealed slight desquamation and no visible Wickham's striae. No mucosal or nail involvement was noticed. Skin biopsy showed irregular acanthosis, compact hyperkeratosis, focal parakeratosis and colloid bodies at the epidermis, and a band-like lymphocytic infiltrate at the superficial dermis. The clinical picture, the timing between vaccination and the appearance of the skin eruption, and the histopathologic findings were consistent with a lichenoid eruption triggered by the COVID-19 vaccine. The patient was treated with topical betamethasone and had the second administration of the Moderna covid-19 vaccine, with no recurrent lesions and showing complete clinical resolution after 4 months.

Discussion

Lichenoid drug eruption (LDE) is an uncommon cutaneous adverse reaction to a medication/vaccine clinically and histologically identical to LP. Nevertheless, LDE occurs more often in the elderly and is characterized by more psoriasiform lesions, mainly on the back and the extensor surface of the limbs. In addition, it rarely involves the mucous membrane and nails and does not exhibit the classic Wickham's striae, as in our case. LP and LDEs uncommonly occur after vaccination, especially regarding hepatitis B and influenza. Recently, a flare of a pre-existing LP on the ankles, periumbilical area, forearms, and axillary folds have been reported, as well as a new-

onset LP on the trunk, and a new-onset LP on both hands, 48h after the second dose of the Pfizer-BioNTech COVID-19 vaccine, 1 week after the first dose and 5 days after the first dose, respectively. Additionally, 1 case of LP on the trunk and extremities after the Moderna COVID-19 vaccine has been reported. LP and LDE due to non-mRNA COVID-19 vaccines are poorly reported. As such, we describe a disseminated lichenoid eruption after the Oxford–AstraZeneca COVID-19 vaccine to broaden the knowledge about adverse cutaneous reactions to this vaccine. Nevertheless, this adverse event should not discourage vaccination against such a life-threatening virus.

Abstract N°: 52

Title: Androgens, Androgenetic Alopecia and COVID-19

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Introduction

Previously, we have reported that among hospitalized men with COVID-19, 79% presented with androgenetic alopecia (AA) compared to 31-53% that would be expected in a similar aged match population. AA is known to be mediated by variations in the androgen receptor (AR) gene. In addition, the only known promoter of the enzyme implicated in SARS-CoV-2 infectivity, TMPRSS2, is regulated by an androgen response element. The polyglutamine repeat (CAG repeat) located in the AR gene is associated with androgen sensitivity and AA. These observations led us to hypothesize that variations in the AR gene may predispose male COVID-19 patients to increased disease severity.

Materials and methods

We conducted a prospective longitudinal study of hospitalized COVID-19 males. Subjects provided a DNA sample and the AR CAG repeat region was PCR-amplified and the CAG repeat count was determined. The subjects were categorized into two cohorts: subjects with a CAG>=22 and subjects with a CAG<22. Subjects were followed for a period of 60 days from the date of hospitalization. Primary and secondary outcomes were the rate of ICU admissions and length of hospitalization, respectively.

Results

65 COVID-19 positive men were enrolled in the study. 31 (48%) subjects had a CAG<22, with average age of 67.9 (+/- 12.3). The median duration of hospitalization among subjects with a CAG<22 was 25 days (95% CI: 9.000-41.6512), and 14 (45.2%) were admitted to the ICU. 34 (52%) subjects had a CAG>=22, their average age was 65.0 (+/- 12.15). Among the 34 subjects with a CAG>=22, the median duration of hospitalization was 47.5 days (95% CI: 22.9533-49.0935), and 24 (70.6%) were admitted to the ICU. The proportion of subjects admitted to the ICU with CAG<22 was significantly lower than the proportion of subjects with CAG>=22 (Fisher's exact test p= 0.046791). Subjects with a CAG>=22 had a higher risk for ICU admissions compared to subjects with a CAG<22: OR 2.9143(95% CI: 1.0487-8.0985) and Likelihood Ratio 1.705(95% CI: 0.985-2.951).

Discussion

The results of this study suggest that the AR CAG repeat length could potentially be used as a biomarker to identify male COVIID-19 patients at risk for ICU admissions.

Abstract N°: 65

Title: POST COVID VACCINE PSORIASIS

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Introduction

Materials and methods

Results

Covid -19 vaccination is going all around the world with great speed. Various vaccines are developed around the world to prevent Covid-19 infection. The cutaneous side effects of Covid-19 vaccine are very poorly understood. Various articles regarding vaccination and Psoriasis have been published . But there are very few reports regarding Covid-19 vaccination and newer onset Psoriasis. It is very important for Dermatologists to understand the association between Covid -19 Vaccination and Psoriasis. Since Psoriasis is a very common disease all around the world. Significant aggravation of the disease has been reported in few case reports . But to our knowledge no case report have been reported regarding newer onset of Psoriasis in healthy patients without any previous history of psoriasis.

Discussion

Abstract N°: 82

Title: New onset guttate psoriasis in an adult woman after COVID-19

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New-onset guttate psoriasis in an adult woman after COVID-19

Introduction

Materials and methods

Results

Psoriasis may exacerbate or occur *de novo* during or after coronavirus disease 2019 (COVID-19). Possible explanations for this are infection induced hyperinflammation, transient discontinuation of immunosuppressive drugs, discontinuation of corticosteroids after short-term treatment and hydroxychloroquine therapy.[1-6] We present a case of a new-onset guttate psoriasis (GP) following COVID-19.

A 47-year-old woman without underlying medical history or systemic medications presented to our department with slightly pruritic, scaly rash lasting several weeks. Three weeks prior to outbreak of skin lesions she was tested positive with nasopharyngeal polymerase chain reaction (PCR) test for *severe acute respiratory syndrome coronavirus-2* (SARS-CoV-2) virus. The patient had mild COVID-19 that required no treatment. She also had a family history of psoriasis.

Physical examination revealed multiple 5-10 mm drop-like erythematous, scaly papules and plaques on trunk, gluteal region and proximal extremities (Fig. 1). Body surface area was 20%. A review of systems was otherwise normal, including oropharynx. Histopathological examination of a skin lesion specimen from lumbar region was consistent with clinical diagnosis of GP (Fig. 2). Throat swab for bacterial culture was negative.

The patient was treated with a combination of topical corticosteroids and narrow-band ultraviolet B phototherapy three times per week, which led to a good clinical improvement with reduction of erythema, scaling and pruritus.

GP is a variant of psoriasis that is more common in individuals younger than 30 years. It can be environmentally triggered in genetically susceptible individuals. The strongest association is with streptococcal tonsillar infections, while the role of respiratory viruses as triggers remains unknown. However, in a study by Sbidian *et al.* 81% of nasopharyngeal swabs for multiplex PCR viral tests were positive in patients with psoriasis vulgaris or GP flares that had had upper respiratory tract infection up to one month before the test. The most frequent pathogens were Rhinovirus and Coronavirus (HKU1 and OC43), followed by Influenza B, Parainfluenza and Metapneumovirus.[7] Our case adds to this spectrum as causal association between confirmed SARS-CoV-2 virus infection and three weeks later developed GP is assumed. In the literature there is only one similar case of a new-onset GP following confirmed COVID-19, but in a younger patient.[8]

Figures

Figure 1

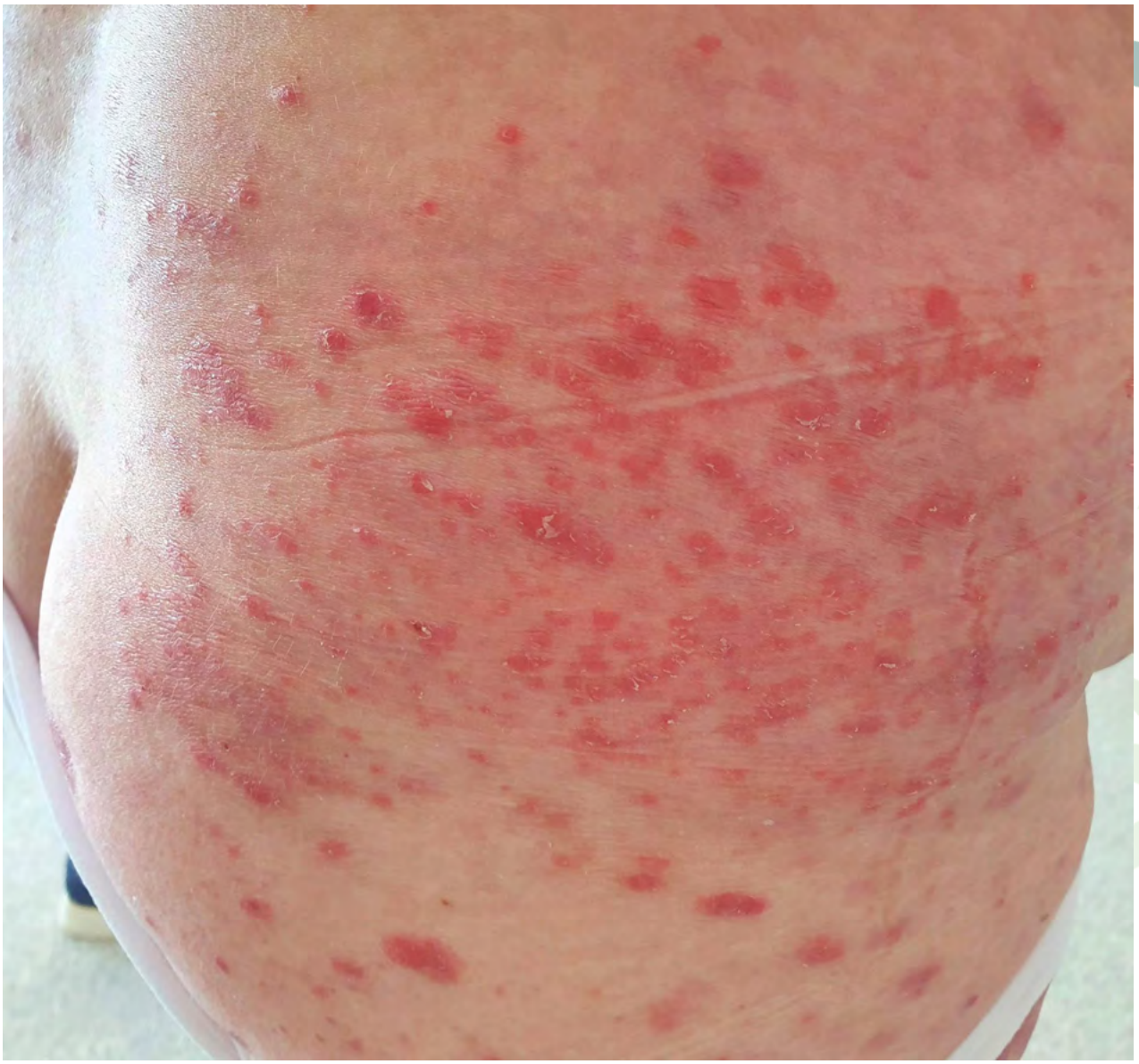
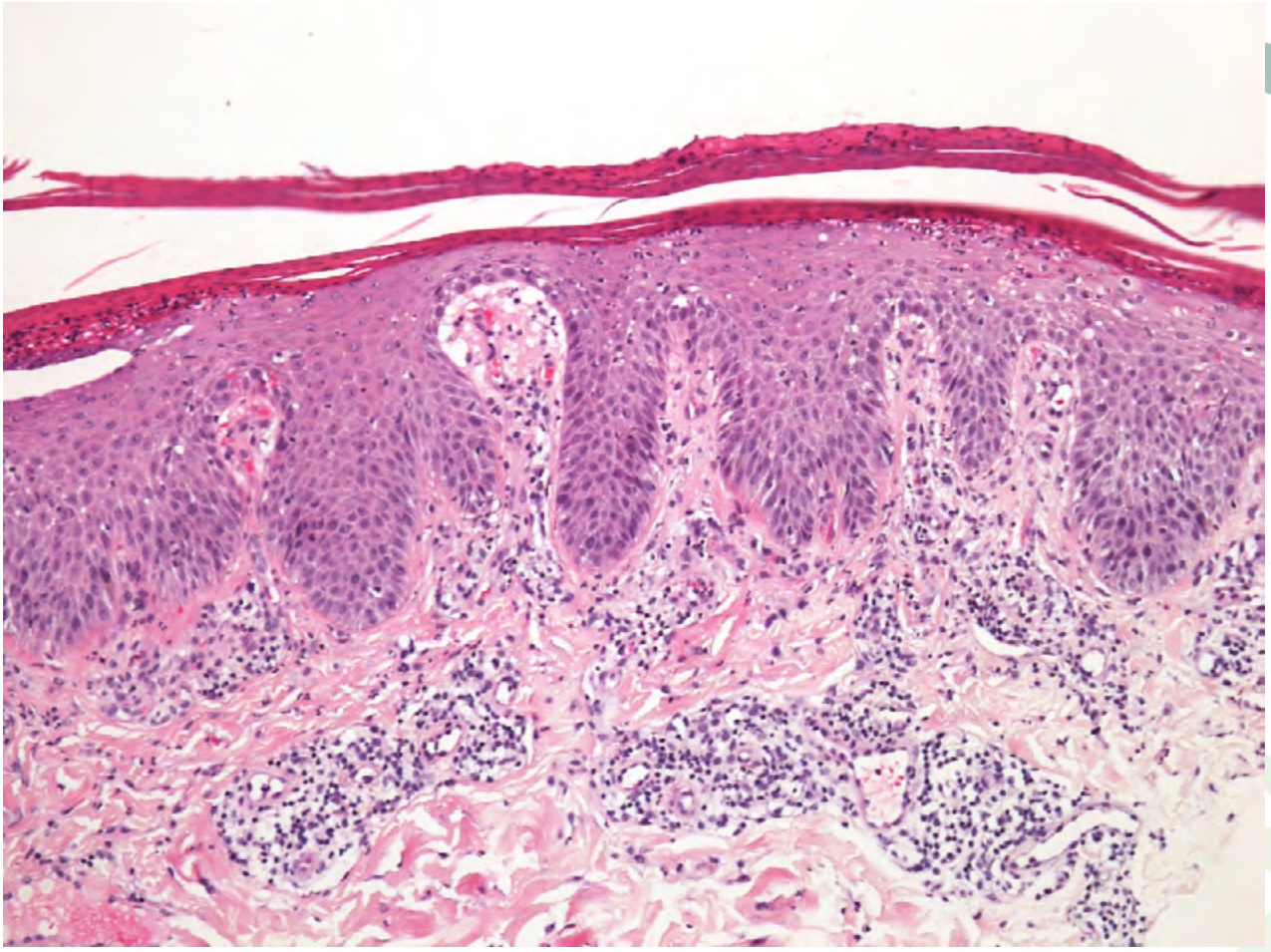


Figure 2



Discussion

Abstract N°: 148

Title: SARS-CoV-2 vaccine-related cutaneous manifestations: a systematic review

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Introduction

By the end of 2021, over 250 million people had been infected by COVID-19 disease, with approximately 5.1 million fatalities. To prevent both COVID-19 and viral transmission, DNA-based/RNA-based vaccines, non-replicating viral vector vaccines, and inactivated vaccines have been recently developed. Although the above-mentioned vaccines are deemed to be generally safe, several side effects have been observed during clinical trials, encompassing a wide variety of vaccine-induced manifestations.

Materials and methods

To shed light on the clinical features, differences and potential mechanisms underlying SARS-CoV-2 vaccine-related dermatological manifestations, a systematic review was performed, according to PRISMA guidelines. Studies were selected if they provided information on cutaneous manifestations reported after COVID-19 vaccine administration: patients receiving Pfizer-BioNTech, Moderna, (J&J)/Janssenn, Covaxin, AstraZeneca and CoronaVac vaccines, both first and second doses, were included. Patients experiencing a flare of a pre-existing skin condition were also included. Data on demographics, number of reported cases with cutaneous involvement, vaccine, and rash type (morphology) were extracted from articles and summarized.

Results

A total of 1549 records were initially identified through a literature search, 477 of which were duplicates. After screening for eligibility and inclusion criteria, 229 articles were ultimately included. Most publications were letters to the editor (n=117), followed by case reports (n=51), correspondences (n =23), case series (n = 16), original articles (n=16), commentary (n=3) and clinical images (n=3). Various cutaneous manifestations have been described, for a total of 5941 cases. The most frequent were local injection-site reactions (n=2023), followed by rash or unspecified cutaneous eruption (n=1954), urticaria (n=647), angioedema (n=318), herpes zoster (n=160), morbilliform/maculopapular/erythematous macular eruption (n=106), pityriasis rosea/pityriasis rosea-like (n=96), vesicular/papulovesicular rash (n=53), chilblains-like/pernio (n=52), purpuric rash/vasculitis (n=46), flushing (n=41), new onset of autoimmune blistering disease (n=37) and flare of psoriasis (n=36). Overall, skin involvement following SARS-CoV-2 vaccine administration was more likely to be experienced by female (n=1708) compared to male patients (ratio 4.5:1).

Discussion

This systematic review encompasses the cutaneous reactions following SARS-CoV-2 vaccination currently reported in the literature. Overall, compared to the high number of vaccine doses administered worldwide, cutaneous adverse reactions seem to be rather infrequent and not life-threatening/severe, albeit heterogeneous and worth being studied. With the introduction of large-scale vaccination programs, patients should be monitored for cutaneous manifestations following vaccine administration and dermatological evaluation should be offered,

when needed. Being largely based on case reports and case series to date, our knowledge of SARS-CoV-2 vaccine-related dermatological manifestations should be further developed and the underlying mechanisms should be clarified. This will also allow dermatologists to promptly recognize and differentiate vaccine-induced cutaneous manifestations from other clinical entities.

Abstract N°: 187

Title: Covid vaccine related autoimmune skin manifestations

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Introduction

While our knowledge about the short term side effects of COVID-19 vaccination in adults has rapidly evolved, data about the long term systemic side effects and potential new onset autoimmune disorders has been limited.

Materials and methods

Here we present a case series of patients with new onset autoimmune skin conditions between 10 days to 4 weeks post mRNA Covid-19 vaccination and discussing the underlying pathophysiological changes contributing to these side effects. Exclusions included any patients who have previously tested positive for Covid-19 or had Covid-19 symptoms.

Results

Our cases include new onset discoid lupus, localised cutaneous lupus, dermatomyositis, linear IgA bullous disease, pemphigus vulgaris, bullous pemphigoid, Lichen planus pemphigoides, erosive lichen planus, psoriasis and vitiligo.

In addition we are reporting significant flare up of pre-existing autoimmune skin conditions after a long period of remission. These includes 3 cases of psoriasis, 2 cases of systemic lupus, one pemphigus vulgaris koebnerising within previous shingles site and a case of pyoderma gangrenosum flare.

Discussion

BNT162b2 vaccine is a potent activator of T and B cell pathway. The production of IL-17 and IL-21 seems to play an important role in vaccine-induced immunological protection which is also linked to germinal center activation linked to autoimmune disorders.

This series does not undermine the much required action of these powerful tools which is required to get through the pandemic, but just helps increase awareness within the medical fraternity regarding increasing the suspicion of some rarer potential side effects associated with these new vaccines and highlights the importance of further studies.

Abstract N°: 197

Title: Online education of medical students during the pandemic Covid19 and its influence on psychological state.

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Introduction

The COVID 19 pandemic changed social life of people all over the world. Schools and universities began to give priority to online learning. A similar system has not bypassed medical universities. Medical universities had to restructire their educational system and switching to online learning. This new unusual methodology had influence on psychological state of as well as medical students as university teachers.

Materials and methods

Overall 500 medical students from O.O.Bogomolets National medical university (Kyiv, Ukraine) participated in Quality of life (QOL) investigation. QOL was assessed using the Health Status Survey (SF36) which is one of general (non- specialized) questionnaires. The survey was conducted for all participants three times – in May 2020, in October 2020 and in October 2021. All participants were divided into 2 groups: 1) those who are just studying and those who work in addition to studying. Those students who work were also divided into 2 subgroups - those who work in covid clinics and those who work in other areas of medicine.

Results

During the one and a half year period, there were noticeable changes in the self-esteem of somatically quite healthy medical students of their own QOL, both on several SF-36 scales and in general. In students who worked in covid clinics all indicators of QOL were worse

Discussion

Comparative analysis of changes in self-assessment of quality of life (QoL) indicators of young medical students during 2020-2021 revealed certain correlations depending on the time during which they were forced to study and work against the background of the predominantly negative influence of the chronic stressful situation — the need to daily contact with different patients in conditions of many months of quarantine due to pandemic of acute respiratory disease caused by the SARS-CoV-2 coronavirus. The overall negative impact of the infectious pandemic and the resulting fears on public consciousness were quite expected. Medical workers with different clinical experiences and qualifications (nursing students and doctors), quite emotionally reacted to the potential danger of being infected with coronavirus infection due to daily professional contacts with various patients who had somatic diseases, some of which might already be in the incubation period of clinical course of coronavirus pathology. This directly reduces their self-esteem of QOL and, in certain situations, can be a factor that leads to the appearance of psychosomatic disorders in them as a kind of somatic occupational pathology, especially with prolonged (many months) continuation of lockdown restrictions due to the high level of morbidity and mortality of the population. The monitoring of changes in self-esteem of individual components of QoL turned out to be quite dependent both on the expression of individual psychological traits of each tested person and on the time of the survey

Abstract N°: 246

Title: Tinea corporis after T lymphocyte infusion for COVID infection

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Introduction

Materials and methods

Results

COVID-19 cannot be considered a disease limited to lungs or cardiovascular system, rather it is a systemic infection with a relevant impact on the hematopoetic and coagulative systems. The main hematological laboratory findings associated with severe form of disease are represent by lymphopenia and eosinopenia which mostly occur in the elderly population.

We report a case of a 65-year-old man with severe COVID-19 pneumonia, initially treated with soulbactam+ampicillin, dexamethasone and fondaparinux. The patient also received SARS-COV-2 specific cytotoxic T lymphocytes intravenously (IV) over 30 minutes on day 1. One week later the respiratory symptomatology significantly improved, but the patient presented two erythematous plaques on the right armpit extending to the hole half thorax and on the buttocks extending mainly on the right thigh. The clinical diagnosis of tinea corporis was conformed by the cure of the exanthema after four weeks of 200 mg daily per os therapy with itraconazole.

The immune responses to dermatophytosis range from an innate immune response to humoral and cell mediated immune responses. Elimination of dermatophytosis is mediated by Th 1 type of cell mediated immunity while Th 2 response predispose to infection or results in allergic response.

When a preceding viral infection such as COVID-19 impairs both innate and adaptive antibacterial host defenses, other colonizing bacteria exploit this temporary compromise of a physical and immunological barrier to cause secondary bacterial pneumonias, leading to severe and deadly disease in people with pre-existing comorbidities and previously healthy people. Respectively, a pre-existing ringworm may expand after treatment of COVID-19 infection, especially with systemic antibiotics and recently, T cell infusion. Diagnosing coinfections is complex and essential in the best of circumstances and because there is a desire to avoid diagnostic procedure and minimize the exposure of COVID-19 to health-care workers, diagnosing potential mycotic skin infection during COVID-19 has been challenging.

Discussion

Abstract N°: 258

Title: Face masks may trigger both seborrheic dermatitis and psoriasis of the face: a multi center, case control study

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Introduction

Wearing masks is an optimal preventive strategy during COVID-19 pandemic, but it may increase facial sebum production. At the moment only few case reports described seborrheic dermatitis (SeBD) and psoriasis (PsO) flares due to masks.

Materials and methods

This case-control, multicenter study enrolled patients with a diagnosis of facial seborrheic dermatitis or psoriasis. All dermatological consultations were in teledermatoogy at baseline (T0) and after 1 month (T1) of >6 hours/day mask wearing. PsO patients were assessed using PASI and Self-administered PASI (SAPASI), whilst SeBD patients with Symptom Scale of Seborrheic Dermatitis' (SSSD) and Seborrehic Dermatits Area and Severity Index (SEDASI).

Results

We enrolled 33 (20 males, 13 females, average age 43.61 ± 9.86) patients with PsO and 33 (20 males, 13 females, average age 44.00 ± 8.58) with SeBD. Patients with psoriasis displayed incremented values of both PASI and SAPASI ($P<0.0001$), as well as patients with seborrheic dermatitis experienced a flare of SeBD, as testified by the increment of both SSSD and SEDASI ($P<0.0001$). Mask type did not influenced the flare severity.

Discussion

Masks remain an optimal preventive strategy during COVID-19 pandemic, but patients with PsO and SeBD may experience a facial flares. Thus, therapeutic approach to this patients should be more aggressive to counteract the triggering effect of masks.

Abstract N°: 291

Title: Psoriasis flare-up after AZD1222 and BNT162b2 COVID-19 mRNA vaccines

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Introduction

Exacerbation of psoriasis after vaccination, though rare, is reported in the literature. There is a potential association between psoriasis flares-up and COVID-19 vaccination. We present twelve cases of psoriasis flare up after AZD1222 and BNT162b2 COVID-19 mRNA COVID-19 vaccination in Heraklion, Crete, Greece.

Materials and methods

A retrospective case-series study was performed at the Dermatology Department at the University Hospital of Heraklion in Greece from 1st of January 2021 until 31st of July 2021 regarding patients with psoriasis who experienced a flare-up within one month after having COVID-19 vaccination and attended the outpatient dermatology clinic, Accident and Emergency (A&E), or were hospitalized as inpatients, to assess clinical features and timing of psoriasis-flare up after COVID-19 vaccines. We collected each patient's demographic information, vaccine manufacture, medications, allergies, prior vaccination reactions, latency and duration of flare-up, other symptoms, and treatment.

Results

From 1st of January 2021 until 31st of July 2021, twelve patients with a flare up of their psoriasis attended the outpatient dermatology clinic, A&E or were inpatients, at the University Hospital of Heraklion in Heraklion, Greece. There were nine (9/ 12, 75%) females and three (3/12, 25%) males. The mean age of the patients was 53.33 years (SD $\pm\pm$ 10.90), and the mean duration of their psoriasis was 24.42 years (SD $\pm\pm$16.44). The mean latency period from vaccination till psoriasis' exacerbation was 13.17 days (SD $\pm\pm$ 8.408). The mean duration of the exacerbation of psoriasis was 2.50 months (SD$\pm\pm$ 1). All patients were

on monotherapy for their psoriasis. There was no recommended or spontaneous discontinuation of psoriasis therapy before or after vaccination. six patients, three (3/12, 25%) were on treatment with secukinumab for their psoriasis, two patients (2/12, 16.7%) were on treatment with adalimumab for Crohn's disease, and one patient was on ustekinumab. All three patients on secukinumab had a mild to moderate flare-up of their psoriasis and continued on this treatment with a good recovery. One of the two patients on adalimumab had a severe exacerbation of pustular psoriasis that resulted in hospitalization and discontinuation of adalimumab treatment. After vaccination, ten patients (10/12, 83.3%) had a flare of plaque psoriasis and two patients (2/12, 16.7%) had a flare of severe pustular psoriasis. The patient who had exacerbation of his psoriasis 15 days after the first dose of AstraZeneca vaccine also developed bullous pemphigoid (BP) 60 days later. The close temporal association between exacerbation of psoriasis and Sars-Cov-2 vaccination pointed out a potential link between the two events.

Discussion

To the best of our knowledge, we have reported the first two cases of development of severe pustular psoriasis after BNT162b2 COVID-19 mRNA vaccination. It might be postulated that mRNA vaccines may cause an increase in the production of interleukin (IL)-6 and recruitment of Th17 cells that play a crucial role in pathophysiology of psoriasis. The exact pathophysiology underlying psoriasis flare-up after AZD1222 and BNT162b2 COVID-19 mRNA vaccines has still to be elucidated, and further prospective larger studies are needed.

Abstract N°: 293

Title: Herpes Zoster Viral infection after AZD1222 and BNT162b2 COVID-19 mRNA vaccines

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Introduction

There is a great variety of cutaneous reactions after COVID-19 vaccination, with only a few

cases of Varicella-zoster viral infection (VZV) reported. Given the importance of widespread vaccination, recognition and understanding of these novel vaccines' adverse events

are crucial. In this brief report, we present a case series of VZV infection after AZD1222 and BNT162b2 COVID-19 mRNA COVID-19 vaccination in Heraklion, Crete, Greece.

Materials and methods

A retrospective case-series study was performed at the Dermatology Department at the University Hospital of Heraklion in Heraklion, Crete, Greece from 1st of January 2021 until 15th of

July 2021 regarding patients who attended Accident and Emergency (A&E) after developing herpes zoster (HZ) infection after COVID-19 vaccination, to assess clinical features and timing of

VZV infection after COVID-19 vaccines.

Results

From 1st of January 2021 until 15th of July 2021, 11 patients attended A&E Department at the University Hospital of Heraklion in Heraklion, Crete, Greece, who developed HZ viral (VZV)

viral infection after COVID-19 vaccination. There were six (6/11, 54.5%) females and five (5/11, 45.5%) males. The mean age of the patients was 67 years (SD ± 7.899). Eight patients developed

VZV after the second dose of Pfizer vaccine, one patient developed VZV after the second dose of AstraZeneca vaccine, and two patients developed VZV after the first dose of Pfizer vaccine. Both of these patients who developed VZV after the first dose of Pfizer vaccine had after three weeks the second dose of Pfizer vaccine with no further complications. The mean latency period till symptoms' onset was 7. Ninety-one days (SD ± 4.86) and the mean latency period until vesicular eruptions onset was 11.09 days (SD±5.41). None of the patients was immunosuppressed and all of them received treatment with oral antiviral for seven days with good response.

Discussion

Here, we have reported a case series of VZV reactivation after AZD1222 and BNT162b2 COVID-19 mRNA vaccines. In our case series, two patients developed VZV after the first dose of

Pfizer vaccine and both were proceeded to the second dose of vaccine without any complications The exact pathophysiology underlying cutaneous effects after AZD1222 and BNT162b2 COVID-19 mRNA vaccines have still to be elucidated, and further prospective larger studies are

needed. Nevertheless, even though VZV reactivation is rare, medical professionals should pay close attention to the possible adverse effects of the COVID-19 vaccines.

Abstract N°: 307

Title: COVID-19 vaccine-related eruption of papules and plaques (V-REPP)- a case report

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Introduction

Within the introduction of the COVID-19 vaccination program, a large spectrum of cutaneous adverse reactions (CARs) has been reported including primarily injection-site and type 1 hypersensitivity reactions: urticaria/ angioedema, delayed large local hypersensitivity reaction known as "COVID arm" as well as rare potentially fatal adverse events like vaccine-induced prothrombotic immune thrombocytopenia (VIPIT). An entity of papulovesicular, papulosquamous, and pityriasis-rosea like eruptions was suggested named vaccine-related eruption of papules and plaques (V-REPP) with histopathologic reaction pattern of spongiotic dermatitis.

We present a case of a lenticular papular rash rather classified as V-REPP with histological findings of dermal lymphocytic inflammatory infiltrate and minimal epidermal alteration.

Materials and methods: A 77-year-old Caucasian male presented in our department with a generalized pruritic papular eruption three days after the second administration of the COVID-19 vaccine *BNT162b2 (Pfizer-BioNTech*). The initial lesions involved the trunk and rapidly disseminated to the upper and lower extremities. The patient had no fever or systemic symptoms. No history of previous allergic reactions or atopy was reported. Physical examination upon admission revealed multiple disseminated erythematous infiltrated lenticular papules and plaques, distributed in a confluent pattern on the lateral trunk. Upon dehospitalization however the rash developed lilchenoid transformation characterized by hyperpigmented plaques and lichenoid papules. Differential diagnoses included pityriasis rosea, parapsoriasis en plaque, psoriasis guttata, syphilis acquisita secundaria, lichen ruber planus, etc.

Results: Laboratory tests revealed leukocytosis with neutrophilia, elevated blood glucose levels, gamma-glutamyl transpeptidase, and ESR. Histopathologic findings demonstrated dermal periadnexial and perivascular predominantly lymphocytic inflammatory infiltrate with scarce neutrophils and almost no involvement of the epidermis. The diagnosis of the vaccine-related eruption of papules and plaques (V-REPP) was based highly on the history of vaccine administration and the clinical features of the rash. Treatment with methylprednisolone 40mg/24h with gradual dose reduction, antihistamines, highly potent topical corticosteroids, and emollients was initiated. It resulted in a complete reversal of the lesions in the follow-up examinations, however, a low-dose steroid regimen was continued for a 4-month period due to few relapses.

Discussion: We present a rare vaccine-associated CAR with a clinical and histopathologic correlation of a delayed-type T-cell hypersensitivity reaction. These adverse reactions are relatively rare associated exclusively with mRNA vaccines. The pathophysiologic mechanism of V-REPP remains unknown, however, two potential theories have been suggested including delayed-type hypersensitivity reaction and T-cell mediated response via molecular mimicry.

In conclusion, a variety of cutaneous reaction patterns occur after COVID-19 vaccination, most of which with immunological and autoimmunological character. The exact mechanism of the immune response is to be confirmed by the means of further investigation.

Key words: COVID-19, vaccines, V-REPP

Abstract N°: 405

Title: Clearance of viral warts following COVID-19 vaccination

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Introduction

Materials and methods

Results

Viral warts caused by infection of the keratinocytes with the human papilloma virus (HPV) is a common dermatological problem. Among the several modalities of treatments available, immunotherapy is gaining importance especially in the setting of recalcitrant and recurrent warts. We report two cases of recalcitrant wart resolution following COVID-19 vaccination.

A lady presented to our outpatient department complaining of peripheral scaling and partial detachment of palmar warts which she had for the past 3 years. She alleged that the symptoms developed after she took first dose of COVISHIELD^{TM} vaccine [ChAdOx1 nCoV-19 (AZD1222), Oxford- Astazeneca] a month ago. At 2-weeks follow-up, it was noticed that most of the warts had resolved completely except for a single wart. Following 2nd dose of vaccination, the remaining wart also cleared within a month. The second patient had recurrent wart on the pinna and was planned for MMR immunotherapy. Surprisingly, the wart cleared after 2 doses of COVISHIELD^{TM} vaccination. Both the patients had no recurrence as observed on 6 months follow-up.

Immunotherapy for warts stimulate the adaptive immune system of the individual. This induces Th1 cytokine production and the viral antigens in close proximity to the site of injection as well as at distant sites are targeted and destroyed.[^1^](#_ENREF_1) COVISHIELD^{TM} vaccine is an adenoviral vectored vaccine with SARS-CoV-2 spike insert. It induces a potent T cell response following a single parenteral injection and is boosted by second vaccination.[^2^](#_ENREF_2) This enhanced immunity may be the reason for wart resolution in both our patients.

Discussion

Abstract N°: 415

Title: Erythema Nodosum following a booster dose of Sputnik V SARS-CoV-2 vaccine: a case report

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Results

Erythema nodosum (EN) is the most common form of panniculitis and it is characterised by the presence of tender erythematous nodules predominantly located bilaterally on the lower extremities.

Generally, EN is idiopathic, but it can be associated with infections, systemic diseases, drugs, pregnancy, malignancies and many other conditions, including vaccination.

EN has been reported as a cutaneous manifestation of COVID-19 infection in many patients, as well as a side effect of COVID-19 vaccines.

Sputnik V (Gam-COVID-Vac) is a heterologous recombinant adenovirus vaccine with two different types of adenovirus vectors, rAd26 and rAd5 for the first and second dose, respectively.

In Serbia, the first component (rAd26) of Sputnik V is used as a booster dose.

We observed a case of a 61-year-old woman showing painful red nodules, 4 to 5 cm in diameter, located bilaterally on her lower extremities and forearms. The skin lesions were associated with fever, malaise, muscle pain and arthralgia. The symptoms started 8 days after administration of the booster dose of Sputnik V COVID-19 vaccine.

Before the onset of these symptoms, however, she got diarrhea the same day that she was given the booster shot and it lasted for 3 days.

Due to high fever (up to 39.5°C) and generalised weakness she was admitted to hospital for further investigation and treatment.

The patient reported that she had vomited for one day after the first dose of Sputnik V vaccine and that she had not experienced any side effects after the second shot.

Apart from that, the patient had no significant medical history.

Laboratory investigation on admission showed the following: elevated CRP 131.1 (<5.00 mg/l), ESR 45 (0-20 mm/h), WBCs 13.30 (3.40 - 9.70 x10^9/L) and D-dimer 886 (< 500 ng/ml).

COVID-19 RT-PCR test was negative.

Hepatic, renal and thyroid panels were also in the normal range.

Throat swab, urine and stool cultures, and parasitic examination were negative.

Only one of the three blood cultures performed was positive for CoNS, subsequently identified as *Staphylococcus epidermidis*.

ASO, hepatitis B and C serologic profiles were negative.

HIV screening was negative.

ANA, ANCA, ACPA and RF were not detected.

Serum immunoglobulins, C3-C4 levels, cryoglobulins and ACE were in the normal range.

Chest X-ray, chest CT scan, echocardiography and complete abdominal ultrasound showed no abnormalities.

No skin biopsy was performed due to the classic clinical presentation of EN.

While in hospital, the patient was treated with broad-spectrum antibiotics, crystalloid fluids, antipyretics, LMWH and low-dose corticosteroid.

All elevated inflammatory markers decreased to normal values within 7 days and the patient was discharged.

The skin lesions gradually resolved and completely disappeared over the next 8 weeks.

EN is a reactive erythema that can be associated with numerous conditions and in approximately 50% of cases is idiopathic.

Vaccine-related EN has been reported after administration of the following vaccines: Tdap, BCG, typhoid, cholera, hepatitis B, HPV, rabies and some COVID-19 vaccines (AstraZeneca-Oxford, Pfizer-BioNTech, Moderna and Medigen).

We hypothesised that a booster dose of Sputnik V could have triggered EN in our patient due to temporal and causal relation between vaccine administration and the onset of skin manifestations, since no other common cause could be found.

Although EN in our case might be idiopathic, clinicians should be aware that COVID-19 vaccines could be a cause of EN.

Abstract N°: 449

Title: The Impact of Covid-19 on the Rate of Diagnosis of Non-melanoma Skin Cancer: A Single Centre Experience.

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Introduction

The Covid-19 pandemic has had a significant impact on the diagnosis of melanoma and nonmelanoma skin cancers (NMSCs). Previous studies have examined the impact of Covid-19 on the rates of skin cancer diagnoses throughout the first wave of the pandemic when nationwide lockdowns were imposed and non-emergency care suspended$_1$. This is the first study to our knowledge to compare the rates of diagnosis of NMSCs prior to the pandemic to rates of diagnosis following the easing of nationwide restrictions, the roll out of vaccination programmes, the re-establishment of access to primary care and resumption of elective theatre lists.

Materials and methods

This was a retrospective, single centre study. We examined the total number of patients who attended for skin biopsy or excision from January to December 2020 and 2021 and compared the rates of diagnoses of NMSCs throughout 2019. Patients were identified through departmental histology records. Exclusion criteria included those undergoing excision of a histology proven lesion and those diagnosed with superficial basal cell carcinoma or squamous cell carcinoma in-situ.

Results

The total number of patients attending for skin biopsy or excision decreased by 34% from 2019 to 2020 (n=576 vs n=368) but subsequently recovered in 2021 (n=509). Despite this, 25.1% (*p* value 0.0468) less patients were diagnosed with NMSC in 2021 compared to 2019 which was a further decline from 15.9% (*p* value 0.275) less diagnoses in 2020.

There was a 27.4% (*p* value 0.0246) decrease in the total number of NMSC lesions diagnosed in 2021 compared to 2019, a further decline from a 12.2% (*p* value 0.413) decrease in 2020. Thirty-four percent more patients were diagnosed with multiple NMSCs in 2019 than in 2021 (n=26 patients vs n= 17 patients). Rates of diagnosis of BCC versus SCC were similar throughout all years (range 24-27%) and there was no significant difference in age at diagnosis (range 72.4-74.5 years).

Discussion

Despite resumption of services and easing of restrictions alongside a nationwide vaccination rollout, there was a significant decrease of 25.1% less patients diagnosed with NMSC in 2021 compared to pre-pandemic figures in 2019. This may be explained by factors such as a significant 'third wave' at the beginning of 2021 coupled with a continued heightened reluctance from elderly patients to access tertiary care due to the ongoing risk of Covid-19. As the pandemic continues with a more protracted course than initially anticipated, future studies will be useful to assess whether this has had a lasting effect on the rates of diagnosis of NMSC and the subsequent implications on patient outcomes.

References

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Abstract N°: 472

Title: Diagnosis of COVID-19 infection in a patient with cutaneous B lymphoma complicated by macrophage activation syndrome.

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Introduction

The SARS-COV-2 virus infection has led to a pandemic since March 2020, the severe forms of which may manifest as "cytokine shock syndrome".

Macrophage activation syndrome (MAS) is a rare non-malignant proliferative disorder affecting activated antigen-presenting macrophages and resulting in haemophagocytosis. We report a case of a Covid-19 infection complicated by MAS in a patient with cutaneous B lymphoma.

Observation

A 40-year-old patient with no prior medical issues presented with progressive papulo-nodular lesions on the left hemithorax 7 months before hospitalisation preceeded by chronic pruritus during 10 years associated with erythematous papular lesions. The clinical examination revealed a conscious patient who was hemodynamically and respiratory stable, febrile to 39 degrees. Dermatological examination revealed a papulo-nodular erythematous plaque on the left hemithorax surrounded by multiple erythematous papules with intervals of healthy skin. Abdominal examination also revealed hepatomegaly. Skin biopsy revealed a CD20+ follicular B lymphoma, predominantly large cell. PET scan revealed liver and bone metastases. PCR was carried out, which came back positive associated with fever, asthenia and myalgias, a COVID-19 Biological work-up revealed normochromic anaemia, lymphopenia, very high ferritin level; LDH: 547IU/l associated with hepatic cytolysis, cholestasis and hyponatremia. The patient was referred to a COVID service for management of his COVID-19 infection with good clinical improvement reported and then to the haematology service for therapeutic management of cutaneous B lymphoma.

Discussion

Macrophage activation syndrome is a clinico-biological entity reflecting a significant inflammatory response that can be life-threatening. It results from abnormalities in the regulation of the immune response and may be primary or secondary to multiple autoimmune conditions, infectious conditions including COVID-19 infection, or haematological malignancies including lymphomas. A pre-existing immune deficiency in MAS, found in about 60% of cases, suggests an important role of the underlying immune status in the pathophysiology of MAS. Activated T cells, mainly of Th1 profile, produce large amounts of cytokines (IFNgamma, TNFalpha, macrophage colonising factor or M-CSF) which stimulate the macrophage response with phagocytosis of blood elements and production of other cytokines by activated macrophages which also seem to exert a positive feedback on T lymphocytes, thus maintaining a deleterious overactivation of the immune system. The diagnosis is based on a combination of clinical and biological signs, which are non-specific and require an exhaustive etiological investigation.

Conclusion

SARS-COV2 infection can be fatal, particularly when it occurs in an immunocompromised setting such us haematological malignancy, that can be complicated by macrophagic activation syndrome; which makes the originality of this case.

Abstract N°: 481

Title: A Case Of Atypical Pityriasis Rosea with Multipl Giant Medallion Following mRNA SARS-CoV-2 Vaccination

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Introduction: COVID-19 disease caused by SARS-CoV-2 emerged in China and caused a worldwide pandemic. Various vaccines have been developed against morbidity and mortality during this pandemic. It has been reported that mRNA vaccines, administered as two doses, improve 95% protection against COVID-19. In addition to vaccine-related side effects such as pain, fever and malaise, skin rashes have also been reported. The most common of these rashes are local skin reactions, urticaria and morbiliform rash. Pityriasis rosea and pityriasis rosea-like rashes have also been described. Pityriasis rosea is an acute eczematous disease characterized by typically first followed by a primary solitary herald patch before the development of smaller scaly papulosquamous lesions within days or weeks. Besides the reactivation of HHV-6, HHV-7, the bacterial infections, vaccines and some drugs are also blamed in the etiology. Here, we present a case of atypical pityriasis rosea that occurred 8 days after the 1st dose of BioNTech vaccine.

Case: A 47-year-old male patient was applied to our polyclinic one week later with the complaints of erythema, mild itching and burning sensation on the legs, and widespread small erythematous and slightly scaly skin rashes all over the body that he stated to these complaints have occurred 8 days after the first dose of the Biontech vaccine. The patient had no history of any other medication or infection. In the dermatological examination of the patient, in addition to 3 giant medallion plaques on the legs, there were also erythematous maculopapular lesions on the trunk, arms and legs with collar-like scales ranging in size from a few millimeters to a few centimeters observed. As a result of clinical and histopathological examination, the patient was diagnosed with pityriasis rosea, and his lesions regressed with acyclovir treatment.

Conclusion: Pityriasis rosea and pityriasis rosea-like eruptions rarely develop after vaccination. Drug or vaccine induced pityriasis rosea and pityriasis rosea -like rashes often do not contain a herald patch, unlike typical pityriasis rosea. Since the development of pitriasis rosea and the presence of multiple giant medallion plaques after the 1st dose of mRNA vaccine is remarkable in our case. For this reason we think this case will contribute to the literature.

Abstract N°: 507

Title: Delayed onset of vitiligo and erythema nodosum after COVID vaccination in the same patient

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Introduction

Cutaneous and extracutaneous autoimmune diseases (AD) have rarely been reported in association with COVID-19 vaccine. We describe an original case of delayed onset of vitiligo occurring in a patient who had presented post-COVID vaccine erythema nodosum (EN) .

Materials and methods

Results

Observation:

A 66 year old patient, followed for breast neo since 2008, currently in remission, having already presented a biopsy confirmed erythema nodosum 48 h after the 2nd dose of the anticovid vaccine "Astrazeneca", consulted for newly appeared achromic lesions. In the history, the patient reported the occurrence of lesions 1 month after the 2nd vaccine dose.

The clinical examination revealed 2 well-limited annular achromic macules on the right lower limb and a macular lesion on the left lower eyelid. The patient had no family history of vitiligo. The patient was screened for other autoimmune diseases with a negative immunological workup. The patient was put on dermocorticoids and antioxidant with slight improvement.

Discussion:

The precise triggering mechanisms are still unknown, but several studies suggest that a vaccine component may induce AD in genetically predisposed subjects. Possible pathogenic mechanisms involving the vaccine as a cause of vitiligo are molecular mimicry occurring when a genetically susceptible individual is infected/vaccinated with an agent carrying antigens immunologically

similar to the host antigens promoting activation of cross-reactive T or B

cell cross-reactivity. Subsequently, tolerance to the self-antigens deteriorates and the pathogen-specific immune response is directed to the host tissues. Viral/bacterial or vaccine agents can induce the release of sequestered self-antigens or modify host tissue self-antigens which, in turn, activate antigen-presenting cells generating a clonal expansion of autoreactive T and B cells. In addition, the vaccine component/adjuvant can induce a strong immune response, which causes non-specific activation of autoreactive CD8+/CD4+ T and B cells, leading to AD. Through these mechanisms, the vaccine could have stimulated the immune system to produce antibodies against SARS-CoV-2 and secondarily against melanocytes.

In our patient, the occurrence of EN after covid vaccination implies that the patient is predisposed to develop AD,

which supports our hypothesis. However, the temporal relationship between the vaccine and the development of vitiligo in our case is interesting because the cases in the literature report the occurrence of vitiligo after the first dose and after RNA vaccines. In our case the injected vaccine is a live vaccine which makes our observation original.

Conclusion:

The autoimmune phenomena occurring after COVID-19 vaccination suggest that the vaccine may play a role in triggering vitiligo. In the meantime, clinicians should be aware of possible skin reactions to vaccines, especially in

patients with or genetically susceptible to AD.

Discussion

Abstract N°: 580

Title: Generalized pustular psoriasis exacerbed by COVID 19 vaccine (mRNA)

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Introduction

Generalized pustular psoriasis (GPP) or von Zumbuch pustulosis is a rare variant of pustular psoriasis, which can affect any age, it is difficult to distinguish from acute generalized exanthematous pustulosis (AGEP). Several triggering factors have been reported: drugs, infections, pregnancy. But very few cases have been described after the Covid 19 vaccine.

We report the case of pustular psoriasis triggered by the mRNA anti-COVID vaccine (pfizer)

Results

55-year-old female patient with a history of plaque psoriasis who received topical treatments and methotrexate with a good evolution. Who presents 4 days after the 1st pfizer vaccine dose a erythematous-squamous lesions initially located on the trunk then generalized extension accompanied by gonalgia and fever.

On examination: erythroderma made up of scaly erythematous lesions, non-follicular pustules having merged. A palmoplantar keratoderma surmounted by pustules, and a scaly scalp. Without nail damage. The BSA was 90% and the PASI at 61.

On the biologic assessment, there was an inflammatory syndrome, hyperleukocytosis, hypercholesterolemia, a negative infectious balance. The radiological exploration of the joints did not show any signs in favor of psoriatic arthritis.

To rule out AGEAP and confirm the diagnosis of psoriasis, a skin biopsy showed psoriasiform dermatitis, with the presence of pustules under the cornea. The patient was put on dermocorticoids, emollient, and methotrexate treatment with good clinical improvement.

Discussion

To date, two cases have been reported (in America and Tunisia), another in Turkey following an inactivated virus vaccine (CoronaVac). The mechanisms responsible for this exacerbation are not yet understood, one theory shows that the proteins generated in response to the vaccine induce the production of interleukin 6 and the development of T lymphocytes which have a key role. The delay between vaccination and the onset of PPG in our patient suggests a causal role.

Abstract N°: 584

Title: COVID 19 vaccine and pemphigus

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Introduction

Since the WHO announced the COVID 19 pandemic as a global health emergency, several researches have been conducted in order to develop an effective vaccine.SARS-CoV-2 vaccines benefited from an accelerated schedule and were approved in record time. Which didn't allow to detect all their side effects, and it was only after mass vaccination that the majority of side effects , among other cutaneous ones were observed, we report here 2 cases of pemphigus after COVID 19 vaccine

Observation 1

65-year-old patient, who had been presenting erosions limited to the oral mucosa for a year, the symptomatology was aggravated 15 days after the 2nd dose of the messenger RNA vaccine (Astrazeneca) by the appearance of flaccid cutaneous bullae and post bullous erosions on the trunk and roots of the limbs, the skin biopsy + DIF objectified pemphigus vulgaris

Observation 2:

A 58-year-old patient, with no particular history, who had presented 21 days after the 2nd dose of the messenger RNA vaccine (astrazeneca) painful erosions on the thorax, interscapular regions and face, DIF had objectified a deposit of IG G in favor of pemphigus .

According to the pharmacovigilance investigation, a cause-effect relationship between the vaccine and pemphigus is possible in both cases

Discussion

Pemphigus triggered or aggravated by medication is a variety of pemphigus where the mechanism of acantholysis is immunological. The disease follows a natural history identical to idiopathic pemphigus. The drugs most incriminated are thiol drugs (penicillamine, ACE inhibitors: captopril, enalapril), a few cases of pemphigus induced by vaccines against hepatitis B, influenza have been reported in the literature, , to date 3 cases have been reported of pemphigus triggered by covid's vaccine : one case in Thailand following the mRNA vaccine: Astrazeneca and 2 in Italy following the mRNA vaccines: Moderna and Pfizer, the mechanism is not yet elucidated but several authors incriminate RNA vaccines in the triggering / aggravation / relapse of autoimmune diseases, this is probably due to the production and important release of interleukins as well as the increase of lymphocyte activity in response to vaccine proteins

Moreover, vaccination was not contraindicated in any of the 3 patients mentioned above: all these patients received their 2nd dose of the vaccine in parallel with treatment with oral corticosteroid therapy and/or immunosuppressant.

Conclusion:

Vaccines play a crucial role in the protection of vulnerable patients, in particular those with bullous autoimmune diseases, given the significant risk of infection, it is therefore recommended to complete the vaccination schedule or medical supervision is required and if necessary a therapeutic adjustment. .

Abstract N°: 631

Title: New onset of psoriasis after COVID-19 vaccination : A Case Report

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Introduction

Psoriasis is an immune-mediated disease resulting from a combination of polygenic and environmental factors. Various exogenous and endogenous triggers have been noticed to initiate the onset or exacerbation of the disease. We report a case of New-Onset plaque psoriasis triggered by COVID-19 vaccine, which has been reported in the literature only thrice.

Results

A 85-year-old male patient was referred to our department for a 3 months history of disseminated itching psoriasiform lesions, which had started 10 days after receiving the second injection of the coronavirus disease vaccine. He had no previous dermatological issues, and there is no family history of psoriasis or any other putative triggers (underlying infections, new intake of medication). His past medical history revealed hypertension, and his daily medications (without any recent adaptations) included amlodipine. Dermatological examination revealed multiple confluent erythematous plaques, involving about 25% of the body surface area, localized mainly on the upper and lower extremities, nape of the neck, and his face. Skin biopsy was compatible with psoriasis, including regular acanthosis, neutrophilic collections within the parakeratotic cornified layer, elongation of rete ridges, and mild lymphocytic infiltration of the dermis. Psoriasis Area Severity Index (PASI) score was 12.6. Routine blood tests were within normal ranges. After the diagnosis of Covid-19 vaccine-induced plaque psoriasis, the clinical picture presented a complete resolution with topical steroids and emollients and did not present relapses during follow-up.

Discussion

Vaccination is an uncommon triggering factor of several skin diseases and a potential association between vaccination and the onset or exacerbation of psoriasis has been reported. The available studies have reported influenza (H1N1), tetanus-diphtheria, BCG, and pneumococcal pneumonia vaccination as triggering factors for new-onset or flare of psoriasis. The COVID-19 vaccine has the potential to trigger the development of psoriasis too. A registry of 414 patients with cutaneous reactions after receiving the COVID-19 vaccine have documented only 2 exacerbations of existing psoriasis, and only 3 reports of de novo psoriasis have been reported: One case described Novo generalized pustular psoriasis, one involving nail unit, and one case described guttate psoriasis that appeared after the first dose of COVID-19 vaccine. The relationship between vaccination and psoriasis remains uncertain. It is possible that similarly to influenza vaccines, it may be caused by both vaccine adjuvants and dysregulation of the immune system due to viral components.

Exacerbations and particularly de novo cases of psoriasis after COVID-19 vaccination are extremely rare. However, further studies are needed to establish the relation between vaccination and Novo psoriasis.

Abstract N°: 633

Title: Skin Reactions to Personal Protective Equipment among First-LIne COVID-19 Healthcare Workers: A Survey In Northen Morocco

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Introduction:

Health care workers (HCWs) adopted several protective measures, including hand hygiene and wearing personal protective equipment (PPE) during the COVID-19 outbreak. However, the frequent use of these preventive measures can lead to skin reactions. Our study aimed to determine the frequency of these reactions in Northern Morocco. In addition, we also looked at the risk factors and the consequences of these injuries on work efficiency and performance.

Materials and methods

An anonymous online survey was used to collect data, which was sent to 500 health workers in the study region. It was in the form of a short or multiple-choice response with several photos and illustrations to facilitate the choice of answers. Each part dealt with one type of protective activity or equipment, the frequency of its use, the duration of the symptoms, and the lesions reported after wearing. Descriptive and inferential statistics were used to analyze the data on IBM SPSS software. The results of this work have already been published in an international indexed journal: ***doi:10.1093/annweh/wxab018***.

Results

In total, 273/500 responded to the questionnaire (55%). For the participants' profession, 41% were doctors, 32% were nursing staff, and 26% held other jobs. The general prevalence rate of adverse reactions for all health workers was (80%), including skin problems: after wearing goggles (58%), after wearing surgical masks and respirators (57%), after handwashing and wearing gloves (45%), after wearing a face shield (23%), and after wearing protective clothing (11%). Bleach immersion was highly significantly associated with hand reaction (OR: 2.9, 95% CI: 1.77–4.90; P < 0.001). Moreover, we found a statistically significant association between hand cream use more than twice daily and fewer reactions (OR: 1.9, 95% CI: 0.98–3.77; P = 0.038). The skin reactions related to goggles

use were also significantly associated with use duration (OR: 1.7, 95% CI: 0.988–3.12; P = 0.05). Similarly, wearing masks and N95 respirators and their related adverse reactions were significantly associated with use duration (OR: 0.5, 95% CI: 0.20–0.7; P = 0.02). In addition, adverse reactions of regular use of protective clothing were related to the frequency of its use per shift (OR: 3.5, 95% CI: 1.47–8.54; P = 0.05).

Discussion

The COVID-19 pandemic has heightened the use of personal protective equipment and hygiene activities among healthcare workers. We surveyed healthcare workers in Morocco, and found that 80% of respondents reported adverse skin reactions associated with work. Bleach immersion for cleaning and was associated with increased prevalence of skin reactions on the hand, and skin reactions were generally associated with personal protective equipment (other than gloves) when used over longer durations or more days of work per week. Intensive use of personal protective equipment and hygiene may adversely affect skin health.

Abstract N°: 643

Title: BCG scar reactivation following COVID-19 mRNK vaccine

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Introduction

Since the beginning of the pandemic, two years ago, many skin conditions are connected with Covid-19 infection. After the vaccination has been started, dermatologists around the world have noticed some skin reactions connected with the vaccination process, usually localized to the site of administration, with less frequent systemic reactions such as allergies and exanthemas. However, only a few cases have been presented in the literature with the reactivation of the BCG scar, after the mRNK vaccine application. Bacillus Calmette–Guérin (BCG) vaccine is a vaccine primarily used against tuberculosis. In countries where tuberculosis or leprosy is common, one dose is recommended in healthy babies as soon after birth as possible which is the case in our country where it is mandatory for all newborns. BCG vaccine is also used as a treatment protocol for some urinary tract tumors.

Materials and methods

We present a case report of a 34-year-old woman, who presented with the BCG scar reactivation, after the mRNK Covid-19 vaccine administration. She is otherwise healthy with no previous allergies, BCG vaccinated at birth at the left shoulder, and revaccinated at the age of 12, as suggested in the national vaccination protocol at that time. She did not have, previously confirmed Covid infection. Her family members, mother, father, and siblings, who were also regularly BCG vaccinated and now vaccinated with Covid-19 mRNK vaccine did not have any similar reaction.

Results

On admission to our clinic, 4 days after the first dose of vaccine, she presented with erythema, induration of the BCG scar, five centimeters from the place where the mRNK vaccine was administrated. She did not report any pain, just a sensation of localized itch. On the day of vaccination and a day after she had a headache and mild muscle pain. All the complete blood count parameters were in the normal range. We implemented local therapy with mometasone furoate for 7 days, once a day, and after a week, the lesions were completely gone. After the second vaccine dose, she has only light erythema on the BCG scar, without induration which lasted for 2 days. This time, we did not use any topical therapy. Two months after we conducted once again a complete blood test count which was in the normal range. The scar was without any visible or palpable changes.

Discussion

Inflammatory reactions of the Bacillus Calmette-Guérin (BCG) scar have been mostly reported as a feature in children with Kawasaki disease, in the first two years of life. It is characterized by erythema, induration, ulceration,

and/or crust formation at the inoculation site. It has also been described with measles and human herpesvirus type 6 (HHV6) infection. Several cases have been described after the influenza vaccination. So far around ten cases have been published worldwide, after the mRNK Covid-19 vaccine, with similar properties. In half of the cases there was a reaction after both doses, and in another half, only after the second dose. There were no, systemic findings connected, and all patients were otherwise healthy, without any further health issues.

Abstract N°: 647

Title: Facial masks and acne : it's not all bad !

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Introduction

Due to the pandemic, facial mask becomes part of our daily routine. Several studies showed the exacerbation of inflammatory dermatoses with mask use, the main one being acne. The aim of our work is to demystify the phenomenon and to encourage the use of masks, which remains a considerable barrier measure.

Materials and methods

This is a comparative study between September and January 2021 on patients treated for acne. Only female patients in whom the use of a mask influenced their dermatosis were selected. The population was divided into G1: improving acne: 38 patients and G2: worsening it: 20 patients.

Results

A total of 58 patients ,filled the survey. The use of surgical masks was the most common in G2:75%. In contrast, the use of N95 masks was noted in 78.94% in G1 ($p<0,0001$). All patients in G1 changed their masks daily. Only 35% of G2 changed it daily ($p<0,0001$). Wearing masks exceeded 8 successive hours in 80% of G2 . 22 patients in G1 wore their mask less than 4 hours in a row ($p=0,006$). Regarding the daily beauty routine, most patients in G2 (12) used make-up, which was not the case in G1.In contrary, 65.78% of G1 admitted using less make-up with the advent of the mask ($p=0,038$). Using morning moisturizer is preponderant in 80% of G2 as opposed to the majority of the G1 who only used a sunscreen. In fact, 70% of G2 used a sunscreen in combination with a moisturizer ($p=0,0002$) . Twice-daily face washing was noted in 31 (G1) VS 9 (G2) ($p=0,004$). Most of the patients in both groups accepted their acne better and handled their lesions less with the mask.

Discussion

Many studies significantly prove the increase of acne mainly for surgical masks due to formaldehyde they contain. This kind of mask was the most used in G2. In contrast, the N95 was the most used in G1. N95 filters out 95% of 0.3 microns airborne particles, including sulfur dioxide. Such pollution is part of the acne exposome, explaining our findings. In prior reports, reuse facial masks was prevalent. According to our results, mask switching was reported in G1, explaining the non-aggravation of acne in this group. The arrival of the mask led to a change in makeup habits with a simplification of the beauty routine. Consumers therefore use less make-up, a fact found particularly in G1. Moisturizing creams can be occlusive and worsen acne, as observed in G2. Prolonged use over 6 hours per day has been listed as a contributor to acne exacerbation in the literature, similar to our results. Face mask wear is shown to raise sebum secretion and modify the skin microclimate.Twice-daily washing reduces excess sebum , thus being a preventive factor for acne exacerbation in the acne population. Previous studies done in summer found an increase in acne's severity. The climatic issue may explain the discrepancy with our results done in this winter period.All the patients in our study admit that they accept their acne better and handle their lesions less by wearing a mask. This is a positive point about the impact of the mask on acne.

Conclusion: According to previous studies performed in the summer, wearing a mask aggravated inflammatory dermatoses, especially acne. However, no study has investigated the effect of the mask during the winter period. Our study is the first to describe the positive effects of masks on acne by proposing preventive factors of possible aggravation of acne in an acneic population.

Abstract N°: 708

Title: Pityriasis lichenoides et varioliformis acuta following COVID-19 mRNA vaccination: A case report and review of literature

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Introduction

Materials and methods

Results

The BNT162b2 (Comirnaty) COVID-19 vaccine showed strong efficacy against COVID-19 in longer-term analysis, with a good safety profile. However, various cutaneous adverse reactions include urticaria, morbilliform purpuric and/or edematous rash, herpes zoster, pityriasis rosea-like rash, erythromelalgia, pernio/chilblains, vasculitis/vasculopathy have been reported following the BNT162b2 (Comirnaty) COVID-19 vaccine. There are 12 cases of vaccine-induced PLEVA reported in the literature so far, and four of them are associated with COVID-19 vaccines. We present a new case of PLEVA following a COVID-19 vaccine administration and discuss the development mechanism of PLEVA by reviewing the BNT162b2 (Comirnaty) COVID-19 vaccine and the other vaccine-induced PLEVA cases in the literature. We report here a 14-year-old male with PLEVA who developed erythematous and scaly papules, pustules, erosions, hemorrhagic crusts, mainly localized on the neck, axillar, and inguinal areas 2 weeks after the second dose of the BNT162b2 (Comirnaty) COVID-19 vaccine. The diagnosis was confirmed with histopathological examination. PLEVA has already been associated with various vaccines, including inactivated, live-attenuated, and now mRNA types. There may be a pleiotropic effect involving the same inflammatory pathway contributing to the pathogenesis of PLEVA, or this association may be coincidental.

Discussion

Abstract N°: 715

Title: Pemphigus foliaceus triggered after inactivated SARS-CoV-2 vaccine: coincidence or causal link?

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Introduction

Materials and methods

Results

Pemphigus is a group of autoimmune blistering disorders associated with autoantibodies against the keratinocyte cell surface. Its exact cause is still unknown, but neoplasms, infections, or medications are considered as possible triggering factors. We report the first case of Pemphigus foliaceus (PF) triggered after Sinopharm BBIBP COVID-19 vaccination. A 44-year-old male presented with 2 months history of an erythematous progressive eruption which appeared 7 days after the first dose of vaccination with BBIBP-CorV. He denied any previous medical history or medication use. Few erythematous and crusted lesions first appeared on his shoulders. These lesions had been neglected by the patient, and he received the second dose 21 days later. That was when the lesions spread to the face and the trunk. The immuno-histological results of the different samples were compatible with pemphigus foliaceus. He was diagnosed with PF and treated with prednisone, 2 mg/kg daily and azathioprine 150 mg/day. Although no clear etiology has been established for pemphigus, we know that aberrant immune responses contribute to its development. There is some evidence of pemphigus induction or exacerbation as a consequence of different types of vaccines. In the present case, although the relation between these two events could be a mere coincidence, such strict time succession is clearly suspicious. We suggest that in some cases vaccination may be the triggering factor for pemphigus in genetically predisposed individuals and physicians should be aware of this possible association.

Discussion

Abstract N°: 718

Title: New-onset leukocyclastic vasculitis following ChAdOx1 nCoV-19 COVID-19 vaccine

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Introduction

Concomitantly with the fast-paced COVID-19 vaccination drive around the world, several reports of newly-diagnosed or relapses of cutaneous vasculitis following the COVID-19 vaccines have recently emerged in the literature.

We report the case of a 62-year-old female patient who developed leucocytoclastic vasculitis (LCV) after receiving ChAdOx1 nCoV-19 corona virus vaccine.

Materials and methods

The patient presented to our dermatology department with wide-spread violaceus eruption that started 2 days before. This was eight days after receiving the first dose of the vaccine. She didn't receive any kind of treatment and didn't present any pathologic antecedents. There was no recent history of fever, infection, dyspnoea or arthralgia. Dermatological examination revealed multiple palpable purpuric plaques and papules distributed bilaterally on the legs, the thighs and the abdomen associated with non-pitting oedema of the lower limbs. Upon physical examination, no systemic manifestation was perceived. Complete blood count, liver/kidney function tests, urinalysis, erythrocytes sedimentation rate, serum protein electrophoresis and chest x-ray were all within normal limits. Reverse transcriptase polymerase chain reaction (RT-PCR) for COVID-19 was negative. An autoimmune workup revealed a low antinuclear antibody titre (1:160 speckled), no anti-extractable nuclear antigen antibodies and no anti-neutrophil cytoplasmic antibodies (ANCA). Cryoglobulins were not detected. Serologies of hepatitis B, C and HIV were negative.

Histopathology from the lesion showed unremarkable epidermis and perivascular inflammatory infiltration mainly made of neutrophils, eosinophils and nuclear debris with fibrinoid necrosis in the dermis, consistent with the diagnosis of leucocytoclastic vasculitis. Direct immunofluorescence was negative.

The diagnosis of cutaneous small-vessel vasculitis secondary to ChAdOx1 nCoV-19 corona virus vaccine was made and the patient was advised rest and was treated with antihistaminics for two weeks, after which lesions resolved completely. No relapses were observed after a five-week follow-up.

Discussion

Vasculitis precipitation or exacerbation has been observed and reported as adverse events following immunization after various vaccines such as the influenza virus and hepatitis B virus (HBV). However, establishing a causative link between vaccination and vasculitis is still an issue of debate.

Vasculitis in COVID-19 has been attributed to SARS-CoV-2 associated endotheliitis which could be either due to virus directly invading the endothelium or to inflammatory response which results in immune complex deposits in the vessels. As SARS-CoV-2 antigens and vaccine proteins share structural similarities, it has been hypothesized that the vaccine may induce a pro-inflammatory cascade similar to that caused by the viral protein resulting in the activation of autoreactive B/T cells, antibody formation, and immune complex deposition within small vessels. Recently, cases of LCV post ChAdOx1 nCoV-19 corona virus vaccine have been reported. No systemic involvement was described in all of these cases and clinical course was rapidly regressive when treated with tapering doses of oral prednisolone.

As reports of similar cutaneous eruptions add-up, health care providers must be aware of such manifestations after COVID-19 vaccines.

Abstract N°: 721

Title: Facial cutaneous manifestations linked to mask wearing among healthcare workers during the COVID-19 pandemic

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Introduction

Worldwide, healthcare professionals have been fighting COVID-19 for 2 years already, wearing facial masks daily to avoid further propagation of the virus. This essential and mandatory habit has triggered a wave of facial cutaneous manifestations. This study aims to describe and to characterize undesirable cutaneous manifestations due to facial mask wearing in a Lebanese population of healthcare workers at a tertiary healthcare medical center during the COVID-19 pandemic.

Materials and methods

A cross-sectional study was conducted at a tertiary healthcare medical center between November 2020 and November 2021. Healthcare workers were asked to fill an e-questionnaire sent by email and comprising: demographic data, history of dermatoses, potential risk factors, facial cutaneous manifestations, impact on quality of life. "SPSS statistics version 23.0" was used for statistical analysis of results.

Results

The study included 209 healthcare workers, predominantly women (54.5%). The majority of participants noted new-onset facial cutaneous reactions (54.5%). The mean age was (27.5±8.5) years. Signs and symptoms characteristic of acne and papulopustular rosacea were most frequently reported: oilier skin (55.1%), erythema (55.3%), pustules (49.1%) and papules (43.9%). The 3 most frequently affected facial regions were: the nose (54.2%), the cheeks (50.3%) and the chin (48.4%). Female sex, facial sweating, make-up application, history of facial dermatoses and a duration of daily mask use of more than 6 hours/day were 5 factors significantly associated to cutaneous manifestations secondary to mask wearing (p-value < 0.05).

Discussion

Half of healthcare professionals suffer from adverse cutaneous reactions linked to mask wearing. This study demonstrated that mask wearing leads to onset and/or aggravation of facial dermatoses in healthcare professionals in Lebanon. Raising awareness about the most frequent cutaneous dermatoses and early screening should be implemented.

Abstract N°: 773

Title: Scleroedema adultorum Buschke following COVID-19 pneumonia with bacterial superinfection

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Introduction

Scleroedema adultorum Buschke refers to a rare disease of the connective tissue with an unclear pathogenetic mechanism. It is defined by the induration and hardening of the skin, accompanied by color changes. We report a case of scleroedema adultorum Buschke that developed after COVID-19 pneumonia with additional bacterial superinfection.

Materials and methods

A 42-year-old male with progressive skin stiffening and erythema in the neck, shoulders, and upper back region was referred to our dermatological department in November 2020. The patient stated that symptoms had first appeared almost 2 months previously. First, redness and pruritus of the skin occurred. The patients' general practitioner prescribed low potency topical corticosteroids and antihistamines. Response to the treatment was nominal, and the patient observed difficulties turning his head from side to side. According to the patients' medical history, he suffered from hypertension and was treated for several years prior with dual antihypertensive combination therapy (telmisartan and bisoprolol). He was not a known diabetic. However, he underwent a radical prostatectomy due to a prostate adenocarcinoma in 2008. Shortly before the first symptoms started, he had been hospitalized in an intensive care unit with severe COVID-19 pneumonia and required mechanical ventilation. Later he developed a bacterial superinfection. This infection responded well to antibiotics (ampicilin/sulbactam) and the patient recovered.

Examination of the patient's blood showed no elevation in blood sugar (5.3 mmol/l) but did indicate elevated ANA with the titre 1:160. A biopsy revealed an intact epidermis but there was perivascular lymphocytic infiltrate in the dermis and mucine deposits between collagen bundles in the deeper dermis. Based on the biopsy mucinosis was suspected, and together with the clinical findings, the final diagnosis of scleroedema adultorum Buschke was established. The patient's condition gradually improved after being treated with UVA 1 phototherapy and intramuscular corticosteroid injections

Results

Scleroedema is a rarely seen clinical entity, with only a few cases reported in the Czech Republic each year. The disease is commonly divided into three types: Type 1 occurs in patients who experienced a bacterial febrile infection, usually of the respiratory tract, as in our patient, The second type has a slow onset and is commonly associated with monoclonal gammapathy, usually in the case of multiple myeloma. The third type is called scleroedema diabeticorum and mainly occurs in male diabetics. The course of scleroedema is commonly slow except for the type one cases, which often resolve within 6-24 months. Even there are no specific abnormalities detected in the lab results, it is important to rule out malignancies and diabetes.

Discussion

This case describes an uncommon diagnosis of scleroedema developing after bacterial pneumonia in a middle-aged patient.

Abstract N°: 783

Title: alopecia areata in children due to confinement during the COVID 19 pandemic

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Introduction

Alopecia areata (AA) is considered an autoimmune with sudden hair loss coursing with spontaneous remission and exacerbation which the psychic component is of considerable importance. General confinement in the context of the covid pandemic is a potentially high-risk situation for children specifically and their mental and psychological health. We report two cases of 2 girls with hair loss following confinement.

Materials and methods

Results

Two girls aged 4 and 6 years with no history of similar illness in family members and also no history of drug intake and trauma. They consulted for the appearance of occipital alopecic plaques of the scalp that evolved into a total alopecia and then loss of eyelashes and eyebrows for 4 months. On interrogation, we noted the concomitance of the appearance of the alopecic patches and the onset of nocturnal enuresis with the establishment of the severe confinement measures. The families reported a change in their daughter's behavior linked to the restrictions imposed by the confinement and the major stress felt in the media. In fact, they no longer played with theirs friends and did not dare to move around the house by herself. Our patients presented signs of psychological suffering with anguish, phobia, aggressiveness and psychological trauma. The clinical examination revealed a total alopecia of the scalp, depilation of both eyebrows, and eyelashes. Routine laboratory studies were unremarkable. Dermoscopic examination revealed a non-scarring alopecia with the presence of yellow dots and downy hair. The diagnosis of universal alopecia was retained. The two patients were treated with an oral bolus of Betamethasone 0.1mg/Kg twice a week with regular follow-up in pediatric psychiatry. The evolution is stationary at 4 months.

Discussion

The particularity of our cases is to highlight the socio-psychological effects of confinement in children and the importance of dermatological disorders related to psychiatric conditions revealed by the COVID-19 pandemic. Quarantine conditions are a difficult process for children and can aggravate their psychological state. Confinement can cause anxiety, anger, and even phobias or trauma if not well managed by parents. Our patient presented a psychological suffering related to the disappearance of the regular rhythm of life and the stress felt by her parents and especially by the media. Our case also proves the intertwining of psychic and organic components in alopecia.

Abstract N°: 798

Title: Linear Ig A bullous dermatosis following Oxford Astrazenaca COVID-19 vaccine

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Introduction

Linear IgA bullous dermatosis (LABD) is a subepithelial vesiculobullous disease, characterized by linear deposition of IgA along the basement membrane zone of the skin and/or mucosae. Most cases of LABD are idiopathic, but drugs, infections and malignancies have all been implicated as possible inductors. To date, only two cases of LABD following vaccination have been reported, one after influenza3 and one after human papillomavirus vaccine administration. We describe the first case of LABD developing 3 days after the second dose of Oxford AstraZeneca COVID-19 vaccine in an adult patient, suggesting a possible causal association.

Materials and methods

Results

A 61-year-old man presented with a 22-day history of a bullous eruption, which had first appeared 3 days after his second dose of Oxford AstraZeneca COVID-19 vaccine. He reported no symptoms of infection, medication intake or sources of stress in the previous weeks.

Physical examination revealed tense blisters with serous content on a background of erythematous, urticarial and purpuric skin on his legs, and target-like lesions on his abdomen, trunk and thighs. The oral and genital mucosae were also involved

Histopathological examination revealed a subepidermal split with an inflammatory infiltrate composed of lymphocytes, histiocytes and some eosinophilic polynuclear lymphocytes. Direct immunofluorescence demonstrated predominant linear IgA deposition at the dermoepidermal junction , while indirect immunofluorescence revealed antibasement membrane zone IgA antibodies binding to the roof of salt-split skin

Laboratory examination revealed eosinophilia (1450 cells/µL). ELISA results for anti-desmoglein Dsg1 and Dsg3, and for bullous pemphigoid (BP)180 antibodies were negative.

A diagnosis of LABD was made. The patient was treated with oral prednisolone, with marked clinical improvement and normalization of polynuclear eosinophil count.

Discussion

There are multiple reports in the literature on drugs that cause LABD, particularly vancomycin.Drug-induced LABD is defined by its polymorphic clinical features, which are more severe than in spontaneous forms.

A large range of cutaneous adverse events after COVID-19 vaccine is being reported as the vaccination programmes widen. Regarding bullous dermatoses, Coto-Segura et al. reported three cases of BP and one case of LABD induced by the BioNTech/Pfizer mRNA COVID-19 vaccine.Tomayko et al. reported 12 cases of subepidermal

blistering eruptions, including BP, following COVID-19 vaccination.5

Among the possible explanations for LABD developing after vaccination is molecular mimicry, where a viral antigen shares sequence or structural similarity with a host antigen. Another is direct or indirect activation of the host's immune system by viral antigens or cytokines, such as interleukins and transforming growth factor-β, which increase IgA synthesis.

To our knowledge, this is the first case of LABD after Oxford AstraZeneca COVID-19 vaccine . It is possible, given the absence of triggers, that the condition was spontaneous but considering the temporal association between COVID-19 vaccination and the development of the eruption, we suggest that immunization was the most probable trigger. Vaccination is a rare trigger for this condition. While this case may be a simple coincidence, it is worth keeping in mind that COVID-19 vaccination could induce immune-mediated bullous disease in susceptible people

Abstract N°: 812

Title: Hand-foot syndrome like following SARS-CoV-2 mRNA vaccine

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Introduction

Recently, palmoplantar erythrodysesthesia, also known hand-foot syndrome (HFS), has been described as a new skin manifestation of SARS-CoV-2 infection.

Here, we report the first case of hand-foot desquamation following SARS-CoV-2 mRNA vaccine (Pfizer-BioNTech).

Materials and methods

Results

A healthy 60-year-old man presented with non-itchy acral desquamation, evolving for 3 weeks. After a prodromal phase of dysesthesia and palmar-plantar tingling, the patient reported a bilateral, painful erythema and limitation of daily activities.

Cutaneous examination revealed redness and large bilateral desquamation on both palms and soles associated with edema. The desquamation extended to the dorsal hand and feet. No history of recent SARS-CoV-2 infection has been reported. He denied any recent drug intake or topical application of cream or plant on his hands or feet, before the onset of the cutaneous lesions. However, we noted that these lesions appeared 3 days after the third dose of Pfizer BioNTech vaccine. He received two doses of AstraZeneca-Oxford vaccine, 6 months ago, without any cutaneous or systemic manifestations.

SARS-CoV-2 serology revealed positive IgG (4.80) and negative IgM (0.26).We ruled out concomitant dermatophytosis by negative result of fungal culture. Blood tests were within normal levels, showing especially negative serologic tests for hepatitis (B/ C), HIV, Parvovirus B19 and Epstein-Barr-Virus.

Histological examination of skin biopsy showed detachment of the stratum corneum associated with slight inflammatory infiltrate made of lymphocytes.

The clinical symptoms presented by our patient were consistent with grade 3 HFS. The patient was treated by only moisturizing cream resulting in a total healing of lesions within 3 weeks, without recurrence after one-month follow-up.

Discussion

HSF is a common skin adverse effect associated with certain systemic chemotherapy drugs. It is characterized by erythema, edema, and burning sensation, especially over palmoplantar surfaces. The pathogenesis of this syndrome is not fully understood. It is believed to be a toxic reaction due to the local accumulation of drugs in sweat glands on both palms and soles and the rich vascularisation of these areas.

Interestingly, Nuno-Gonzalez et *al* reported early HFS in 22 patients (7.2%) and could not attribute it to SARS-

CoV-2 infection or symptomatic therapy. Palmoplantar desquamation was noticed in 77 patients (25.3%) and was described as a post inflammatory desquamation.

Palmoplantar burning sensation and plantar desquamation have been described with Zika, Chikungunya or HIV infection. Palmoplantar involvement was also reported with poxvirus-related erythromelalgia in China.

The pathogenesis is poorly understood but we believe, that HFS may not be only related with SARS-CoV-2 infection but also with mRNA vaccine. Therefore, we can hypothesize that the immune response developed against the spike protein found on the surface of SARS-CoV-2 virus and produced after vaccination could play a major role.

Abstract N°: 832

Title: Erythrodermic psoriasis following Sars-Cov 2 infection : a case report

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Erythrodermic psoriasis following Sars-Cov-2 infection

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Introduction

During the covid-19 pandemic, several dermatological manifestations of sars-cov-2 infection have been reported in the literature. Exacerbation of psoriasis has been reported by some authors, including a transition to pustular psoriasis. However, cases of erythrodermic psoriasis following sars-cov-2 infection are very rare worldwide.

Case report

We report the case of a 55-year-old patient, followed for several years for plaque psoriasis under local treatment with dermocorticoids, who presented ten days after a covid-19 infection with fever, flu-like syndrome and cough, a worsening of his psoriasis with the development of dry erythroderma.

Discussion

Erythrodermic psoriasis is a severe form of psoriasis. Several factors have been implicated in the occurrence of this complication such as bacterial and viral infections, some medications, and stress. The occurrence of erythroderma in patients followed for psoriasis during covid-19 infection is a very rare event. Several pathophysiological hypotheses may explain the link between covid-19 infection and worsening psoriasis. Among these, some reports (1,2) have suggested a link between hydroxychloroquine, used in the treatment of covid-19 infection, and dysregulation of epidermal transglutaminase, leading to keratinocyte hyperproliferation and thus to exacerbation of psoriasis. Another hypothesis incriminates the sars-cov-2 virus as a factor triggering erythroderma in psoriatic patients. In fact, on one hand, the anti-viral immune response increases the production of pro-inflammatory cytokines such as interleukins 17 and 6, as well as TNFalpha and INFalpha. On the other hand, some authors described the role of the super-antigen, played by the spike protein present on the viral surface. In our patient, the hypothesis retained to explain the appearance of this erythroderma is the covid-19 infection, since he was not taking any treatment, but a coincidence cannot be formally ruled out. Furthermore, some reports have noted an exacerbation of pre-existing psoriasis after covid-19 vaccinations (3). This would explain the role of viral proteins in the activation of the immune system in patients being followed for psoriasis.

Conclusion

In conclusion, although erythrodermic psoriasis is a rare manifestation of sars-cov-2 infection, PCR testing should be performed in the presence of respiratory signs. It should be noted that the occurrence of erythroderma does not, to date, contraindicate the use of immunosuppressive treatments, and does not contraindicate the injection of

covid-19 vaccines.

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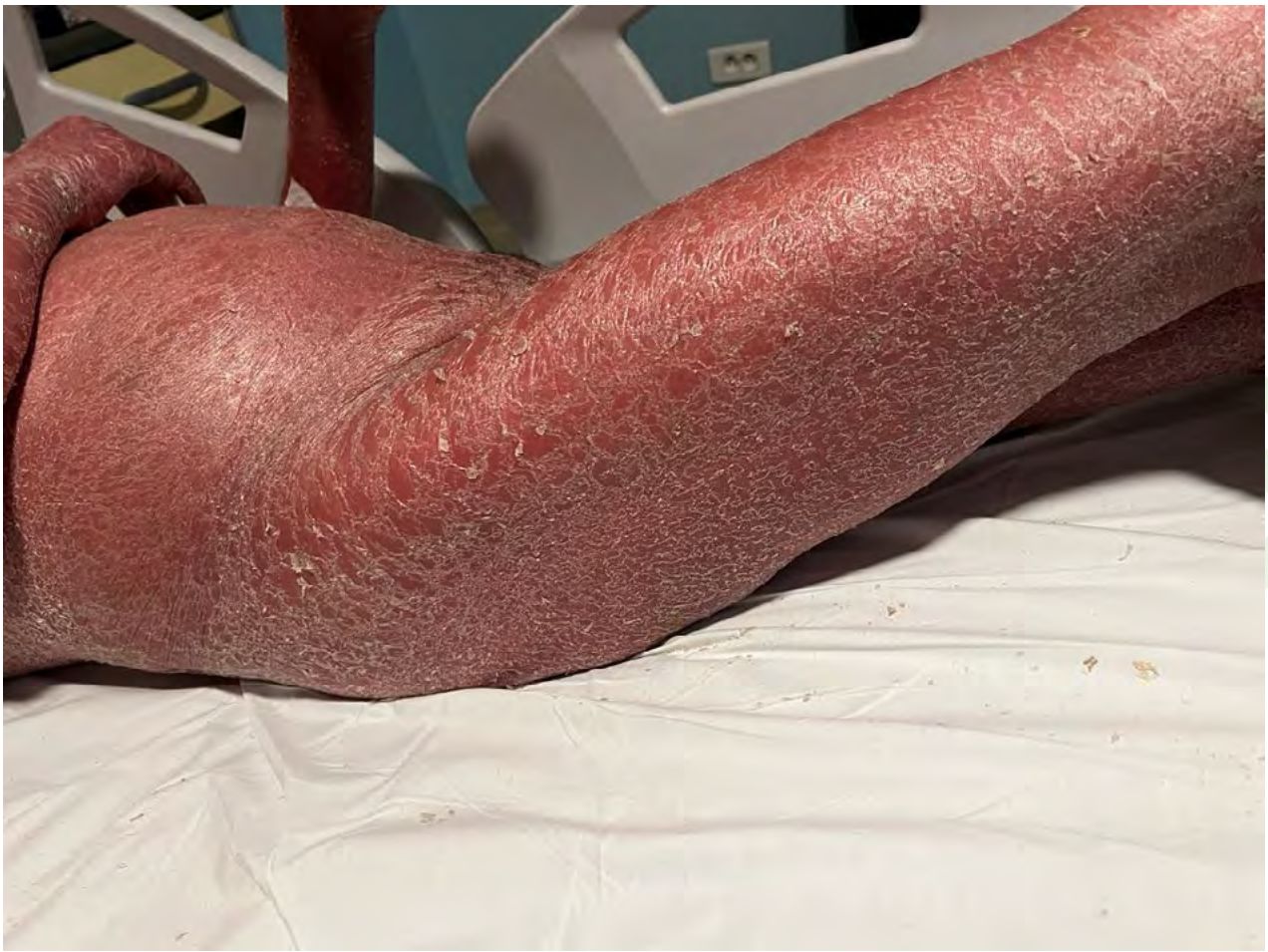

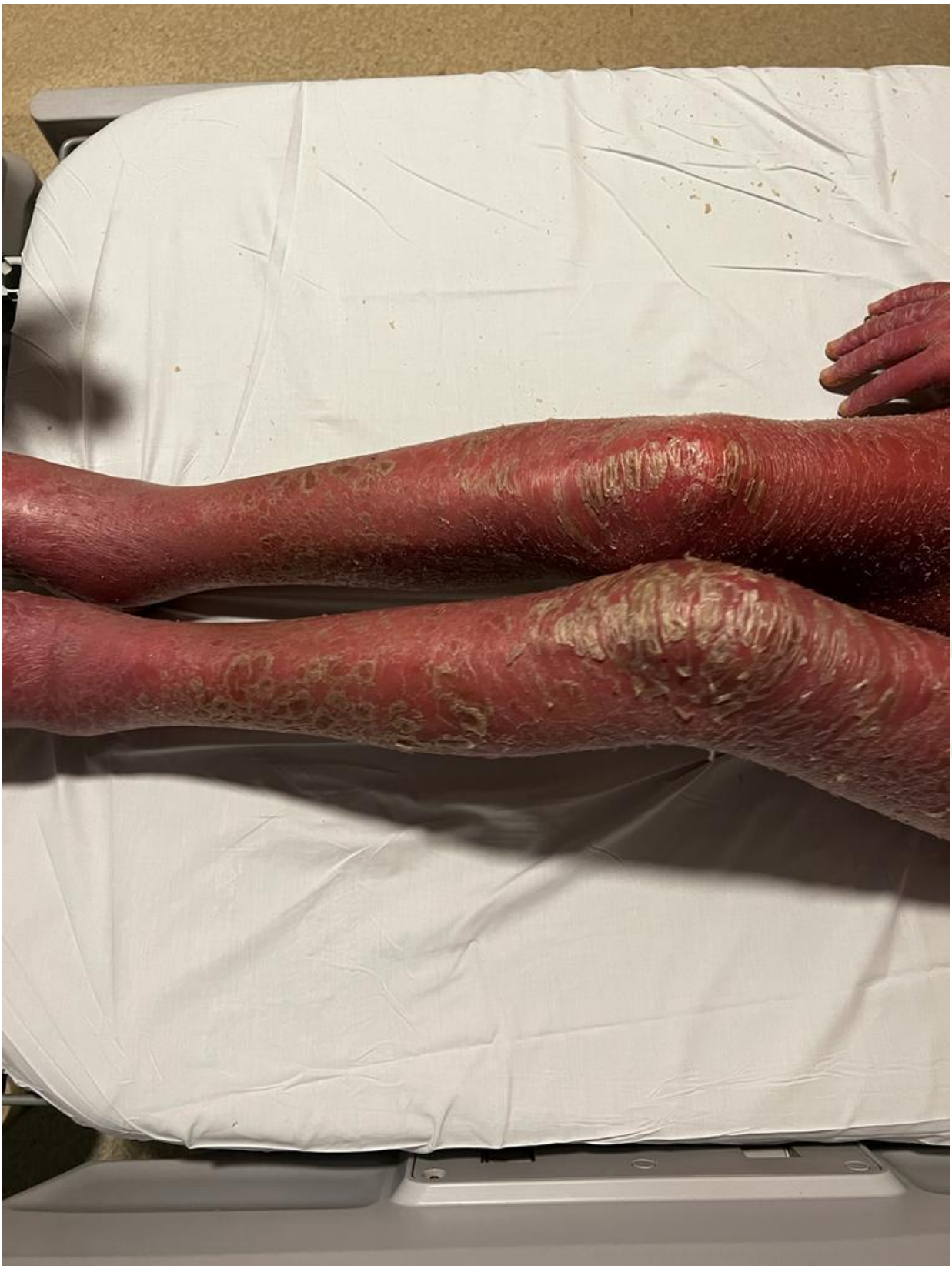

Abstract N°: 845

Title: Pityriasis lichenoides chronica following Covid19 vaccination

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Introduction

Pityriasis lichenoides is a group of rare inflammatory dermatosis of unknown etiology, it can be triggered by an infectious agent or a drug. We report in this case the observation of a pityriasis lichenoides chronica induced by the anti-Covid 19 vaccine.

Materials and methods

Results

A 62-year-old man, without any previous pathological history, was referred to a dermatology consultation for non-pruritic skin lesions that had been evolving for 3 months, occurring 15 days after the 2nd dose of anti-Covid 19 vaccination. The patient denied any newly introduced drug that could have been given either simultaneously or prior to vaccination. On clinical examination, there were small, finely scaly, erythematous papular lesions on the trunk, back, and lower extremities, as well as hyperpigmented scarring lesions. There was no involvement of mucous membranes or skin.

The skin biopsy showed an acanthosic of the epidermis with orthokeratotic hyperkeratosis, parakeratosis, spongiosis and lymphocyte exocytosis with a perivascular mononuclear inflammatory infiltrate with extravasation of red blood cells. Direct immunofluorescence was negative for IgG, IgM, IgA and C3.

The pharmacovigilance investigation concluded that the vaccine was plausibly responsible. The patient was treated with topical steroids and oral doxycycline with good evolution. The current follow-up is 06 months.

Discussion

Pityriasis lichenoides is a rare skin disease characterized by a spectrum of clinical manifestations ranging from acute (pityriasis lichenoides et varioliformis acuta) to chronic (pityriasis lichenoides chronica) features.

The etiology of pityriasis lichenoid is unknown. It has been suggested that it is an inflammatory response to extrinsic antigens, such as infectious agents, drugs, and vaccines.

Three cases of pityriasis lichenoides and varioliformis acuta following Covid 19 vaccination have been described in the literature, but no case of pityriasis lichenoides chronica has been reported to date. In our case, the rash occurred 15 days after vaccination and evolved over several months as a chronic form of pityriasis lichenoides. As our patient was seen 3 months after the onset of the rash, it is difficult to determine whether the clinical resolution observed is related to the treatments initiated or to the natural course of the disease.

Pityriasis lichenoides chronica is an inflammatory dermatosis that creates a serious problem in the diagnosis and management of the disease. Several therapeutic modalities are available but large randomized trials are still needed.

Abstract N°: 871

Title: Review of patient feedback of a new video consultation system developed during the COVID-19 pandemic

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Introduction

The COVID-19 pandemic led to significant disruption in the delivery of outpatient services. The need to reduce footfall and ensure social distancing across hospital sites severely restricted face-to-face activity. However large numbers of new referrals and patients requiring specialist review continued.

The pandemic also presented the opportunity to develop new services in partnership with patients. By embracing technology, our Dermatology department introduced video consultations. We present results of patient feedback evaluating this new service and discuss benefits and areas for development.

Materials and methods

A questionnaire with 52 responses was analysed from patients attending doctor and nurse led video appointments. These include new "routine" appointments and review patients. Responses were received from patients, and parents/guardians.

Results

The feedback received was overwhelmingly positive. A decrease in patient expenses, travel time and increased convenience were key findings, as well as noting it allowed some patients to receive treatment they otherwise would not have done. 94% of respondents would recommend the use of video consultations to a relative and 69% indicated they would not like to return to face-to-face appointments alone, but would prefer a blended approach of both face-to-face and virtual appointments while a further 12% indicated that they would be like their ongoing appointments to be solely by video consultation. Respondents found communication easier by video than by telephone and noted the use of technology decreased the risk of hospital acquired infection and exposure to COVID-19 which they greatly appreciated.

Discussion

This study demonstrates that patients are satisfied with video reviews. While face-to-face care remains the gold standard and is essential in certain circumstances, when appropriate patients should be offered the choice of using video technology if we are to deliver patient centred care.

Abstract N°: 878

Title: The dermatological manifestations of COVID 19

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Introduction

Since the beginning of the pandemic, many skin manifestations associated with COVID-19 have been reported. However, new reports show that COVID-19 can lead to autoimmune and auto-inflammatory diseases, especially dermatological diseases. We report the experience of the dermatology department of the CHU Ibn Rochd of Casablanca during this pandemic.

Materials and methods

This is a prospective study conducted by the dermatology department of the CHU Ibn Rochd of Casablanca since the beginning of the pandemic, including 16 patients with dermatological manifestations related to COVID-19.

Results

A total of 16 cases were collected, in which SARS-COV2 infection was confirmed by positive RT-PCR in 81.25% of cases, chest CT in 18.75% of cases, and serology in 12.5% of cases. The sex ratio was 0.45. The mean age was 36.93 years. The COVID score ranged from 0.1 to 7 with an average of 0.8. Positive contact was found in 68.8% of cases.

93.75% of the cases had general symptoms.

Skin involvement was variable: maculopapular rash in 50%, purpura in 31.25%, pustular rash in 18.75%, urticaria in 6.25%, varicella-like rash in 6.25%, necrotic lesions of the face in 6.25%, bullous lesions in 6.25%, PRG-like lesions in 6.25%. Mucosal involvement was observed in 50%: oral erosions in 43.75%, conjunctivitis in 31.25%. Telogen effluvium was found in 25%.

Moreover, autoimmune diseases were triggered by COVID 19: systemic lupus erythematosus in 12.5% of cases, associated with APL Sd in 6.25% of cases, psoriasis in 12.5% of cases, universal alopecia in 6.25% of cases (which relapsed after COVID 19 vaccination despite continued treatment), and Pemphigus Vulgaris in 6.25% of cases.

Toxidermia was potentiated by SARS-COV 2 infection in 25% of cases: Stevens-Johnson sd in 12.5% of cases, PEAG and DRESS sd in 6.25% each.

The average time between the onset of symptoms and the dermatological manifestations was 22.25 days. Dermatological involvement revealed SARS COV 2 infection in 37.5% of cases.

12.5% of cases required intensive care treatment. 12.5% of cases died.

Discussion

Dermatological involvement in COVID 19 remains rare with a worldwide incidence of 1-2%. This could be explained by the low proportion of ACE2 receptors of the virus in the skin compared to the alveoli, and also by an under-reporting of cases of cutaneous manifestations due to their lesser severity.

The cutaneous manifestations have been classified into 3 groups: paraviral eruptions (maculopapular exanthema, urticaria, PRG-like eruption...), varicelliform eruption, and vasculitic eruptions (chilblain-like, purpura, livedo, necrosis...), with the possibility of overlapping

Mucosal involvement is rarely described and can be aphthoid, herpetiform, oral erosions, conjunctivitis...

Telogen effluvium post-COVID has also been described and has been associated most often with severe forms of infection.

Furthermore, autoimmune diseases can be triggered by COVID 19 in genetically predisposed patients, as a result of the activation of an aberrant immune response by the SARS-CoV-2 induced cytokine cascade.

However, toxidermia can also be potentiated by SARS-CoV-2 infection via complex immune reactivations, even in the absence of prior sensitization in genetically predisposed subjects.

Conclusion

The interest of this work is to describe the dermatological manifestations of COVID 19, and to alert clinicians to its potential association with autoimmune and autoinflammatory diseases, as well as toxidermia.

Abstract N°: 893

Title: The use of COVID19 Vaccination in patients taking immunosuppresive and immunodulatory therapies

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Introduction

Patients with immune-mediated dermatoses may require long-term immunosuppressive therapy and/or immunomodulatory therapy. In this study, we identified the prevalence of vaccination in these patients and collected the reasons for vaccine reluctance.

Materials and methods

This is a cross-sectional study including all patients who have received or are receiving immunosuppressive or immunomodulatory treatment in the dermatology department of the Mohamed VI University Hospital of Oujda, from February 2014 to February 2022. We contacted the patients using a questionnaire with 14 questions, written in French, and translated into dialectal Arabic.

Results

We collected 91 patients. The mean age was 57.6 years and the sex ratio M/F was 1.3. The treatment received by almost two thirds of our sample (60 patients) was long-term corticosteroid therapy, followed by Methotrexate (33 patients), Rituximab (19 patients), Secukinumab (3 patients), Everolimus (4 patients) and Adalimumab (1 patient). Regarding the SARScov2 vaccine, 43.9% of patients were not vaccinated. This was due to lack of experience with the vaccine according to 12 patients and fear of side effects according to 31 patients. Eleven patients thought that they were receiving a dangerous treatment and were afraid of an interaction with the vaccine. Three patients refused to be vaccinated because they felt their health was fragile and 5 thought it was a biological weapon to control population growth and that they were test subjects for developed countries. COVID-19 vaccines were considered less safe and less effective than other vaccines by 62% of respondents. Finally, social networks were the main source of information about the vaccine for 54% of our patients, followed by family and friends (35%), and lastly the doctor (11%).

Discussion

In Morocco, more than 52 million doses of vaccine have been administered to date, yet we note a 16.4% non-vaccination rate in the eastern region. Concerns about vaccine safety, side effects, and efficacy are common and were expressed by 77.5% of our sample. In a study conducted in 15 countries by the African Center for Disease Control and Prevention, 43% of respondents believed that they had been used as test subjects for vaccine trials. In our study, 12.5% of our patients thought the same. In France, the results of the CoviPrev survey show that 36% of respondents did not wish to be vaccinated and the reasons were: vaccine safety (67%); preference for other means of prevention such as barrier gestures (33%); anti-vaccination behavior in general (18%). The use of immunomodulatory treatments has been the subject of much discussion in the scientific community. Several

professional societies have proposed advice for Sarscov2 vaccination in these patients. One study recommends vaccination of patients on Rituximab 12 to 20 weeks after the end of a treatment cycle or to space out its administration. The psoriasis group of the French Society of Dermatology recommends that psoriasis patients with no known allergy to vaccines be vaccinated against SARS-CoV-2. About the change in vaccine efficacy, good antibody levels were observed after vaccination in patients taking Secukinumab. In contrast, Adalimumab,and Ustekinumab were associated with a significant decrease in antibody levels. For systemic corticosteroids and methotrexate, they seem to have a higher risk of reduced antibody production.

Abstract N°: 922

Title: Lichen planopilaris (LPP) due to COVID- 19 infection

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Introduction

Materials and methods

Results

The muco-cutaneous manifestations of COVID-19 are being remarkably described. However, few reports of lichen planus among COVID-19 patients were reported. Lichen planus is an idiopathic and autoimmune disease implicating the skin, oral and genital mucosa, scalp, and nails. Lichen planopilaris (LPP) is considered a follicular form of lichen planus affecting the scalp and hair. It is characterized by scaly skin and redness around hair follicles, accompanied by itching or burning and rarely pain on the scalp. We report a unique case of lichen planopilaris following COVID-19 infection. A 47-year-old female presented to the dermatological department with a 2-months history of focal hair loss at the vertex areas of the scalp. The patient had a medical history of hypothyroidism under treatment. She denied applying traction to the areas of hair loss or using any medication before the onset of hair loss. The patient reported a history of COVID-19 infection one month before the appearance of the lesions. Physical examination of the scalp revealed erythematous and hyperkeratotic follicles at the periphery of areas of alopecia and markedly reduced follicular ostia. The oral cavity and nails were not affected. Dermoscopic evaluation of the scalp showed perifollicular keratin plugs, granular grey dots, white dots, and crystalline structures predominantly around the hair follicles. In view of the above findings, a diagnosis of lichen planopilaris was made. The diagnosis was also confirmed by biopsy and an administration of hydroxychloroquine and potent topical corticosteroids was decided. To the best of our knowledge, this is the first report describing the correlation between COVID-19 infection and lichen planopilaris. It is important to report this uncommon complication of COVID-19 infection, as the health practitioners must be suspicious about the probably rising incidence of lichen planopilaris during the COVID-19 pandemic.

Discussion

Abstract N°: 943

Title: Acute febrile neutrophilic dermatosis after SARS-CoV-2-Vaccination

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Introduction

Acute febrile neutrophilic dermatosis (AFND), most commonly known as Sweet syndrome, is an uncommon inflammatory disease, characterized by the rapid onset of edematous and erythematous papules or nodules on the skin. Frequently, fever and leukocytosis are associated to the skin lesions. Several cases of AFND have been reported after influenza and pneumococcal vaccination. A 40-year-old Caucasian female was admitted to our clinic. She developed erythematous papules on the forehead, chest, and arms one week after the second dose of Comirnaty©. The patient complained also of fever and diffuse joint pain. Her medical history was not relevant for any dermatological or systemic diseases, and she was exclusively on paracetamol because of fever and joint pain. Laboratory findings revealed leukocytosis and enhanced CRP. Swabs from lesions on the chest did not detect any virus, including HSV, VZV, and CMV. In addition, HBV, HCV, HIV, and syphilis were ruled out. A punch biopsy of a lesion on the chest showed a dense infiltrate of neutrophils in the upper and mid-dermis with leukocytoclasis. Therefore, a diagnosis of acute febrile neutrophilic dermatosis after SARS-CoV-2-Vaccination was established. The patient was successfully treated with oral systemic steroids (1mg/kg) and NSAID.

Discussion

AFND most commonly known as Sweet syndrome, is an uncommon inflammatory disease, characterized by the rapid onset of edematous and erythematous papules or nodules on the skin. Frequently, fever and leukocytosis are associated to the skin lesions. In addition, eyes, musculoskeletal system, and internal organs may be involved. AFND has been described in association with several disorders, including infections, inflammatory bowel diseases, malignancies. In addition, several drugs, including diazepam, diclofenac, furosemide, and granulocyte-colony stimulating factor may induce AFND. Furthermore, several cases of AFND have been reported after influenza and pneumococcal vaccination. To establish a diagnosis of AFND two major criteria and two of four minor criteria are required. According to the skin features, several differential diagnoses should be ruled out, including cutaneous infections, drug eruptions, erythema nodosum, other neutrophilic dermatoses, and halogenoderma. The pathogenesis of AFND is not completely known. Several factors may play a role in its onset, including hypersensitivity reactions, cytokine dysregulation, and genetic susceptibility. Systemic glucocorticoids are considered first-line treatment. Local therapy with topical steroids may also be used in patients with widespread cutaneous lesions. In addition, colchicine, dapsone, and potassium iodide could be used as second-line therapy. In the literature, several cases of AFND after vaccination have been reported, including three cases after influenza vaccination. Furthermore, Torrealba-Acosta et al. reported a case of AFND after the first dose of mRNA-1273 vaccine from Moderna. In this case, the patient also developed an acute encephalitis and myoclonus. In addition, one case of AFND after COVID-19 Infection was reported. Berro et al. described the acute onset of painful, dark erythematous plaques in a 51-year-old woman affected by COVID-19 nine days after stopping corticosteroids. To our best knowledge, only a few cases of AFND after Comirnaty© have been described.

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Abstract N°: 968

Title: Morphea after covid 19 vaccine : A new case report

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Introduction

Current health conditions have contributed to the development of a new vaccine against covid 19, which like any other vaccine that causes side effects. Morphea reflects fibrosis of the dermis and sometimes of the underlying tissues with no recognized cause. Several factors are incriminated in its occurrence, but post-vaccination forms remain rare.

We report a new case of morphea post-vaccination against Covid 19.

Materials and methods

A 59-year-old female patient, without any particular pathological history, presented 3 weeks after the second dose of the Covid 19 vaccine "Sinopharm" a cutaneous induration in patches on the left arm (next to the injection site) then the abdomen. Clinical examination revealed pearly white patches slightly infiltrated, sclerotic to palpation, measuring 4 cm in diameter with pigmented patches on the left arm, abdomen and thighs. The lesions were painless and

did not hinder the movements of the limb.

The anatomopathological examination of a skin biopsy showed an aspect in favor of morphea. . Antinuclear antibodies and anti-Scl70 were negative

Results

The patient was put on oral corticotherapy at 30mg/day at a rate of 0.5mg/kg /day in addition to Methotrexate at 15 mg/week and adjuvant therapy with a good clinical evolution (regression of induration; joint mobility was preserved) .

Discussion

The interest of our observation lies in the novelty of the factors of occurrence during the present circumstances.

In adults, a drug or traumatic factors have been invoked in a few observations with lesions localized at the injection sites (vitamin K, vitamin B12, pentazocine...) or at a distance (bisoprolol, bleomycin, peplomycin, D penicillamine, balicatib, recombinant interleukin 2, L-5-hydroxytryptophan and carbidopa...). Few cases of post-vaccination morphea have been described and no post-Covid 19 cases have been reported to our knowledge. A profibrotic, ischemic or toxic effect of these drugs has been evoked to explain their possible inducing effect of morphea. Treatment is based on clinical subtype and extent of involvement. Our patient was put on oral corticosteroids and methotrexate with a good clinical evolution.

Abstract N°: 1022

Title: Auto-immune bullous dermatosis after COVID-19 vaccination

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Introduction

Autoimmune bullous diseases is an autoimmune disease characterized either an intraepidermal detachment (pemphigus group of disorders) or by a subepidermal one (pemphigoid group of disorders). Several factors can trigger this disease, including vaccines ; but this entity remains very rare. A few cases have been reported in the literature. We report five cases of autoimmune bullous diseases triggered by COVID-19 vaccine.

Observation

Five patients (3 females and 2 males), were admitted for management of extensive bullous lesions and post-bullous erosions. They all had previously received the COVID 19 vaccine (3 patients had Astra-Zeneca vaccine and 2 patients Pfizer vaccine). The clinical and histopathological examinations confirmed the diagnosis of bullous pemphigoid in 3 patients and the diagnosis of pemphigus in 2 patients (one with pemphigus vulgaris and one with superficial one). According to the French method of imputability, the pharmacovigilance investigation showed an I5B4 causality assessment score for the vaccines, interpreted as highly probable, for all the patients. The diagnosis of vaccine-induced autoimmune bullous dermatosis was made. One patient progressed well on dermocorticoids alone, while the four others required oral corticosteroid therapy at 0.5 mg/kg/day, with a favorable outcome.

Discussion

Precipitating factors, such as vaccines, could induce or exacerbate autoimmune bullous diseases in the context of several predisposing factors. Indeed, the mechanism for induction in response to vaccine is not very well understood. As for inactivated vaccines, the main mechanism by it provides immunity is the humoral pathway by stimulation of B-lymphocytes, leading to the production of antibodies. As for mRNA vaccine, besides the mechanism of molecular mimicry, it may give rise to a cascade of immunological events eventually leading to the aberrant activation of the innate and acquired immune system. To conclude, vaccine-associated autoimmunity is a well-known phenomenon attributed to either the cross-reactivity between antigens or the effect of adjuvant. We hypothesize that vaccination with COVID-19 triggers an immunological response in genetically predisposed individuals. This type of dysregulation is then reinforced by other autoimmune mechanisms. COVID-19 vaccine probably needs to be added to the list of vaccine triggers of AIBD. However, given the risks of SARS-CoV-2 infection, the rarity of these events, and the uncertainty of causality, clinicians should encourage full vaccination, including completion in those with induced blisters after the first dose. This being said, studies on the effect on immunosuppressants on IgG antibodies titers on the short and the long term are needed.

Abstract N°: 1037

Title: Psoriasis in COVID-19 era: Impact of SARS-CoV-2 infection and COVID-19 vaccination in the patients with psoriasis

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Introduction

Coronavirus 2019 (COVID-19) caused by SARS-CoV-2 has affected the health system worldwide. This pandemic has led to repercussions in psoriatic patients on a clinical and therapeutic level. The objective of this study was to evaluate the epidemiological data, clinical and therapeutic modalities of psoriasis patients during the pandemic period.

Materials and methods

Sixty psoriatic patients followed at the dermatology department of the Ibn Rochd University Hospital in Casablanca were included in this study. All were telephoned or interrogated during their consultation or hospitalization. A questionnaire was established including the demographic data of the patients, the disease features, the notion of SARS-CoV-2 infection and COVID-19 vaccination as well as the evolutionary character of the disease after infection or vaccination.

Results

Among the 60 patients, 34 (56.7%) were women and 26 (43.3%) were men. The mean age of the patients was 41.6 years with extremes ranging from 6 to 73 years. 11 patients (19.3%) had diabetes, 4 (7%) were followed for dyslipidemia and 6 for obesity. 35 (59.3%) were followed for psoriasis vulgaris, 6 for guttate psoriasis, 9 for pustular psoriasis, 5 followed for psoriatic arthritis and 5 for erythroderma. 79.6% of the patients had asymptomatic COVID 19 infection, 18.4% had mild symptoms and only 1 patient was hospitalized in an intensive care unit for severe infection. 26 patients (38.2%) were under systemic treatment, 11 of them had to stop their treatments during the course of the infection due to concerns. The clinical course was marked by an exacerbation of the erythematosquamous lesions in 9 patients (16.7%) with a mean interval of 5 days. Concerning the anti-COVID-19 vaccination, 46 patients (76.7%) were vaccinated; an exacerbation was noted in 6 patients (13%), 4 of them after the 2nd dose.

Discussion

Patients with SARS-CoV-2 have increased plasma concentrations of inflammatory cytokines, particularly interleukins 2, 7 and 10. The increase in these cytokines is also implicated in the etiopathogenesis of psoriasis, which may suggest that COVID-19 is a source of exacerbation of this dermatosis. Vaccines against COVID-19 are essential to face this pandemic. A few cases have been reported in the literature of worsening of pre-existing psoriasis after vaccination, however the mechanisms involved remain poorly elucidated. The fear of incurring severe consequences following COVID-19 infection may have prompted some patients to discontinue treatment without consulting their dermatologist.

Limitations of this study include the inability to establish causality. Therefore, it would be essential for

dermatologists to closely monitor COVID-19-infected patients as well as those vaccinated, and to remain aware of national and international guidelines.

Abstract N°: 1042

Title: Pityriasis Lichenoides Chronica related to COVID-19 vaccine

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Introduction

Pityriasis lichenoides (PL) is a rare, benign inflammatory cutaneous disorder, typically manifesting with two main clinical entities; pityriasis lichenoides et varioliformis acuta (PLEVA) and pityriasis lichenoides chronica (PLC).

Although the etiology of the disease remains unknown, several factors such as infections and vaccines have been implicated in its etiopathogenesis. Specifically, there are reports on PL after vaccination against MMR, influenza, HPV, tetanus and diphtheria. Lately, also BTN162b2 COVID-19 vaccine has been added in the list of potential triggers of the disease.

Materials and methods

Herein, we present the case of a 27-year-old, otherwise healthy, woman who visited the outpatient clinic of our hospital, seeking dermatological advice for an asymptomatic skin eruption that appeared a few days after the second dose of the BTN162b2 COVID-19 vaccine. The patient reported no previous or concomitant drug intake, or past medical history of adverse events to drugs or vaccines.

Results

Clinically the eruption was characterized by numerous, discrete erythematous macules and reddish-brown, scaly papules, scattered over the face, trunk and extremities; scalp, mucosa, palms and soles were spared. Further physical examination disclosed no systemic findings and laboratory tests were unremarkable. The clinical suspicion of PLC was established by the histologic examination of a skin sample, revealing features consistent with the aforementioned diagnosis.

The patient underwent treatment with oral doxycycline and achieved complete remission after 2 months.

Discussion

So far, the most common cutaneous side effects associated with COVID-19 vaccines include local injection site reactions, delayed large local reactions, urticaria and morbilliform rashes. However, as vaccination rates increase, reports on vaccine-related dermatologic adverse events are constantly emerging.

To date, there are scarce case reports of PL following BTN162b2 vaccine against COVID-19, all of them classified as PLEVA. However, to the best of our knowledge, this is the first report of histopathologically confirmed PLC, triggered by vaccination against COVID-19.

As we emphasize the importance of COVID-19 vaccination, physicians should be aware of this rare cutaneous adverse reaction that may occur after vaccination, in order to early recognize and properly manage this condition. Furthermore, histopathologic confirmation of the diagnosis, as in our patient, contributes to a more precise classification of the COVID-19 vaccines-related adverse effects.

Abstract N°: 1052

Title: Cutaneous adverse events of COVID-19 vaccines: A case series

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Cutaneous adverse events of COVID-19 vaccines: A case series

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Introduction

Mass vaccination against COVID-19 is the key to achieving herd immunity and ending the pandemic. However, cutaneous side effects with varying severity have been reported. Therefore, their recognition is crucial in order to better educate patients and initiate appropriate management. Herein, we report 13 cases of dermatologic manifestations of COVID-19 vaccines

Materials and methods

A retrospective monocentric observational study was conducted in Charles Nicolle Hospital including all patients that presented with a cutaneous manifestation after COVID-19 vaccination over a period of 10 months (March to December 2021). We excluded patients with immediate and/or delayed local site injection reactions.

Results

Twelve patients: 6 men and 6 women were included. The average age was 53 +/-12 years old with a median of 49,5 years old. The vaccines involved were mRNA vaccines (Pfizer / Moderna) in all cases. The average time of the apparition of skin signs was 7 days. The skin manifestations observed were a maculopapular morbiliform rash in 3 cases, a pityriasis-rosea like exanthem in 3 cases, an eczematiform rash in 3 cases, fixed drug eruption in one case, a herpes zoster reactivation in one case and a SDRIFE syndrome in one case. In all these patients, cutaneous manifestations were more likely to affect the trunk and members. Symptoms resolved under topical steroids in all cases. Histopathological examination revealed, scattered degenerated apoptotic keratinocytes, patchy areas of basal cell degeneration and perivascular inflammatory cell infiltrate with some eosinophils.

Discussion

Various skin reactions were reported following COVID-19 vaccines including local site and delayed large local reaction, urticaria, morbilliform purpuric and/or oedematous rash, erythromelalgia, pernio/chilblains, vasculitis. In our study, we reported in addition to maculopapular rash, pityriasis-rosea like eruptions and eczematiform rash a case of FDE and a case of SDRIFE syndrome related to COVID-19 vaccines which has rarely been reported. Serious cutaneous side effects are exceptional. Therefore, our results are consistent with the data already published.

It is crucial for healthcare providers, particularly dermatologists, to recognize these cutaneous side effects related to COVID-19 vaccines which do not imply a cessation of the vaccination protocol.

Abstract N°: 1057

Title: Erythema Multiforme like Lesions and COVID-19

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Introduction

Materials and methods

Results

A 27 year old man presented to Accident and Emergency with an itchy rash over the thighs and buttocks. This followed two days of fever, headache and malaise. His past medical history was unremarkable and there was no regular medication use. He was unvaccinated. There was no history of previous erythema multiforme or HSV infection. He was febrile but otherwise haemodynamically stable. Clinically over the thighs and buttocks there was a symmetrical rash consisiting of striking urticated targetoid lesions. Some had a dusky center and had coalesced over the thighs. There was no mucosal involvement.

A SARS-CoV-2 PCR test was positive. Mycosplasma serology and swabs for HSV were negative. Other bloods were unremarkable. A skin biopsy from affected skin showed spongiosis and a mild dermal lymphocytic infiltrate . There was an absence of necrotic keratinocytes. He was treated with 5 days of prednisolone (30mg) and potent topical steroids. There was complete clinical resolution of the rash in a week.

In the published literature there are a small number of EM like eruptions in the context of COVID-19 infection. Similar to our patient, skin biospies often show features not typical of erythema multiforme, including spongiosis and a lymphocytic perivascular and interstitial infiltrate 1,2. Lack of keratinocyte necrosis is a common feature 2. COVID-19 associated erythema multiforme can also be associated with chilblain-like lesions. Like our patient, reported cases show rapid recovery with no recurrence.

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Discussion

Abstract N°: 1061

Title: Bilateral Localized Acneiform Eruption Due to Coronavac Vaccine

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Introduction

Materials and methods

Results

Abstract

Since the beginning of 2020, the Covid 19 pandemic has become a problem affecting the whole world. At the end of 2020, vaccines that will provide the immune system response have started to be developed. However, with the widespread use of vaccines, vaccine-related side effects began to be reported. Coronavac vaccine, one of these vaccines, is an inactivated virus vaccine. After vaccination with Coronavac, side effects such as pain at the injection site, weakness, headache, muscle-joint pain, fever can be seen. Post-vaccine pitriasis rosea, flexural exanthema are among the other reported skin reactions.

A 43-year-old male patient applied with the complaint of acne-like rash and burning on the face that started 2 days after receiving the second dose of Coronavac vaccine. There was no disease or drug use in his history. When questioned, it was learned that on the 3rd day after the 1st dose of vaccination, there was a similar rash on the left side only, but it regressed spontaneously within 3-4 days, but the rash still continued on the 8th day after the 2nd dose. His dermatological examination, a pustular-acneiform eruption was observed on an erythematous background in the bilateral preauricular region of the face. It was considered as a vaccine-induced pustular drug reaction/acneiform eruption. Oral antihistamine drugs, triamcinolone acetonide and topical treatments were given symptomatically.

As a result, fixed and acneiform drug eruption due to Coronavac has not been previously reported in the literature.

Discussion

Abstract N°: 1069

Title: eosinophilic fasciitis post covid 19 vaccine

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Introduction:

Eosinophilic fasciitis or Shulman syndrome is a rare connective tissue disease described by Shulman in 1974, characterized by symmetrical cutaneous and subcutaneous induration and hypereosinophilia. The diagnosis is clinically suspected, verified by MRI and confirmed by histology.

We report the case of a 66-year-old female patient who presented eosinophilic fasciitis post COVID 19 vaccination.

Observation:

A 66-year-old female patient, with a history of high blood pressure, presented 10 days after her second dose of COVID 19 vaccine, an intense pruritus, followed by an induration and hyper-pigmentation on the abdominal region extending progressively to the proximal limbs.

The clinical examination revealed symmetrical, hyper-pigmented and sclerotic lesions, avoiding face and fingers, associated with bilateral and diffuse swelling of lower limbs, without any detectable visceral involvement.

The biological findings showed an elevated sedimentation rate with a significant hypereosinophilia at 2950/ul, and a positive antinuclear antibodies at 640.

The full skin to fascia biopsy showed significant fibrosis extending to the hypodermis, associated with a perivascular inflammatory infiltration composed by lymphocytes and eosinophilics.

The MRI aspect revealed a thickening with edematous infiltration of soft tissues and the superficial and deep fascias.

The patient was treated with prednisone 1 mg/kg/day, combined with methotrexate 10 mg/week.

Discussion

The originality of our observation is the rarity of eosinophilic fasciitis and its association with COVID 19.

Eosinophilic fasciitis is a rare scleroderma syndrome that can occur at any age. The onset is often abrupt, and a triggering factor, such as intense physical effort or trauma, is noted in 30% to 46% of patients.

However, very few cases of post-vaccination eosinophilic fasciitis have been reported, and the etiopathogeny of this condition remains unknown, although an autoimmune mechanism is presumed. It is due to the presence of hypergammaglobulinemia, steroid response and the presence of rheumatoid factor, antinuclear antibodies and immune complexes in some cases.

Abstract N°: 1070

Title: erythema multiforme post covid19 vaccine

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Erythema multiforme post Covid-19 vaccine

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Introduction:

Erythema multiforme is an acute, immune-mediated reaction that involves the skin and sometimes the mucosa.

We report the case of a 66-year-old patient with erythema multiforme following COVID 19 vaccine.

Observation:

A 66-year-old patient, chronic tobacco user, with no history of recurrent labial herpes, presented an acute skin rash two days after his second dose of COVID 19 vaccine associated with headaches and fever.

The physical examination revealed a target or iris lesions characterized by erythematous, ring-shaped plaques, centered by bullae, located on the back, trunk and dorsal surfaces of hands; associated with nasal mucosal erosions and diffuse urticarial lesions.

The biological findings showed a minimal inflammatory syndrome and herpes serology was negative.

The Chest CT did not show any abnormalities.

Treatment with antihistamines and corticosteroids was instituted with good clinical evolution.

Discussion:

The originality of our observation is the rarity of erythema multiforme post COVID 19 vaccine.

Erythema multiforme is a widespread hypersensitivity reaction that occurs with varying degrees of severity, most often post-infectious, essentially to herpes simplex virus or Mycoplasma pneumoniae. However, some reviews on isolated cases or small series have shown that some vaccines can be incriminated, in particular vaccines against hepatitis B, rubella, HPV, influenza... Also, some Isolated cases of erythema multiforme have been described as newly analyzed side effects of the vaccine COVID 19.

In our case, in the absence of etiological factors, we have implicated the COVID 19 vaccine in the occurrence of erythema multiforme.

Abstract N°: 1071

Title: herpetic gingivostomatitis during covid 19

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Introduction:

Herpetic gingivostomatitis is an orofacial infection usually occurs in infants and young children during primary herpes infection. More than 90% of cases are caused by HSV type 1.

We report the case of a 77-year-old patient who presented herpetic gingivostomatitis during COVID 19 infection.

Observation:

A 77-year-old female patient, with history of recurrent labial herpes and type 2 diabetes, vaccinated from sars-cov-2, was hospitalized in the intensive care unit for COVID 19 pneumonia with a positive oropharyngeal swab for COVID-19 testing and bilateral ground-glass opacities on chest computed tomography.

17 days after her hospitalization, the patient presented painful oral ulcerations.

On intraoral examination, vesicles spherical clustered coated with crust were present on the lips;

associated with scalloped-border ulcerations covered by a yellowish membrane on the anterior surface of tongue, labial commissures and the lower labial mucosa.

Tzanck smear showed ballooning multinucleated giant cells which is in favor of a herpetic infection.

On the basis of clinical features and the patient's medical history, diagnosis of secondary herpetic gingivostomatitis in the context of COVID-19 infection was made.

Treatment with acyclovir 10mg/kg/j was started immediately and the patient responded well showing healing of the lesions after 2 weeks.

Discussion:

Acute herpetic gingivostomatitis usually occurs in infants and children, with most adults having developed immunity to HSV after an infection during childhood.

Secondary herpetic infection may occur due to later reactivation of the latent virus. The virus remains dormant in the trigeminal ganglion until it is reactivated by a stimulus, such as exposure to sunlight, recent dental treatment, physical/emotional stress or febrile illness.

In our case we believe that the COVID-19 infection and prolonged inpatient care were causal factors of stress induction and immunosuppression, leading to Secondary herpetic gingivostomatitis.

Abstract N°: 97

Title: Comparison of severity of arsenical skin lesions in arsenicosis associated with and without skin carcinoma

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Introduction

Skin cancer in arsenicosis has been well documented over the past several decades. As our body's' response to arsenic exposure varies among individuals, so even at the same level of exposure the severity of skin lesions varies and not all develop skin cancer.

Materials and methods

In this case control study, thirty two arsenicosis with skin cancer individuals were taken as case and 32 arsenicosis without skin cancer individuals were taken as control.

Results

About 78.1% skin cancer occurred in the covered part of the body and 21.9% occurred in sun exposed part. Bowen's dsease was common (56.3%), followed by squamous cell carcinoma (34.4%) and basal cell carcinoma (9.4%). Regarding pigmentation 21.9% of cases had mild, 65.6% and 12.5% had moderate and severe skin pigmentation respectively, where as 62.5% of control had mild, 37.5% had moderate pigmentation and none had severe pigmentation. 43.8% case had mild keratosis, 40.6% had moderate keratosis and rest had severe keratosis. In control group, 65.6% had mild keratosis, 31.3% had moderate and remaining 3.1% had severe keratosis.

Discussion

Pigmentation was more pronounced in arsenicosis with skin carcinoma whereas palmoplanter hyperkeratosis was comparable in both groups.

Abstract N°: 147

Title: Remarkable association between Primary cutaneous B-cell lymphomas and other skin cancers: results from a multicenter cohort study

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Introduction

In the last years an increased interest in the potential association between cutaneous lymphoma and the development of other malignancies has been mainly focused on patients with Mycosis Fungoides. However, data assessing this occurrence in Primary Cutaneous B-cell lymphomas (PCBCL) are still scarce. Rates of 16% and 25% of PCBCL patients developing other primary cancers have been previously reported in the literature, suggesting a potential association. Whether a dysfunction of cancer surveillance or immunosuppressive drugs should be held accountable for this association in these patients is still unknown.

Materials and methods

To shed light on the potential association between PCBCL and other malignancies, we conducted a multicenter cohort study on PCBCLs from two European tertiary referral centers on cutaneous lymphomas. All histopathological diagnoses were made on the agreement of two independent dermato-pathologists specialized in PCL. PCBCL staging has been carried out according to EORTC guidelines. Demographics, PCBCL subtype, site of lesions, stage at diagnosis and progression have all been assessed.

Results

A total of 144 PCBCL patients were gathered (78 Follicular, 49 Marginal zone, 15 Large cell Leg-type, 1 intravascular B-cell lymphoma, 1 both Follicular and Marginal zone). Forty patients out of 144 (27.8%) developed at least one malignant neoplasm, mainly men (67.5%). Twenty-seven patients (18.8%) reported at least one non-lymphoma skin cancer and 15 patients (10.4%) were diagnosed with other non-skin related malignancy. In two patients both neoplastic conditions were observed. As for the non-lymphoma skin cancers, 23 were metachronous, 5 synchronous and 3 previous, whereas in the non-skin related malignant group, 8 diagnoses were metachronous, 1 synchronous and 8 previous the diagnosis of PCBCLs. Two patients presented more than one type of non-lymphoma skin cancers. PCMZL was the most common subtype associated with other non-lymphoma skin cancers (28.5% of the cases), whereas the more common PCFCL was associated with other non-lymphoma skin cancers in 16.6% of the cases.

Discussion

This first multicenter study on secondary malignancies in PCBCLs collects the largest cohort ever described so far

and displays the highest percentage of metachronous skin cancers ever presented in the literature. Since more frequent dermatological examinations are performed on PCBCL patients and given an increased cumulative risk of developing skin cancers in the age range of our cohort, compared to the general population, the possibility of a selection bias should be considered. However, the absence of familiar and other risk factors for cancer development, as well as the low number of patients treated with immunosuppressive agents and developing other primary cancers, seems to suggest, in accordance with previously reported evidence, a possible increased intrinsic risk for the development of other primary PCBCL-related cancers. A careful dermatological examination to screen for skin tumors following the diagnosis of PCBCL is therefore fundamental to promptly identify skin neoplasms in these patients.

Abstract N°: 170

Title: Treatment of superficial and nodular basal cell carcinoma by methyl aminolevulinate photodynamic therapy: 2-year follow-up.

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Introduction

Basal cell carcinoma (BCC) accounts for 80% of all non-melanoma skin cancer (NMSC) with a steadily increasing incidence which has prompted use of minimally invasive therapies including Photodynamic therapy (PDT). The objective of the present work was to analyze the efficacy of methyl aminolevulinate-mediated photodynamic therapy (MAL-PDT) in patients suffering from superficial or nodular BCCs.

Materials and methods

A total of 80 superficial and 151 nodular BCC lesions, clinically diagnosed and confirmed by histopathology analysis where treated. Debulking using curettage was performed before two or three MAL-PDT sessions (λ=630nm; 90 J/cm^2; 23 min) at 4-week intervals. Fluorescence diagnosis with a Wood´s lamp was done to help delineate the lesions. Analysis of clinical clearance and cosmetic outcome were carried out by direct examination, dermoscopy and photographs. Evaluations were carried out at the PDT sessions and over the course of 2 years.

Results

MAL-PDT protocol here applied was safe and highly tolerated with minimal side effects such as crushing, erythema and edema and showed excellent or good cosmetic outcomes. After an average of 2.5 sessions for superficial BCC lesions and 2.8 sessions for BCC nodular lesions, the overall clearance rate at 2-year follow-up was 99.1% and 97.2% respectively.

Discussion

The MAL-PDT protocol followed in the present study was safe and effective in the treatment of superficial and nodular BCC.

Abstract N°: 195

Title: Identification and quantification of Sézary cells in blood using standardized flowcytometry protocols

Safa Najidh[1], Kees Tensen[1], Alita Van Der Sluijs[1], Cristina Teodosio[1], Davy Cats[1], Hailang Mei[1], Thomas Kuipers[1], Wim Zoutman[1], Thorbald Van Hall[1], Alberto Orfao[2], Julia Almeida[2], Jacques Van Dongen[1], Maarten Vermeer[3]

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Introduction

Sézary syndrome (SS) is an aggressive leukemic form of cutaneous T-cell lymphoma arising from the malignant transformation of CD4+ T cells. These neoplastic so-called Sézary cells are present in skin, blood and lymph nodes and are preferably detected by flow cytometry (FC) which is indispensable for diagnosis and assessment of tumor burden in blood. Nonetheless, FC protocols as currently used in research and clinical practice lack standardization and are further hampered by heterogeneity of Sézary cell immunophenotypic characteristics. In this study, we aimed to perform an in-depth immunophenotypic analysis of Sézary cells and thereby characterize their cellular identity, evaluate potential immunophenotypic changes over time, study the transcriptome of phenotypically distinct Sézary cell subsets and discover novel Sézary-specific markers.

Materials and methods

We applied highly sensitive and standardized EuroFlow-based multiparameter FC (MFC) methods and tools for detailed immunophenotyping of 47 blood samples from 24 SS patients and 10 healthy donors (HDs). Sézary cells and normal residual CD4+ T cells were subclassified according to different maturation and functional subsets. MFC was combined with fluorescence-activated cell sorting (FACS) and RNA sequencing (RNA-seq) on purified immunophenotypically distinct Sézary and matched normal CD4+ T-cell subsets from the same SS patients and HDs.

Results

With the application of standardized MFC, we were able to accurately identify, quantify, and characterize Sézary cells in all SS samples. Comparative immunophenotypic analyses between Sézary cells and their normal CD4+ T-cell counterpart revealed substantial inter-and intra-patient heterogeneity in the expression of different markers and immunophenotypic changes over time. Sézary cells exhibited phenotypes corresponding with classical and non-classical T-helper subsets with different maturation phenotypes. Our RNA-seq data confirmed pure mono-clonality of Sézary subsets, showed the transcriptomes of phenotypically distinct Sézary subsets and identified novel Sézary-specific signature genes that were consistently and exclusively perturbed across Sézary cell subsets.

Discussion

Our in-depth analyses provided a thorough overview of the immunophenotypic and transcriptional profiles in SS and further unraveled the heterogeneity of Sézary cell subpopulations between and within patients. The explorative study proved the utility of standardized EuroFlow-based MFC for rapid, sensitive and reproducible identification and quantitation of Sézary tumor cells in blood of SS patients. This technique is currently being adopted in a multicenter setting in a large European prospective study aiming to improve international diagnostic, disease staging and treatment response criteria.

Abstract N°: 339

Title: Nail Melanoma in Non Caucasian Populations

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Introduction

Acral lentiginous melanoma is the most common subtype of melanoma in non-Caucasian patients, it affects areas little exposed to sunlight such as the subungual, palmar and plantar skin.

Melanonychia is observed in approximately 70% of subungual melanomas, in most cases it is the first clinical sign, so its detection and observation through dermoscopy is important.

The objective of the study is to determine the frequency of subungual melanoma and its main manifestation characteristics in the patients of a National Medical Center.

Materials and methods

Observational, retrospective, cross-sectional and descriptive study. Records of patients from a National Medical Center with a diagnosis of subungual melanoma verified by histopathological study, treated between June 2009 and May 2019, were reviewed.

Statistical analysis was performed descriptively, reporting means and standard deviation using the SPSS v 20.0 program.

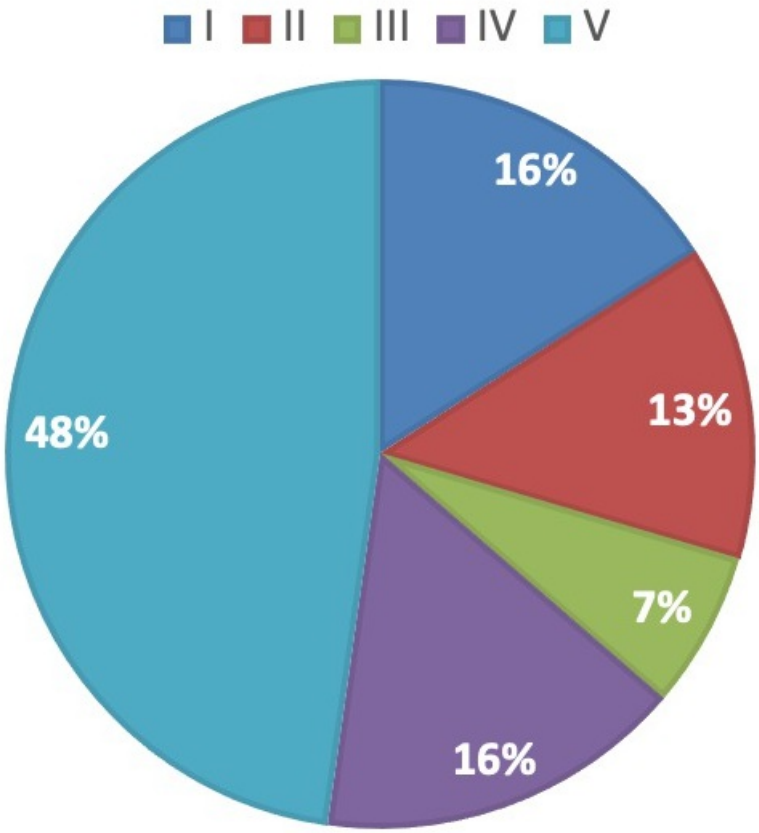
Results

325 cases of acral lentiginous melanoma were reported, of which 13.54% corresponded to confirmed subungual melanoma with histopathological diagnosis. 39% of patients with subungual melanoma were men with a sex ratio, F:M of 2.53. The mean age of the population at diagnosis was 60.23 years with predominant laterality towards the right side (64%). The right big toe was the most affected (23%), followed by the left big toe (18%) and right thumb (18%).

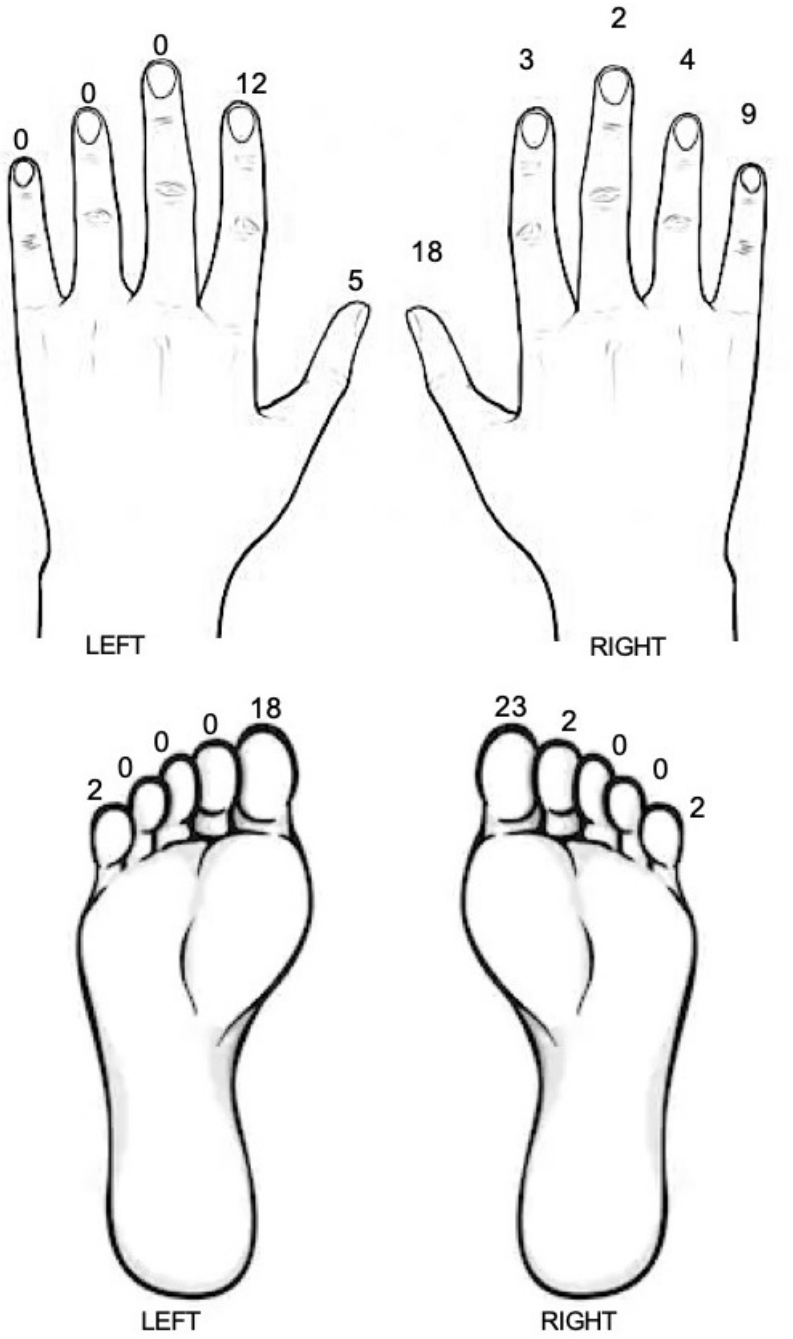
Dermoscopy revealed loss of parallelism, wide irregular longitudinal lines (>2mm) with multiple colors (black, gray, brown) and Hutchinson's sign. In several cases there was presence of nail dystrophy.

Discussion

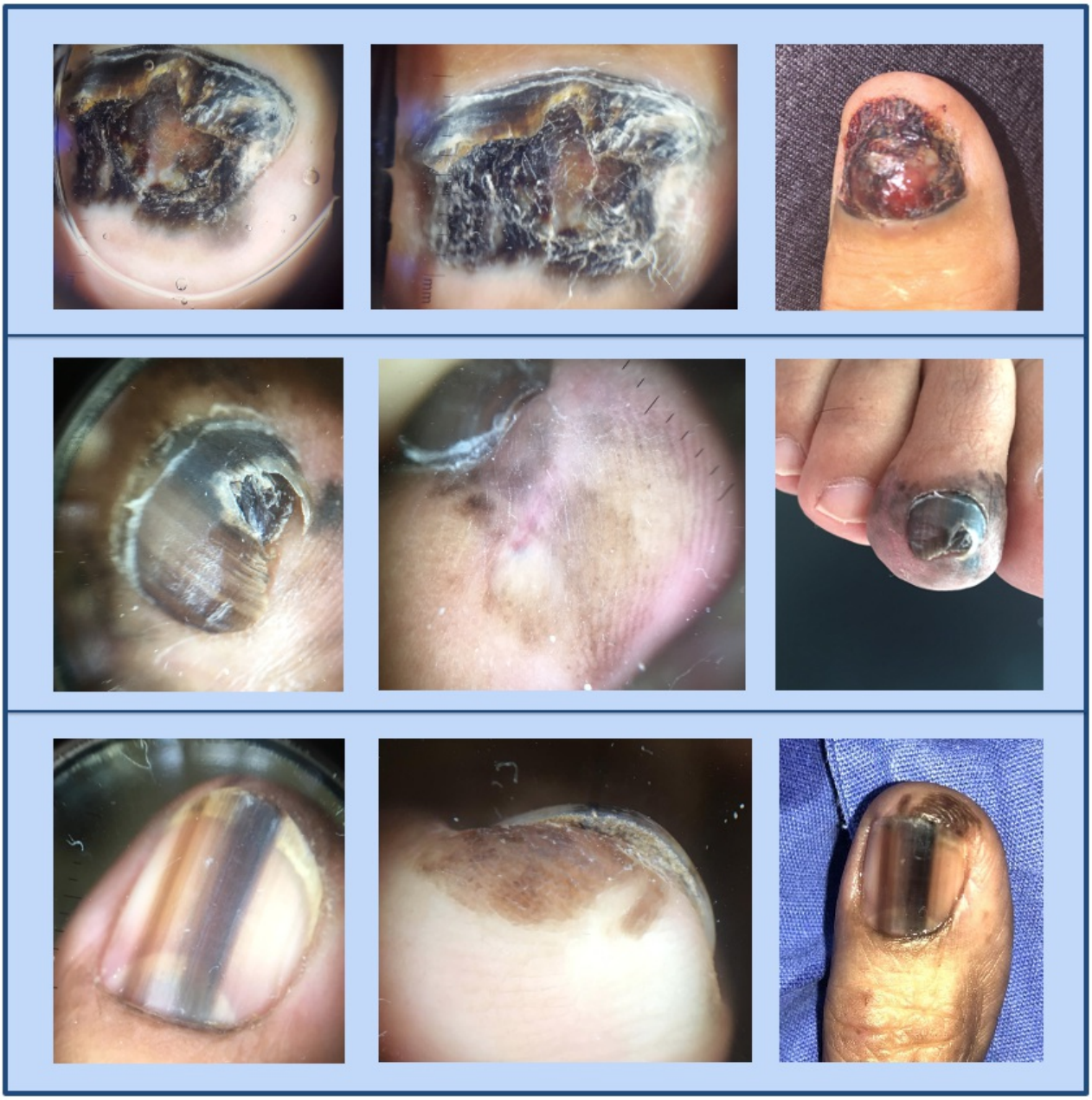
The frequency of subungual melanoma showed a similar increase in the years 2010, 2016 and 2019. A female predominance was documented. Most of the cases were diagnosed in advanced stages with Clark level III (30%) and Clark level IV (27%), however in this study just over half of the cases corresponded to melanoma in situ (57%). It is imperative to direct efforts towards the detection of subungual melanoma both for its clinical and dermoscopic characteristics, in addition to creating awareness in patients about melanoma and the importance of self-assessment.



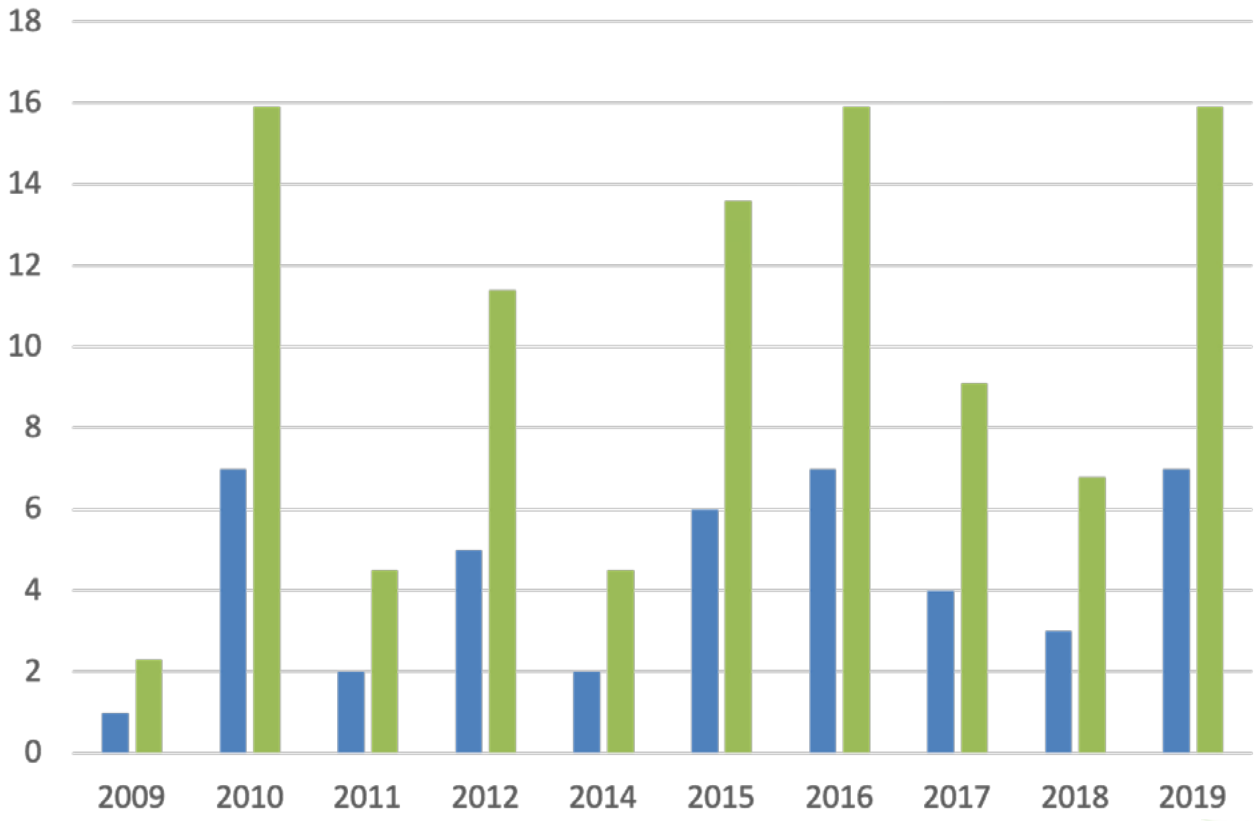
Clark Levels (%) found in patients with subungual melanoma.



Melanoma distribution (%) by digit.



Subungual melanoma dermatoscopic and clinical appearance.



Subungual melanoma cases per year

(Blue: number of cases, Green: percentage of cases)

Abstract N°: 353

Title: The Burden Of Skin Diseases [BOSD] in Europe : preliminary results about skin cancers diagnosis and care pathway

Richard Marie-Aleth[1], Carle Paul[2], Tamar Nijsten[3], Paolo Gisondi[4], Carmen Maria Salavastru[5], Charles Taieb[6], Myrto-Georgia Trakatelli[7], Lluís Puig[8], Alexander Stratigos[9]

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Introduction

The EADV conducted an epidemiological study in 27 countries of the European Union (24 EU countries), plus Norway, Switzerland, and UK to identify and compare the prevalence, dermatological needs, health pathways and treatment access about the main skin diseases.

Materials and methods

A digital survey was conducted to question adults of each country surveyed (through a panel representative of the general population (GP) according to age, gender geographical location, and social category). Each surveyed person expresses him/herself using a validated and standardized questionnaire, translated in each language of the surveyed country in a matter of declarative data.

We report the preliminary results about skin cancers studied from a pooled dataset of 44,689 participants from 27 European countries (24 belonging to the European Union plus United Kingdom (UK), Switzerland (SW) and Norway (NO), henceforth referred to with the acronym NEUKS (Norway, EU24, UK and SW).

Results

For data pooled in the overall analysis of the 27 countries, mole check or skin cancer screening was the main request from the 18,004 patients that had consulted a dermatologist during the past 12 months (representing 22.3% of all consultations).

In the overall analysis, a prevalence of 1.71%±0.12 of skin cancers was reported, which represents 7.304.000 Europeans after extrapolation to the NEUKS population

Out of identified skin diseases that disrupted the patient's quality of life during the past 12 months, skin cancers were in the 38th position whereas hair loss and psoriasis were at the 1st and 2nd position. Anxiety and fears about surgical scars, death, and metastasis were the main reasons mentioned for this quality of life alteration. More than 60.7 % of all surveyed individuals trusted dermatologists as the most qualified physician to treat them in case of a skin cancer.

Data about health systems and health care provision were as follows: the dermatologist was the first healthcare professional consulted by 36.3% of individuals in case of a skin lesion suspected to be a cancer, followed by the general practitioner (22%) and the surgeon (12.9%) at the second and third place.

Final diagnosis of skin cancer was mainly made by the dermatologist (45.7%), the GP (15.6%) and the surgeon (22.5%). In the overall analysis, 70.7% individuals declared having had surgery to treat their skin cancer.

We observed distinct country-based differences on the role of the dermatologist in the health care pathway of skin cancers. Indeed, 30.6% of the cases in the UK, 38.9% in Poland, and 46.3% in France were diagnosed by the dermatologist, versus 58.8%, 60.3% and 61.3% of cases diagnosed by the dermatologist respectively in Spain, Italy and Germany.

Discussion

This survey shows that skin cancer is perceived by the general population as a serious and life threatening condition, underscoring the awareness and the need for skin cancer screening. Skin cancer screening represents an important number of consultations in the activity of each dermatologist. Dermatologists-venereologists are considered by the general population as the recognised experts for the management of skin cancers, but discrepancies in the health care pathway of skin cancers among European countries appears throughout these preliminary data.

Abstract N°: 359

Title: Nonmelanoma skin cancers associated with seborrheic keratosis: a retrospective study

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Introduction

There has been some debate on the association between nonmelanoma skin cancer(NMSC) and seborrheic keratosis(SK). However, data regarding NMSC associated with SK are scarce.

Materials and methods

In order to investigate the characteristics of NMSC associated with SK, we retrospectively reviewed medical records and pathologic characteristics of 4 cases of SK-associated NMSC. Immunohistochemical staining was performed for p53 and human papillomavirus. Furthermore, we reviewed other reports regarding NMSC associated with SK using Pubmed search.

Results

We found 196 cases of NMSC associated with SK including our 4 cases, consisting of 99 basal cell carcinoma(BCC) (50.5%), 95 squamous cell carcinoma(SCC) (48.5%), and 78 SCC in situ (39.8%). Among the 50 patients whose demographic data were available, the mean age at diagnosis was 66.4 years, and male/female ratio was 1.1:1. Lesions were equally distributed in sun-exposed (50%) and sun-unexposed (50%) areas, but SCC associated with SK occurred more frequently in sun-exposed areas (especially head/neck and upper extremities). Interestingly, most common subtype of SK associated with NMSC was reticulated type (36.2%), followed by acanthotic type (34.0%), in contrast to the highest proportion of acanthotic type in general. Overexpression of p53 was detected in 6 out of 7 cases. Human papillomavirus testing was all negative in 17 cases.

Discussion

NMSC may arise in association with SK. We suggest p53 mutation and disease-associated immunosuppressed status as factors that may be involved in the carcinogenesis within SK. Further studies regarding the mechanisms of this association are warranted.

Abstract N°: 366

Title: Sarcomatoid de-differentiated melanoma with complete response to Nivolumab

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Introduction

Sarcomatoid de-differentiated malignant melanoma (MM) with rhabdoid features is a rare variant of malignant melanoma, described in 1992. Since then, few cases have been published. We present a patient with metastatic sarcomatoid de-differentiated melanoma with good response to immunotherapy.

Results

A 72-year-old patient, Fitzpatrick´s phototype II, presented to Westmead Hospital with a 3-month history of a growing and easy-bleeding mass on his right shoulder. His past medical history included diabetes, hypertension, dyslipidaemia, CVA and Chron´s disease. Chron´s disease was treated with colectomy 30 years ago and had since been inactive.

An excisional biopsy showed a nodular melanoma with sarcomatoid de-differentiation and prominent rhabdoid morphology in approximately 70% of the sampled tumour mass. The tumour had a Breslow thickness of 22mm with brisk mitotic activity (63/mm^2) and minimal in situ component. He also had 1-2mm satellite nodules in the deep dermis and subcutis. On immunohistochemical staining, melanoma markers such as S100, SOX10, Panmel, HMB45 and PRAME were strongly positive at the melanoma component, and showed reduced intensity of staining in the sarcomatoid areas, that were strongly positive for desmin. The right axillary sentinel node biopsy was positive for malignant melanoma with V600K mutation and he underwent complete lymphadenectomy of the right axilla, with 8/29 positive adenopathies. Adjuvant radiotherapy was proposed, but the patient declined.

Three months later, a whole-body CT scan showed lung, peritoneal and peripancreatic progression with a diagnosis of stage IV rhabdoid melanoma (pT3b, N3c, M1c). The patient was started on Nivolumab receiving 2 cycles until it had to be held due to colitis, with differential diagnosis including Chron´s disease relapse and immune-related adverse event (irAE). Nine months after treatment, he was admitted for inflammatory pericardial effusion, probably as an irAE, that resolved after pericardial window and did not show any malignant cells. Fifteen months after diagnosis and ten months after immunotherapy, the patient is in complete response without active treatment.

Discussion and conclusions

Sarcomatoid de-differentiated MM with rhabdoid features is rare. It is considered a highly aggressive tumor with bad prognosis, similar to that of other rhabdoid renal and extra-renal neoplasms. Information regarding prognosis and response to treatment is only based in case reports, and cases with long follow-up are lacking. Hence, it is important to highlight that these aggressive types of tumors may respond to PD1 inhibitors with strong immune response, that may manifest as irAEs.

Abstract N°: 380

Title: CD4+/CD8+ Mycosis Fungoides : a rarely reported entity

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Introduction

Mycosis fungoides (MF) is the commonest form of primary cutaneous T-cell lymphoma.

Clinically, it is characterized by erythematous and pruritic patches and plaques in non-photo-exposed areas that may change progressively to tumours. The diagnosis requires clinicopathological correlation and immunohistochemistry that shows that atypical cells are classically CD3+, CD4+ and CD8-. We report two cases of CD4+/CD8+ MF, an uncommon variant.

Materials and methods

Results

Case 1: A 64-year-old female patient with a history of hypertension presented with pruritic, lichenified, erythemato-squamous plaques on the trunk and right thigh that had been evolving for 15 years. The rest of physical examination showed no abnormalities. The diagnosis of MF was clinically evoked. Histopathological examination of a skin biopsy showed hyperkeratosis, a lymphocytic infiltrate made of atypical lymphocytes in a band-like aspect and epidermotropism. On immunohistochemistry, atypical lymphocytes expressed CD4 and CD8. Based on the anatomical-clinical aspect, the diagnosis of MF with a double positive CD4/CD8 phenotype was retained. The patient was treated with topical corticosteroids.

Case 2: A 50-year-old female patient with a history of dysthyroidism, presented with lichenified eczematous plaques on both legs, evolving for more than 10 years. A skin biopsy was performed and showed a MF aspect. Immunohistochemistry showed T lymphocytes with CD4+ and multiple T lymphocytes with CD8+. Treatment with topical corticosteroids was followed by a good evolution.

Discussion

Herein, we report 2 cases of CD4+/CD8+ MF. It is a very rare form with only about ten cases reported in the literature. Clinically, this form can present as classic MF, like our 2 patients. Knapp et al described an atypical clinical presentation with hypochromic sclerotic plaques mimicking morphea. This variant of double positive CD4+/CD8+ MF seems to be characterized by an indolent evolution and a good prognosis, which could explain the slowly progressive evolution for years for our 2 patients. Given the rarity of this entity, further studies are needed in order to determine the clinical and the outcome of this form and its therapeutic impact.

Abstract N°: 456

Title: kaposi's disease: epidemiological, clinical and therapeutic profile (26 cases)

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Introduction

Kaposi's disease (KD) is a rare disease probably associated with infection by the Human Herpes virus (HHV8), it is a multifocal angiogenic process characterized by a double vascular and cellular proliferation.

We report a serie of cases to determine the epidemiological, clinical and therapeutic characteristics of KD.

Materials and methods

This is a descriptive retrospective study collecting the cases of KD from the dermatology department of the university hospital of Casablanca, over a period of 10 years from 2011 to 2020. The diagnosis was clinically suspected and confirmed histologically in all patients.

Results

In 26 cases. There were 16 men and 5 women, with a sex ratio of (M/F) of 3.2. The average age was 65 (34-89). We observed 21 cases of classic KD, the average consultation time was 37 months (1 month-10 years), two patients were followed for UCNT and cerebral meningioma.

The lesions were macules, and angiomatous nodules in plaques and plaques, with ulceration in 5 patients, and pain in 5 patients. Lymphedema was present in 11 patients, the predictive site was the lower limbs in all the patients, the cephalic extremity in 2 patients. Involvement of mucosa in 7 patients.

Extra dermatological localizations were present in 12 patients (1 in bone, 6 in pulmonary, 3 in digestive, and in 2 lymph node) discovered with or without clinical signs.

HHV8 antibodies were identified in 10 patients by immunohistochemistry.

therapeutic abstention was indicated in 5 patients, intralesional bleomycin in 8 patients (15mg/15 days), radiotherapy in 4 patients, excision followed by radiochemo (etoposide) in 2 patients, electrotherapy in 1 patient, radio-chemotherapy in 1 patient.

We noticed a regression of lesions in 15 patients, stabilization in 4 patients, and extension and aggravation (superinfection and hemorrhage) in 2 patients.

AIDS-associated KD was observed in two patients, with cutaneous, oral, nodal, pancreatic, and pulmonary involvement. Antiretroviral therapy was administered systematically, combined with chemotherapy (paclitaxel and bleomycin) and radiotherapy in 1 patient.

Iatrogenic KD was observed in 3 patients on corticosteroid therapy and azathioprine. In two patients the cutaneous lesions were several with oral and digestive, pulmonary expressions. Decreasing corticosteroid therapy was indicated in 1 patient and intralesional bleomycin in 2 patients with regression of the disease.

Discussion

Our study is characterized by the association of the MK with other cancers, the advanced age of the patients, the cephalic localization, the frequency of the mucosal and visceral involvement in the classic KD, from where the interest of push for investigations even in the absence of clinical signs. In the forms associated with AIDS or iatrogenic, antiretroviral therapy and tapering of corticosteroid therapy allow the disease to regress.

Abstract N°: 534

Title: Retrospective study of 5 years of tele-expertise for early skin cancer diagnosis in outpatients

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Introduction

The association of a decreasing number of dermatologists and an increasing number of skin cancers results in longer waiting time to assess skin cancers. This could lead to poorer vital or fonctionnal prognosis for patients, and increased societal costs for treatment of advanced cancers.

The objectives of the tele-expertise linking general practitioners (GP) and dermatologists were to reduce time between GP consultation and dermatologist response in case of skin cancer suspected during GP consultation, to propose the right medical treatment at the right time, to optimize the scarce dermatological resources.

Materials and methods

This retrospective, observational study is based on data from real practice from November 2015 to December 2020 in an outpatients population.

2 consecutive software platforms were used : the first one was available on PC only (2015-2018) ; the second was available on PC and smartphone (2018-2020).

Before being able to request an opinion on the dermatology tele-expertise application, GP had to undergo training presenting tele-expertise, the dedicated application, skin cancers. This met GP requests in dermatology training.

Collected data included : patients' demographic and clinical profile ; dates of request for an opinion and the dates of expert response ; motive of request ; type of skin lesion ; diagnosis proposed by the expert ; post-diagnosis conduct (e.g. : no treatment ; meeting with dermatologist ; clinical follow-up by GP). Data from the online chat function (allowing GPs and dermatologists to exchange more qualitative information) were also collected.

Results

1,812 tele-expertise requests were made by 126 GPs and answered by up to 30 dermatologists, with a medium time of 0,79 days to answer.

Patients were 47% of men and 53% of women. The average age was 55.5, the youngest was a baby and the oldest 99.

Lesions were classified by dermatologists as benign tumors in 47,76 %, skin cancers in 28,44 %, actinic keratosis in 5,9% and other lesions

Actions recommended by the dermatologist following the tele-expertise were : abstention for 273 patients, follow-up by GP for 202 patients, treatment without dermatology consultation for 118 patients. 593 consultations of

dermatology in real life were avoided, as well as patients' travel time and cost to the dermatologist's. Surgery, such as biopsy (172 patients) or excision (187 patients) was also proposed. Longer term dermatological follow-up was organised for 298 patients.

In spite of several technical problems, tele-expertise was well accepted by GP and dermatologists.

Discussion

Tele-expertise dramatically decreases access time to dermatologist expertise. This helps improve diagnosis, prognosis and patients' quality of life of patients. Healthcare societal costs are reduced.

Further medico-economical study is needed, to analyse the impact of tele-expertise on the total cost, and to improve the business model. Remuneration of GPs and dermatologists should be clarified.

Patients' opinion about this innovative approach to healthcare should also be explored.

A more ergonomic platform, for GP and dermatologists alike, is to be created based on users' feedback.

Not only does tele-dermatology prove easy to use in everyday practise, it also generates useful data for research and public health purposes.

Longer studies are necessary, to clarify the impact of tele-expertise on quality of life and survival of skin cancer patients, and to compare these with traditional approaches in dermatology.

Abstract N°: 551

Title: Renal transplant patients and photo protection - are they practicing what we preach?

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Introduction

Renal transplants have been performed in Ireland since 1964. Since then we have developed insight into the long-term side effects of immunosuppressant regimes. The increased incidence of skin cancer in this patient population is now well recognised. The focus has shifted from simply screening for skin cancer to implementing preventative measures. Patients are educated early on in their transplant journey about both their increased risk of skin cancer and actions they can take to mitigate it. However, it is unknown what impact these education measures have on patients' behaviours. We aimed to explore if patients who perceived they had an increased risk of skin cancer engaged in photo-protecting practices.

Materials and methods

Patients attending a renal transplant clinic responded anonymously to a 25 item multiple-choice questionnaire.

Results

55 patients were included in the study. The median age was 58 years, range (21-84). 27 patients were female. The median time since renal transplant was 8 years, range (1-36). 87% (48) of patients were aware that they were at increased risk of developing skin cancer. 76% (42) of patients reported performing regular skin checks. 92% (44) of patients reported that they wear sunscreen, 86% (47) using factor 50. However, only 56% (42) of those surveyed were applying sunscreen to all exposed skin and only 40% were applying it between March and October. 40% (22) reported wearing sunscreen during the summer months only. 76% (43) of patients had medical cards and 20% (11) of them had availed of reimbursement for SPF, which they are entitled to as transplant patients in Ireland. 27% (15) of patients had been diagnosed with skin cancer, 93% (14) of diagnoses occurring post-transplantation. Exploring preferences for the communication of information on preventing skin cancer, 43% (24) reported a preference for a paper leaflet while 38% (21) would opt for a smartphone application.

Discussion

Transplant patients in our centre have a good awareness of their risk of skin cancer. They engage in self-skin checks and photo-protecting practices. Despite the majority of patients reporting that they use sunscreen, there is a need for further education on where and when it should be applied. A study by O'Grady et al (1) has shown that SPF reimbursement schemes lead to an increased usage of SPF, many of our patients are not aware of the scheme available to them, this could be readily addressed. Finally, patients' different preferences for education materials implies we should supply information in more than one format if we want all patients to engage with it.

1. O'Grady C, Roche D, Gilhooley E, MacMahon J, Awdeh F, Tobin AM. Sun protection factor reimbursement as a means to promote increased usage in an organ transplant recipient population. Photodermatol Photoimmunol Photomed. 2020 May;36(3):244-245.

Abstract N°: 619

Title: Glomus tumors: a retrospective study of 49 cases.

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Introduction

Glomus tumor is a benign mesenchymal neoplasm developed on the cells of subcutaneous glomus, which regulates the local temperature and microcirculation. Pain is characteristic, exacerbated by cold. The confirmation is histological. We report a series of 49 cases.

Materials and methods

We conducted a descriptive retrospective study over a period of 15 years (April 2006 - December 2021) including all the patients seen in the dermatology consultation department (nail pathology consultation) for a glomus tumor, histologically retained.

Results

We collected a total of 49 cases with a clear female predominance (46 Women / 3 Men). The mean age was 41 years (22 - 54 years). The reason for consultation was pain in all the patients. The location was subungual in 38 patients (77.55%), pulpal in 6 patients (12.25%) and periungual in 5 patients (10.20%). The nails of the hands were involved in 44 cases (91.84%): thumb (n = 22), middle finger (n = 10), index finger (n = 7), ring finger (n = 4) and little finger (n = 2). In 4 patients (8.16%), the tumor was located in the big toe. Clinical abnormalities most frequently found were: erythematous-violet dotted area (32.65%); onychodystrophy (22.45%); medial fissure in the nail plate (20.4%); and painful subcutaneous nodule (12.24%). Bone radiography performed in all the patients showed a bone notch in three cases. Magnetic resonance imaging, performed in five patients, showed an aspect in favor of a glomus tumor. All patients underwent surgical excision, without any recurrence.

Discussion

Glomus tumors are rare representing 1% to 5% of all the soft tissue tumors of the hand. They are more frequent in women, in the digital subungual site (85%), especially on the thumb, as the case in our series. Localization in the big toe is exceptional and may be confused with arthrosis. Extradigital sites have been reported (forearms and knees). The diagnosis is mainly clinical and is based on the triad: pain, cold sensitivity and Love's test. Imagery isn't systematically required. The diagnosis is histological: glomus arterioles, anastomotic veins and nerve branches within a structure composed of collagen fibers. The differential diagnoses are neuroma, schwannoma or subungual melanoma. The treatment is surgical. The approach can be direct transungual or lateral.

Abstract N°: 641

Title: Hodgkin Lymphoma with cutaneous involvement

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Introduction

Hodgkin lymphoma (HL) is a common subtype of B-cell lymphomas. Cutaneous symptoms such as pruritus are frequently seen during this affection. However, Secondary cutaneous involvement is rare. We report a case of Hodgkin lymphoma with cutaneous involvement.

Results

A 25-year-old male patient with no medical history presented with one year history of asymptomatic cervical swelling and two cutaneous nodular lesions of the chest. The clinical examination revealed two erythematous-violaceous, ulcerated, non-fistulized nodular lesions measuring 4 and 6 cm respectively. The underlying skin was infiltrated. Skin lesions were accompanied by a bilateral asymptomatic cervical mass corresponding to lymphadenopathy. The rest of the lymph nodes were free. A fine needle punction of the cervical lymph node was performed. It didn't reveal any abnormalities. The histopathological examination of the biopsy of the nodular lesions on the chest was in favor of Hodgkin Lymphoma. Immunohistochemistry was consistent with classical Hodgkin Lymphoma. Microbiological testing of the cutaneous biopsy excluded the presence of active tubercular infection. Routine blood parameters were within normal range. A whole-body CT scan revealed cervical nodes with no other associated abnormalities. The patient was referred to the oncology department.

Discussion

Cutaneous involvement in HL is rare and occurs in approximately 0.5%–3.4% cases. Lesions frequently appear during advanced-stages of the disease or upon relapse. Cutaneous HL can present as nodules, plaques, papules or ulcers and involves mainly the chest and the axilla. In our case, the patient presented with nodules on the chest. The tumor dissemination leading to cutaneous involvement is mostly explained by retrograde lymphatic diffusion from the affected lymph nodes. However, hematogenous spread and direct extension from involved lymph nodes are other possible mechanisms of dissemination. The diagnosis is based on histopathological examination of the cutaneous nodules and/or peripheral lymphadenopathy. It reveals atypical lymphoid infiltrates with the presence of Reed-Sternberg cells. In association to the histological examination, the immunohistochemical staining, positive for CD15 and CD30 and negative for CD45, confirms the diagnosis of HL. A whole-body CT scan is mandatory to rule out the presence of enlarged lymph nodes, hepatosplenomegaly and metastasis. There is no specific treatment for HL with skin lesions. The standard treatment is chemotherapy with or without radiotherapy depending on the stage of the disease and the size of the cutaneous tumor.

Skin involvement in HL is a rare entity. However, it should be considered as a differential diagnosis in case of atypical tumors of the chest especially when associated to enlarged lymph nodes.

Abstract N°: 729

Title: Descriptive study of skin cancer risk factors

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Introduction

Skin cancer represents the most frequent malignancy in the world, skin tumors are divided into 2 groups, non-melanocytic tumors and melanomas. These tumors represent a real public health issue due to their considerable economic impact. Several factors of cutaneous carcinogenesis have been identified. The aim of our work is to identify the principal risk factors of skin cancers in patients of the eastern region of Morocco.

Materials and methods

This is a retrospective descriptive study conducted in the department of Dermatology of the Mohammed VI University Hospital of Oujda, all patients with skin carcinomas retained on histological criteria managed in our department from June 2014 until January 2022.

Results

A total of 154 patients were included, the mean age was 60.45 +/- 19.89 with extremes ranging from 7 to 110 years. We noted a male predominance with a M/F sex ratio of 1.9.

Non-melanoma tumors were more frequent (77.9%) than melanoma (22.1%) and the most common tumors were, in order of frequency: basal cell carcinoma (35.3%), squamous cell carcinoma (21.6%), melanoma (16.3%), cutaneous lymphoma (14.4%), and sarcoma (7.2%).

The most frequent location was the face in 27.5% of the cases, followed by accral location in 14% of the cases and the trunk in 11% of the cases.

Chronic sun exposure was observed in 55.2% of cases, followed by occasional photo exposure in 40.3% of cases. Photo-trauma was reported in 25.8% of cases. Smoking was found in 59.1% and alcoholism in 19.5%.

Irradiation was present in 0.7% of cases and occupational exposure was noted in 1.9% of patients.

In patients with melanomas, microtrauma was frequent in 72% of cases, and the notion of wearing tight shoes was noted in 42.1% of patients with acro-lentiginous melanomas.

Genodermatoses were present in 6.5% of cases, mainly Xeroderma Pigmentosum in 72% of cases. A personal history of skin cancer was found in 9.7% of cases, most frequently basal cell carcinoma, and a history of extracutaneous neoplasia was present in 2.6% of cases, consisting of prostate adenocarcinoma and breast cancer.

The patients developing these cancers had in 1.3% a context of immunodepression, in particular the use of immunosuppressive therapies.

Discussion

Skin cancers include two entities: non-melanocytic tumors which include basal cell carcinoma (BCC) and

squamous cell carcinoma (SCC), both of which are the most common group of tumors and account for approximately 40% of all malignancies, and melanocytic tumors including melanoma. BCC is the most common skin cancer in light skinned individuals and is more common in men than in women. Although melanoma is less common, it is much more lethal than non-melanoma cancers. The pathophysiology of skin carcinogenesis is multifactorial, and several constitutional and environmental factors are incriminated, on the top of the list is ultraviolet (UV) radiation. Although sun exposure is the main determining factor, the pathophysiology of skin carcinogenesis is much more complex and includes: light phototype, ionizing radiation, chronic immunosuppression, as well as occupational exposure including the contact with polycyclic hydrocarbons, arsenic, pesticides, and other chemicals substances. Certain skin conditions and genetic syndromes including Albinism and Xeroderma Pigmentosum have been associated with an increased risk of skin cancer, especially squamous cell carcinoma. HPV infection, smoking, and alcoholism also appear to be involved in the pathogenesis of skin carcinomas.

Abstract N°: 741

Title: Evaluation of medical students' knowledge towards suspicious skin lesions

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Introduction

Skin cancer is the most prevalent cancer in adults (1). Their incidence is constantly increasing and their prognosis is strongly correlated to the early management of the disease. Early detection of skin cancer improves survival rate and reduces public health costs. The objective of our study is to describe the attitude of medical students (MS) towards malignant skin lesions and evaluate their involvement in skin cancer screening.

Materials and methods

This is a multicenter cross-sectional observational study conducted in July 2021 using a quiz created on Google Forms®, shared through social networks, sent to MSs including 11 photographs of skin lesions: squamous cell carcinomas, melanomas, seborrheic keratosis, keloid cyst, basal cell carcinoma, mycosis fungoides, neurofibromatosis and Kaposi's disease. They were asked to choose between the benign or malignant nature of the lesion and to adopt an attitude towards it.

Results

Our study included 114 MS, 40% of whom were in their 7th year of study and 20% in their 6th year. Fifty-seven percent of the students had already completed an internship in a dermatology department and had, therefore, already performed a complete dermatological examination. The skin cancers most commonly seen by these MS are melanoma, squamous cell carcinoma and basal cell carcinoma. Ninety percent of them answered that skin cancer can also affect nails and hair. The MSs were able to distinguish a malignant lesion from a benign one in 67% of cases. The difficulties found were more related to Kaposi's disease and mycosis fungoides than to melanoma and carcinoma. Concerning their approach, 70.5% of the MSs suggested an appropriate attitude. The most common error was to refer the patient to a dermatologist when the lesion was clearly benign. Finally, 91% felt a need for a training and 51% considered having a lack in their knowledge about skin cancer and suspicious lesions.

Discussion

Our study showed that MS in general are able to differentiate between benign and malignant skin lesions. However, medical students still prefer to refer more than half of the benign lesions to dermatologists, implying an over-solicitation of the specialist. It was also found that students have a lack of confidence in their diagnosis and are in need of training. In a similar French study (2) published in 2020 on the evaluation of general medical students' skills in the early diagnosis of malignant skin lesions, which included 142 students, 82% of whom were able to differentiate between benign and malignant lesions. This study also underlined the over solicitation of the dermatologist for benign lesions.Our study is in line with the data in the literature concerning medical students'

knowledge of the management of suspicious skin lesions.Our results match with other studies regarding medical students' knowledge towards the management of suspicious skin lesions.

In view of the continuous increase of the incidence of skin cancers, it seems necessary to improve the awareness of future general physicians towards the screening of malignant lesions.

Abstract N°: 764

Title: Buschke-Lôwenstein tumor: about 5 cases

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Introduction

Described for the first time in 1896 by Buchke, Buschke-Löwenstein tumor is a pseudoepitheliomatous proliferation caused by human papillomavirus, and characterized by exo- and endophytic hyperpapillomatosis with hyperacanthosis.

Materials and methods

We describe, through 5 observations, the clinical, histological, radiological, evolutionary and therapeutic profiles of Buschke-Löwenstein tumors.

Results

All our patients were male; the average age of the patients was 65.5 years. All patients had unprotected heterosexual sex with female sex workers, only one patient had homosexual sex. A history of active smoking was found in 3 patients, one patient had a squamous cell carcinoma of the face.

The consultation was motivated by discomfort during sexual relation, pruritus and foul odor of the lesions in 4 patients, whereas the tumor was discovered fortuitously during a systematic examination in only one patient. No patient presented with urinary symptoms.

The size of the tumor was variable, ranging from 15cm to 30cm. All tumors had an exophytic, cauliflower-like, brownish-colored verrucous appearance.

The tumor invaded the peri-anal region in all our patients, the external genitalia in 4 patients. It extended to the hypogastric and peri-umbilical regions where it took on a stony blackish appearance in only one patient. The rectal examination was without abnormality in all our patients.

Colonoscopy was without abnormality in all our patients. Magnetic resonance imaging did not show any extension to the deep structures. All patients had negative hepatitis B, C, HIV and syphilitic serologies.

Skin biopsy did not reveal malignant transformation in all patients.

Three patients underwent wide surgical excision, only one patient was lost to follow-up, and one patient was scheduled for intra-lesional quadrivalent HPV vaccine injections.

Discussion:

Buschke-Löwenstein tumor is a relatively rare sexually transmitted, due to human papillomavirus especially HPV6, HPV11 HPV16 and HPV18.

Its annual incidence is 0.1% in the sexually active adult population. It occurs at any age and predominates between the 4th and 6th decade.

Clinically, it is an ulcerated, firm or hard, sometimes friable, budding tumor. Its preferential localization is in moist areas, at the mucocutaneous junction. In men, the tumor is located at the penile or vulvar.

The complications of this tumor are infection, deep extension, fistulization and malignant transformation, especially into squamous cell carcinoma. Spontaneous regression is exceptional. Recurrence is possible.

The characteristic histological appearance is a combination of exo- and endophytic hyperpapillomatosis with hyperacanthosis. The hyperplastic epithelium is well differentiated, regular, without cytonuclear abnormalities. The basement membrane is respected.

Micaceous pseudoepitheliomatous balanitis, verrucous carcinoma, syphilis, Nicolas-favre disease, verrucous tuberculosis, donovanosis and anogenital amoebiasis may be confused with Buschke-Löwenstein tumor.

The use of topical treatments based on podophyllin, 5-Fluorouracil ointment, cryotherapy, electrocoagulation, systemic chemotherapy based on methotrexate or bleomycin , the CO2 laser was proposed. The mainstay of therapy remains surgery. The anti HPV vaccine has been tested in this indication with success.

Its prevention is imperative based on the control of sexually transmitted diseases and the treatment of condyloma acuminata.

Abstract N°: 769

Title: MALIGNANT SCALP TUMORS

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Introduction: Cancers of the scalp are skin cancers that drift directly from the hair follicle epithelium, interfollicular epidermis or other cell types. They can be primary or secondary. These tumors pose a real diagnostic problem because of their multiplicity. The objective of our study was to specify the epidemiological and anatomo-clinical profile and therapeutic of malignant tumors of the scalp.

Material and methods: this is a retrospective study descriptive performed in the service of Dermatology venereology at CHU MED VI OUJDA, spread over 8 years and 4 months from June 2014 to August 2021, including all confirmed cases of scalp tumours. Epidemiological, clinical, histological and therapeutic data were collected through an exploitation sheet pre-established.

Results: We collected 20 patients presenting 30 malignant tumors of the scalp, with a male predominance (sex ratio M/F of 5.7). The average age of onset was 59.5 years. The most common clinical presentation was the ulcerative-burgeoning lesion (55.5%). With a diameter varying between 0.5-10 cm, pain and bleeding were reported in 27.7% and 38.8% respectively. The The mean time to consultation was 6 years with extremes ranging from 1 month to 32 years. The histological types were: basal cell carcinoma (BCC) (n=19), squamous cell carcinoma (SCC) (n=8), one case of centro-follicular type cutaneous B lymphoma, one case of proliferating trichilemmal cyst and one case of cutaneous metastasis of a bronchopulmonary tumour. The most frequent site was the vertex in 27.7%. All patients benefited from an evaluation of extension made of cervico-thoraco-abdomino-pelvic CT scan which was in favor of: pulmonary metastasis (n=1), lymph node metastasis (n=1), bone lysis (n=1), a case of lung tumor with cutaneous metastasis. Surgical excision was the recommended treatment in 12 patients with a favorable evolution in 11 patients and only one death, one of our patients was treated with dynamic phototherapy as he has multiple BCCs, another patient presented a total reduction of his cutaneous B lymphoma after the injection of the anti SARSCOV2 vaccine type Astrazeneca, the patient who had a pulmonary metastasis was treated with chemotherapy.

Discussion: According to our results, the age group most affected was that of over 60 years, which agrees with the results of a study by Leena et al*, the mean age of patients at diagnosis was between* 20 and 40 years old, unlike our serie where only 3 patients were under 27 years old and they were followed up for gorlin goltz syndrome and Xeroderma pigmentosum. Concerning the clinical presentation, the ulcerative-burgeoning character was the most frequent, which joins the results of a Senegalese study (36 cases). In our patients, the BCC was the most frequent entity (63.3% of cases), this results joins that of a study carried out in Senegal in 2019 with a percentage of 57%.

Abstract N°: 782

Title: Anatomoclinical features of plantar melanoma : Study of 93 cases

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Introduction

Cutaneous melanoma is a malignant tumor of exponentially increasing incidence. Plantar melanoma represents 7% of the total, this localization has distinct anatomic and clinical features, which remain little studied in African populations.

The aim of this study was to analyze the epidemioclinical charactéristics of plantar melanoma and to identify possible clinical prognostic factors.

Materials and methods

Retrospective study carried out in the dermatology department of the Ibn Rochd University Hospital in Casablanca from January 2000 to January 2021, including all patients with a histologically confirmed plantar melanoma. A data file was used to collect epidemioclinical, histological and prognostic data in order to compare our results with the literature

Results

There were a total of 174 patients with cutaneous melanoma, the plantar location was noted in 93 patients (53.44%), including 53 men and 40 women, with an average age of 68.5 years

70 patients (75.2%) had phototype III or IV. The main risk factors were plantar trauma (41.86%) , pre-existing nevi (25.58%), and a pre-existing dermatosis (19.6%), No patient had a history of melanoma . The average time to progression was 35.6 months.

The mean tumor size was 44mm, the type was nodular in 61%, acro-lentiginous in 33.25% and superficial extensive in 5.25%. The main locations were the heel (45.7%), the hollow of the feet (25.4%). The mean value of the Breslow index was 9.4 mm, histological ulceration was noted in 69 cases.

Metastases were found at the time of diagnosis in 37.5% of cases, of which 19.9% had lymph node involvement. Surgical treatment was recommended in 93.1% of patients. The mean survival time was 18 months; 80.4% of patients had died.

Discussion

Our study presents the largest series of plantar melanomas in Africa. This location is the most frequent in our context, identified in 53.44% of cases. There was no difference in age or sex compared to the literature.

Sun exposure is a known risk factor in the various series of the literature, but given the location, repetitive trauma is the main risk factor for plantar melanoma. The long consultation times are the main factor of poor prognosis in

our context. Although studies note the frequency of the SSM type with a Breslow index ≤ 1 mm in plantar melanomas, our series objectifies the frequency of nodular type melanomas, with a mean Breslow index of 9.4 mm, which makes its prognosis more unfavorable.

Despite its accessible site clinically, plantar melanoma is often diagnosed at a late stage. Awareness of the population and health personnel would probably reduce its morbidity.

Abstract N°: 799

Title: Clinical predictors of lymph node metastasis in thick plantar melanoma

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Introduction

The presence of lymph node metastasis at the time of diagnosis of cutaneous melanomas is a known factor of poor prognosis

Through our cases, we will study the clinical predictive factors of lymph node metastasis in 58 patients with a thick plantar melanoma

Materials and methods

This is a retrospective study, from 2000 to 2021, including all plantar melanomas, with a Breslow superior to 4mm, with regional adenopathies without visceral involvement at the time of diagnosis, hospitalized at the dermatology department of CHU Ibn Rochd of Casablanca. The clinical data were collected on a pre-established form

Results

Fifty-eight cases were identified, including 32 men and 26 women, with an average age of 67 years.

Forty-three patients (75%) had a phototype III or IV, the average time of evolution was 35.6 months.

The mean size of the tumor was 44 mm, the clinical aspect of the lesion was nodular in 39 patients (67.24%), a pigmented macule in 19 patients (32.75%), ulceration was noted in 37 patients (63.79%) and bleeding on contact in 41 patients (70.68%).

The main locations were the heel in 36 patients (62.06%), the bottom of the feet in 13 patients (22.41%), the top of the metatarsus in 9 patients (15.51%).

Discussion

To our knowledge, this is the first study to predict the clinical features of lymph node metastasis in thick plantar melanoma.

Melanoma has a strong tropism for the lymph node. It produces extracellular vesicles and soluble factors capable of migrating into the draining lymph node and reprogramming the cells of the lymph node to create a pre-metastatic niche favorable to tumor implantation

The hee l location, the important tumor size, the delay of the first consultation, the nodular aspect and the presence of ulceration constitute the predictive elements of rapid appearance of lymph node metastases, and the knowledge of these elements by the clinicians allows to act rapidly before the appearance of other metastases, especially visceral ones, and thus guarantee a better prognosis

Abstract N°: 804

Title: Amelanotic melanoma : A diagnostic Challenge

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Introduction

Amelanotic melanoma (AM) is a rare form of melanoma which lacks visible pigment. Due to the achromic manifestation of this atypical cutaneous malignancy, it has been difficult to establish clinical criteria for diagnosis. Thus, AM often progresses into an invasive disease due to delayed diagnosis, herein we present case serie of this entity

Materials and methods

Retrospective and descriptive study of all cases of cutanous melanoma

From September 2012 to March 2020

In the department of dermatology chu ibn rochd casablanca, Morocco

Results

Of the 224 cutaneous melanomas excised between 2012 and 2022, 6 cases 2,7 % were amelanotic melanoma, 50 % were women (n=3) and 50% were men (n= 3) . The mean age was 62 years (57 and 71 years for women and men, respectively), the site of AM was planter in 4 patients and under the right ankle in 2 patients . AM were diagnosed as pyogenic granuloma in 3 patients , kaposi Sarcoma , Neurofibroma and vascuar lesion in one patient each . The histological type was nodular in all our patients , The mean Breslow thickness was 11 mm , A dermoscopic evaluation of all AM showed the presence of a polymorphous vascular patterns, including milky-red areas, hairpin vessels, dotted vessels, and linear irregular vessels.

Discussion

In our serie, compared to the literature, the amelanotic melanomas are located mainly on the plantar side of the foot with a fairly high breslow index.

Given the variety of potential clinical presentations in the absence of pigmentation, Amelanotic Melanoma often presents as an advanced lesion that has been misdiagnosed as several, malignant, and nonmalignant disorders and treated unsuccessfully by topical agents or inappropriate physical treatments.

The mechanism underlying amelanosis is still unclear. Previous studies considered AM as de-differentiated or poorly differentiated melanoma .However, as with its pigmented counterparts, AM cells maintain melanocytic lineage and melanin-forming ability with the expression of tyrosinase and microphthalmia-associated transcription factor.

AM is often diagnosed at an advanced stage, with a poor prognosis. Clinicians should keep every potential

presentation of AM in mind and consider melanoma in the differential diagnosis of suspicious lesions

Abstract N°: 839

Title: A new case of blastic plasmacytoid dendritic cell neoplasm: a rare and agressive neoplasm

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Introduction

Blastic plasmacytoid dendritic cell neoplasm (BPDCN) previously known as "CD4+ CD56+ hematodermic neoplasm" is a rare tumor derived from plasmacytoid dendritic cells, these cells normally reside in primary and secondary lymphoid organs and secrete type I interferons in response to various antigenic stimuli. The skin is practically the first organ involved, followed by bone marrow and leukemic involvement. We report a new case of this entity.

Materials and methods

Results

An 81-year-old man, with no prior pathological history, referred for diffuse nodular lesions. These lesions were painless, non-itchy and first noted 2 months ago. Physical examination found violaceus nodules distributed at the trunk, back and limbs. There was no lymphadenopathy, hepatomegaly, or splenomegaly. A skin lesion biopsy was performed. It revealed a dense infiltrate of medium-sized cells with a scant cytoplasm and a dense chromatin organized in scattered clusters, occupying the dermis, and separated from epidermis by a grenz zone. Immunohistochemical analysis showed that neoplastic cells expressed CD4, CD56, TDT. They were negative for CD3, CD20, CD8, CD30, CD15, CD68, CD34, CD117, myeloperoxidase and granzyme B. CD123 was not available. Ki67 was 50%. Based on clinic, histologic and phenotypic features, the diagnosis of BPDCN was suggested. Peripheral blood analysis showed a neutropenia and a thrombocytopenia. Bone marrow aspirate flow cytometric immunophenotypic histogram showed that neoplastic cells were positive for CD4, CD56, CD123 and HLADR. Myeloid and lymphoid markers were negative. From these findings, a diagnostic of BPDCN was made. Collaborative therapeutic care with hematologists was instituted, the patient received chemotherapy with cladribine. The follow-up is about 9 months.

Discussion

In the 2008 World Health Organization (WHO) classification of myeloid neoplasms and leukemia, BPDCN was classified under acute myeloid leukemia and related neoplasms. But it is now classified as a separate, distinct entity in the last update of the WHO classification. The incidence of BPDCN is approximately 0.4 cases per 100,000 individuals. The skin involvement is often the first one. The appearance of single or multiple ecchymotic nodules and plaques should suggest the diagnosis, the histopathological study with immunohistochemistry confirms it. The cells do not express markers of the T and B lymphocytes. However, they do have expression of CD4, CD56 and TCL1, which are markers plasmacytoid dendritic cells. The first-line therapies consist of chemotherapies used in aggressive lymphomas or acute leukemias. Bone marrow transplantation is sometimes performed at the time of the first recurrence.

Abstract N°: 904

Title: Advanced skin tumors: delayed consultation and/or diagnosis?

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Introduction

Skin tumors are common and increasing in incidence. Many articles still describe cases of advanced skin tumors. The aim of our work is to identify factors related to the delay in diagnosis of these tumors.

Materials and methods

This was a cross-sectional study including all patients treated in the dermatology department of the Mohamed VI University Hospital of Oujda, from May 2016 to May 2021, for skin tumors with a size greater than 3cm and a duration of evolution greater than 6 months. We interviewed the patients by telephone using a questionnaire written in French and designed by the Google forms platform and comprising 29 questions.

Results

Seventy-five patients were included, with a mean age of 63 years and an F/H sex ratio of 0.44. Seventy-three percent of the patients lived in urban areas, and all lived with their families. Cognitive disorders were found in 5% of our sample and psychiatric disorders in 6.8%. For more than half of the patients, the tumor was discovered incidentally, 7.3% consulted a general practitioner and 3% consulted a dermatologist directly. Forty-two percent of the patients did not consult because of the absence of pain, 32% because of lack of motivation, 30.3% because of lack of information and ignorance of the urgency, 26% because of the absence of general signs, 15% because of fear of the result and 2% because of lack of time. The average size of the tumors at the time of diagnosis was 6.9 cm and the average duration of the tumor's evolution was 58 months. Sixty-five percent of the tumors were in the photo exposed areas. The most common histological type of tumor was squamous cell carcinoma (38%), followed by melanoma (25.3%), basal cell carcinoma (13.3%), lymphoma (9.3%) and sarcoma (6.6%).

Discussion

Advanced tumors are unfortunately still part of the medical landscape. A study conducted at the University Hospital of Limoges in 2019 over a period of 5 years identified 43 advanced tumors. Our study found a larger number of tumors for the same duration. The average age of the patients was 80 years, 24% had a psychiatric disorder and 26% lived in a situation of family isolation. The average duration of evolution of the tumors was 34 months compared to 58 months in our cases. In another study, patient neglect was found to be the cause of one third of giant basal cell carcinomas. The tendency of individuals to neglect their tumors correlates with a lack of sufficient understanding, a reason found in 30% of our patients. The consequences of this neglect are excessive tumor growth, invasion of neighboring structures, metastatic spread and significant disfigurement. The treatment becomes complicated, requiring advanced skills in resection and reconstruction and a multidisciplinary approach.

Advanced tumors are still part of our daily practice. Information and screening campaigns for physicians and the general population can help to reduce this phenomenon.

Abstract N°: 908

Title: Phototherapy decreases circulating regulatory T cells in two patients with mycosis fungoides

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Introduction

Mycosis fungoides (MF) is the most common primary cutaneous lymphoma. Apart from classic type of MF, several other variants have been described including erythrodermic and folliculotropic MF. UV light and other skin-directed therapies are the mainstay for the treatment of early-staged MF. Regulatory T cells (Tregs) are a subset of CD4+ T cells with an essential role in the maintenance of peripheral tolerance and tissue integrity characterizing by the expression of CD25 and the transcription factor forkhead box protein 3 (FoxP3). We present two cases of MF with a reduction of circulating Tregs after phototherapy.

Materials and method

A 63 year old caucasian woman was referred to cutaneous lymphoma clinic for the evaluation of a widespread pruritic erythematous eruption. The rash first appeared 7 years prior to our investigation, initially treated with systemic steroids. After that, erythrodermic psoriasis was suspected and patient was treated with cyclosporine and apremilast without any clinical response.

On physical examination we observed diffuse erythema and scaling involving most of the skin surface area. There was no organomegaly or lymphadenopathy. Histopathology and immunophenotyping revealed dermal infiltration of atypical lymphocytes, acanthosis, hyperkeratosis, parakeratosis and epidermotropic T lymphocytes with CD3+CD4+CD8-CD30- immunophenotype. The diagnosis of erythrodermic mycosis fungoides was established and patient underwent psoralen plus UVA (PUVA) treatment. At the end of 3-month PUVA treatment period a cumulative UV dose of 81,5 J/cm2 was achieved accompanied by a complete remission of the disease.

The second case is a 57 years old woman with erythematous patches on both legs. She referred to lymphoma clinic with a diagnosis of folliculotropic MF proven with histology and immunochemistry. Likewise, she was treated with narrowband UVB (nbUVB) phototherapy with complete response after 3 months and a cumulative UV dose of 11310 mJ/cm2

Blood sample was obtained from the patients before and three months after phototherapy. The population of T regulatory cells was identified using flow cytometric analysis. We assessed the percentage of CD4+CD25+FoxP3+

T regulatory cells in the CD3+ T cells. A decrease in circulating Tregs was noticed three months after treatment. Particularly, we noticed a decrease of Tregs from 2,8% to 0,2% in the first patient and from 6,5% to 0,7% in the second case.

Discussion

The mechanism of effectiveness of phototherapy for MF is not well understood. The finding in the present MF case is that UV treatment eliminates the peripheral Tregs. While reports cite that phototherapy decreases infiltrating Tregs in MF lesions, little is known about its effect in circulating Tregs. Further studies are required to establish the impact of phototherapy on Tregs in MF patients paving the way for new cell-targeted therapies in the future.

Abstract N°: 912

Title: An unusual basal cell carcinoma mimicking Dubreuilh melanoma in a patient with Xeroderma pigmentosum variant subtype.

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Introduction

Xeroderma pigmentosum variant (XP-V) is a rare subtype of Xeroderma pigmentosum characterized by a normal nucleotide excision repair. It is responsible for a high predisposition to developing skin abnormalities and neoplasia such as squamous cell carcinoma, basal cell carcinoma and melanoma.

Here we report the case of a Moroccan patient with XP-V with atypical basal cell carcinoma in the face mimicking Dubreuilh Melanoma.

Materials and methods

Results

A 34-year-old female, diagnosed with XP-V for 6 years, was admitted in our dermatology department for a hyperpigmented macular lesion on the face associated with multiple nodular lesions.

Physical examination revealed a poikilodermal aspect of sun-exposed skin areas, with the presence of a slightly asymmetric hyperpigmented macular lesion on the left jugal area as well as multiple hyperpigmented polylobed papulo-nodular lesions on the face, pearled at the periphery with some ulcerated areas.No palmar, plantar or mucosal lesions were found.

Superficial lymph nodes were negative and the neurological examination showed nothing abnormal.

The dermoscopic findings of the jugal macular lesion showed: An asymmetric heterogeneous pigmentation with rhomboidal pattern and follicular obliteration. While it showed in the papulo-nodular lesions : Leaf-like areas on the periphery of the lesions with large blue-grey ovoid nests and spoke wheel areas.

Based on the above findings, we clinically diagnosed this patient as having Dubreuilh melanoma on the jugal area with mutiples facial basal cell carcinomas.

Skin biopsies of all lesions were performed with clear resection margins and the histopathological findings for the macular lesion as well as the papulo-nodular lesions were all consistent with a diagnosis of basal cell carcinomas even for the jugal macular lesion.

The patient then underwent facial reconstruction (flaps and skin graft) with satisfying results.

Also, she received extensive advice on protection measures from sunlight in order to prevent precancerous and cancerous lesions, as well as the importance of regular medical follow-up.

Discussion

Basal cell carcinoma (BCC) is a non melanocytic, slow-growing skin tumor which oftens appears on sun-exposed areas. Despite the fact that its malignancy is rarely fatal, BCC can be highly destructive to local tissues when diagnosis is delayed or treatment is inadequate.

And, even though the symptomatology in XP-V patients is attenuated occuring later in life compared to the classical XP patients, they have a high predisposition for malignancies with basal cell carcinomas being by far the most frequent malignant tumors.

However, establishing a definitive diagnosis of basal cell carcinoma can be normally easy when the clinical, dermoscopic and histopathological findings come together. In our case, even though the clinical report suggested a Dubreuilh melanoma, the histopathological results were consistent of basal cell carcinoma.

With no similar case reported in the literature. To our knowledge, we believe that we presented an original case of basal cell carcinoma mimicking Dubreuilh melanoma.

We hope that our case report can help raising clinicians' awareness of the importance of combining clinical and histological findings to aid the establishment and avoiding missing out a particular diagnosis.

Abstract N°: 947

Title: Metastatic squamous cell carcinoma in chronic lymphocytic leukaemia: experience of a combined haematology-dermatology multidisciplinary clinic

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Introduction

Chronic lymphocytic leukaemia (CLL) patients have a greater risk of developing skin cancer, which is frequently more aggressive, more likely to metastasize and have a higher mortality rate than the general population. This is due to the loss of immune-surveillance function from the CLL disease itself, sometimes compounded by immunosuppressive therapies. We aim to describe the epidemiological and clinical features of metastatic squamous cell carcinoma in a series of six patients with CLL who were regularly reviewed in a combined haematology-dermatology clinic.

Materials and methods

A retrospective review of patient presentations to the weekly combined haematology-dermatology clinic at a tertiary hospital was conducted from 2nd May 2013 and 16th April 2021. Data was obtained from clinic notes, referrals and histology reports stored in the institutional electronic medical record system.

Results

A total of 517 patients with CLL were seen in our multidisciplinary combined clinic. Of these 517 patients, of whom 58 developed cSCC, hence the overall rate of cSCC in the CLL cohort was 11.2%. Of patients who had cSCC, six subsequently developed mSCCs, thus the overall rate of mSCC in the CLL cohort was 1.2% (6/517) and 10.3% (6/58) of the CLL cases with cSCC. All six patients were male, with an average age of 67±15 years at the time of CLL diagnosis. One patient was on a novel therapy venetoclax, a BCL-2 inhibitor. In most cases, metastatic disease developed following instituting CLL treatment, with the average time of mSCC development being 7 years post-CLL diagnosis. All patients had multiple cSCC and had a prior history of NMSCs. The anatomical location of cSCC and metastases were predominantly in the head and neck region. The grading of mSCC was moderate to poorly differentiated, in which two patients had perineural invasion, and another two patients had a lympho-vascular invasion. One patient died from the mSCC two years after diagnosis and another patient died from Richter transformation of brainstem region.

Discussion

Our combined haematology-dermatology clinic cohort overall observed a similar rate of metastasis of cSCC in CLL relative to overseas studies. A retrospective New Zealand study observed a rate of 16.4% of cSCC in patients with CLL. The rate of metastasis in these patients with cSCC was 9.9% (6 out of 61 patients). An American study reported a 10.7% rate of metastasis in their CLL cohort over five years (3 out of 28 patients), with a slightly older population (mean age 73 years). This demonstrates highly comparable mSCC rates in CLL in these countries, and is far higher compared to the general community (1.9–2.6%). In the general population, less than <5% of cSCC lesions metastasize to regional lymph nodes. Hence, early detection and monitoring of skin malignancies are of paramount importance in patients with CLL.

This observational data provides a useful depiction of the general pattern and histological features of mSCC in CLL patients. We believe that the combined haematology-dermatology clinic model allows the patient to receive timely diagnosis and appropriate clinical care. It provides the opportunity for early detection of skin cancers and streamlined referral to specialist treatment including surgical and radiotherapy teams when required. Further studies should focus on surveillance, disease pattern and management specific to patients with CLL and skin cancer, which may inform future guidelines and recommendations.

Abstract N°: 960

Title: Radiation-induced morphoea of the Breast: a case series

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Introduction

Radiation-induced morphoea (RIM) is a rare but recognised late complication of radiotherapy for the treatment of breast cancer. It was first described in 1905, not long after the initial discovery of x-rays by Roentgen. Characterised by the deposition of excess collagen in the dermis, it results in thickening of the skin. Its frequency is approximately 2 in 1000 in patients undergoing radiotherapy.

Results

We present a series of 3 cases involving patients receiving radiotherapy for the treatment of breast cancer, each of which subsequently developed localised morphoea after finishing their treatment.

Discussion

Because of its rarity, RIM is often misdiagnosed as infection, radiation-induced fibrosis, or metastatic disease. This can lead to delayed diagnosis and treatment, leading to poorer outcomes such as breast disfiguration and chronic pain issues. Early dermatological involvement and sampling of tissue to examine for specific histopathological features can avoid this, leading to better care and improved results. A variety of treatment options are available, ranging from topical to systemic, with early induction more likely to result in a positive treatment response.

Abstract N°: 970

Title: Epidemiological, clinical and evolutionary profile of squamous cell carcinoma of the foot (twenty cases)

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Introduction

Cutaneous squamous cell carcinoma (SCC) is a common cancer resulting from the malignant proliferation of epidermal keratinocytes. It is the second most common type of skin cancer with potential risks of metastasis and recurrence. The aim of this work is to describe and analyze the epidemiological, clinical, therapeutic and evolutionary aspects of patients followed for squamous cell carcinoma of the foot.

Materials and methods

This is a multicentric retrospective study spread over a period of 20 years, between January 2000 and December 2020, on patients hospitalized in the Dermatology Department of the CHU IBN ROCHD of Casablanca and at the National Center of Leprology (CNL) of Casablanca. Epidemiological, clinical, therapeutic and evolutionary data were collected from the medical records of the central file of the CNL and the archives of the Dermatology Department of the CHU IBN ROCHD.

Results

Twenty patients were included in this study, of which 10 patients were followed up at the National Centre of Leprology and 10 patients were hospitalized at the Dermatology Department within the CHU IBN ROCHD of Casablanca. Thirteen men and seven women were involved. The mean age was 58.74 years (42-80 years). Two patients had a history of squamous cell carcinoma of the right hand and larynx. One patient had a history of third degree burns of the foot and one patient developed Carcinoma Verrucosa on a warty lichen planus of plantar location. The clinical aspect at the time of diagnosis was dominated by an ulcero-budding lesion. The location was the plantar surface of the foot (eight cases), the heel region (six cases), the dorsal surface (three cases) and the inter-toe space (three cases). The initial paraclinical assessment showed bone lysis in 9 patients, a periosteal reaction in one patient and the presence of inguinal adenopathy in seven patients. The remaining initial assessment was normal. Surgical treatment by mid-leg amputation was indicated for all patients, including mid-leg amputation for fifteen patients, forefoot amputation for one patient, biopsy and skin grafting for two patients, whereas this treatment was refused by two patients who were subsequently lost to follow-up. The evolution was marked by the occurrence of metastases in nine patients, at the level of the amputation stump in five patients. They were referred to the Radiotherapy/Oncology Department for adjuvant treatment after a multidisciplinary consultation.

Discussion

Cutaneous squamous cell carcinoma (CSC) can occur on any part of the body, including the head, trunk, neck, extremities, periungual skin, buccal mucosa, and anogenital areas. However, localization in the foot is rare. In the

literature, the patients affected are in their fifties and sixties. Malignancy should always be considered in the cases of any change in aspect, size or appearance of pain, especially in pre-existing chronic lesions. Malignant transformation of plantar ulcers in leprosy is not uncommon. Malignant transformation was more common in plantar ulcers of long duration. After confirmation of the diagnosis, metastases should be excluded, as they are crucial for prognosis and have a negative impact on survival; metastases to regional lymph nodes are likely to result in death within 2-3 years. Metastases at diagnosis are quite common and are found in 27% of patients. Amputation is the preferred option for treating CE of the foot, particularly in the cases of infected bone or joint damage, which is consistent with our series.

Abstract N°: 984

Title: place of phototherapy in the treatment of mycosis fungoid in the patch stage in patients of dark phototype

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Introduction

Mycosis fungoides (MF) remains the most frequent variant of primary cutaneous lymphomas. Its clinical, anatomopathological and evolutionary polymorphism makes its diagnosis difficult (1). Phototherapy is a first-line treatment of MF at an early stage (2). We report our experience with phototherapy in the treatment of patients with MF, having a dark phototype.

Materials and methods

Retrospective study including 7 cases of MF, proven by histological and immunohistochemical criteria, with phototype IV and V, treated by phototherapy in our department, between June 2014 and May 2021.

Results

There were 4 male and 3 female patients, an H/F sex ratio of 1.3. The average age of onset of MF was 46 years ± 20.2. The mean duration between the appearance of the lesions and the diagnosis of MF was 11 years. Pruritus was reported by all patients. Clinical examination showed erythematous and/or dyschromic plaques, infiltrated in 3 patients and not infiltrated in 4 patients. These lesions were in the photo-hidden areas. The clinical examination also revealed open comedones with a depilation of the axillary and genital areas in 1 patient. According to the TNM classification, 3 patients were classified at the time of diagnosis as stage IA, 1 patient IB, 1 patient IIA and 2 patients IIB. Six patients received UVB phototherapy, 5 of them at a rate of 3 sessions/week, and 2 sessions/week for one patient. The average number of sessions was 25, with an average cumulative dose of 56 J/cm2. An association with retinoids was noted in 4 patients. One patient received 3 sessions of puvatherapy per week, with a total of 24 sessions and a cumulative dose of 131.1 J/cm2. No phototherapy-related adverse events were noted in our patients. The evaluation of the therapeutic response showed complete remission in 2 patients and partial remission in 4 patients. Recurrence occurred in 4 patients after an average of 18 months (7 to 36 months).

Discussion

Phototherapy with ultraviolet B (UVB) and ultraviolet A rays combined with 8-methoxypsoralen (PUVA) remain the mainstay of therapy for early MF. UVB, which does not require a photosensitizer and has fewer iatrogenic photocarcinogenic side effects than PUVA, are increasingly used (2).

Our study confirms the effectiveness of phototherapy in the treatment of MF in patients of dark phototype, with remission in 85.7% of cases, this said recurrences are frequent.

Regarding tolerance, no adverse effects related to phototherapy were noted in the patients included in our study.

Our results are similar to those of a Tunisian study involving 9 patients of MF with a dark phototype (3).

Phototherapy is commonly recommended as a first-line treatment for early MF. Our study underlines its efficacy and safety in patients with MF and dark phototype.

Abstract N°: 1003

Title: 15 years after the beginning of the Slovenian preventive health program Safe with the Sun

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Introduction

Since 1980 the substantial increase of melanoma and other skin cancers incidence has been recognized in Slovenia - in 2017 crude incidence of invasive v. "in situ" melanoma was 28 v. 13.3 (Slovenian aged standardized incidence, SASI, was 23.8 v. 11.4) per 100.000 inhabitants. Crude incidence of nonmelanoma skin cancers in the same period was 155 (SASI 118.7) per 100.000 inhabitants.

Besides the secondary the need for primary prevention of skin cancer has been recognized by the Slovene Dermatovenereological Association (SDA).

Materials and methods

In collaboration with SDA, the National Institute for Public Health and a kindergarten teacher, each spring a preventive program "Safe with the Sun" has been organized in voluntary kindergartens since 2007. Through educating the educators, presenting the manners of how to work with children through lectures and professional articles and providing unified educational materials (in 2021 because of the pandemic e-mailed presentations, the pamphlet for parents and other materials) focused on the natural ways of sun-protection (e.g. the rule of shadow, sun-protection with clothes and hats) the program "Safe with the Sun" intends to warn children aged 4-6 in kindergartens, their teachers and parents against unprotected sun exposure and to encourage them to protect themselves regularly all around the year.

Results

The change in legal regulations of kindergartens was achieved: the heads of kindergartens must assure a shady area big enough for all children outdoors. The 4-week long program "Safe with the Sun" was integrated into the kindergarten curriculum. In 2010 the Slovene Ministry of Health recognized the program to be of national importance and it was expanded to voluntary elementary schools. In the period from 2007 to 2021 (without the year 2020 because of Covid-19 pandemic) all together 427.328 pre-school children and 189.177 pupils of elementary schools before going to the field trip "The School in Nature" were actively involved in the program, but even more indirectly.
Each year reports show that children in kindergartens and schools have invented many different activities connected to the topic, e.g. diaries about the weather changes and the sun protective measures, measuring the shadow, paintings, ... A change of the daily routine in organizing outdoor activities has been introduced in kindergartens: children went out immediately after breakfast and they came back to the shady areas at 10 o'clock. Evaluation of the questionnaires for teachers and parents after each year of the program has showed that they have accepted the program very positively and that parents have supported the sun-protective activities of the children.

Discussion

The organization of the 4-week long regular topic in the curriculum of kindergartens each spring repeatedly

supports sun protective activities to become a part of everyday life of kindergartens throughout summer and to support family sun-protection at least during the summers.
In the future, however, the spread of educational preventive program for teenagers will be needed.

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Abstract N°: 1026

Title: Atypical basal cell carcinoma of the face: series of 5 cases

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Introduction

Basal cell carcinoma is an epithelial tumor developed at the expense of epidermal tissue, mainly de novo, localized only on the skin and with local malignancy. Many clinical and histological forms are described, in particular tattooed or pigmented basal cell carcinoma, which poses the problem of differential diagnosis with melanoma, and scleroderma or morpheiform basal cell carcinoma, which are rare forms. The objective of this work is to describe the epidemiological, clinical and therapeutic aspects of patients followed for basal cell carcinoma of the face.

Materials and methods

This is a prospective study spread over one year from June 2020 to June 2021, five patients followed in dermatology consultation at the CHU IBN ROCHD in Casablanca. All cases of basal cell carcinoma of the face with histological evidence.

Results

Five patients were included in this study, they were three men and two women. The average age was 72.3 years (63-86 years). All our patients reported the notion of sun exposure. The average duration of evolution before diagnosis was 3.1 years. The clinical examination found an ulcerated nodular lesion in two patients, an erythematous sclerotic lesion ulcerated in places in one patient, a pigmented plaque in another and a blackish ulcero-budding lesion in the third. Scleroderma basal cell carcinoma was found in three patients and tattooed basal cell carcinoma was found in two patients. The initial paraclinical assessment was normal in all the patients, all the patients were sent to the maxillofacial services for surgical treatment after histological confirmation. The postoperative follow-up was simple except for one patient or a loosening of sutures at the graft level was reported.

Discussion

The particularity of our work is to describe the atypical forms of basal cell carcinoma in the face. Scleroderma basal cell carcinoma is a rare form of basal cell carcinoma, characterized by a potentially aggressive evolution justifying radical surgical treatment to avoid recurrences, usually located in the centro-facial region. Early diagnosis in scleroderma is the main method to avoid disfiguring surgery. Pigmented basal cell carcinoma is a clinical and histological variant of BCC which is characterized by brown or black pigmentation, representing only 6% of total BCC, it poses a problem of differential diagnosis with melanoma. A biopsy is therefore necessary to establish the differential diagnosis of pigmented BCC. Management is based on excision with respect for the margins.

Abstract N°: 120

Title: A case of Kimura's Disease successfully treated with surgery

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Results

A 19-year-old Indian male presented to Dermatology with chronic progressive and painless postauricular and occipital swelling over a five-year duration. There was no associated fever. He had no past medical history or family history of malignancies. Physical examination showed two firm, discrete 3 x 3cm well-circumscribed skin-coloured nodules at the left posterior auricular region. There was no purulent discharge. Systemic examination was unremarkable. Computed tomography of the brain showed a postauricular soft tissue thickening with bilateral preauricular nodular soft tissue thickening (left larger than the right). Blood investigations revealed elevated serum immunoglobulin E (IgE) (3967 IU/ML) and peripheral eosinophilia (Eosinophil 23.7%, Absolute count 1.79x10(9)/L). Routine investigations did not reveal any end-organ damage.

Surgical excision revealed five discrete pale-coloured, smooth-surfaced, soft nodules in the subcutaneous plane and deep to mastoid fascia, measuring between 5mm to 1.5cm. Histopathology showed lymph nodes with reactive hyperplasia. There was paracortical expansion by prominent stromal fibrosis and increased vascularity. The endothelial cells were not overtly epithelioid in appearance. There were patchy areas with increased eosinophils and plasma cells. The final diagnosis of Kimura disease (KD) was made based on clinicopathological correlation.

Kimura disease is a rare chronic inflammatory disease of uncertain aetiology. The usual presentation involves progressively enlarging painless nodules accompanied by increased eosinophils and (IgE). KD classically involves the head and neck region, with typical features of peripheral eosinophilia and raised serum IgE.

The clinical features suggestive of KD include the age of onset between 20-40 years, Asian male, mass size between 1-20cm, blood eosinophilia, and elevated serum IgE. In contrast, ALHE is reported more commonly in female patients in the third to the fifth decade of life, with associated overlying erythema, normal serum IgE and occasional eosinophilia. Diagnosis of KD should be made using clinical, histopathological, and laboratory examination. There are no internationally recognised diagnostic criteria. Histopathological features suggestive for Kimura's disease include lymphoid tissue with hyperplastic germinal centre and surrounding vascular structure hyperplasia. Germinal centres containing eosinophil infiltrate and focal eosinophil micro-abscesses can also be found in lymphoid follicles. Significant vascular hyperplasia and fibrosis without atypical cells are seen.

The etiology of KD remains unclear. Proposed mechanisms include trauma, infection, dysregulated eosinophil dynamics and IgE synthesis in the immune system, or a hypersensitivity reaction. The treatment modalities of Kimura disease are also not well established. Standard first-line therapy includes surgical resection, systemic corticosteroids, cyclosporine, interferon-α, thalidomide, and a combination of post-surgical radiotherapy. Combination therapy of surgical resection with prednisolone has also been reported to be superior to surgery alone. However, KD is has a high recurrence rate, with recurrence rates as high as 72% reported in the literature. Patients with Kimura disease should be monitored for disease recurrence.

Abstract N°: 159

Title: Upper eyelid reconstruction with the Cutler-Beard flap

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Introduction

Materials and methods

Results

Periocular skin malignancies more frequently affect the lower eyelid than the upper eyelid, with squamous cell carcinoma being the second most common type, after basal cell carcinoma. Surgical excision of the tumor is considered the first-line therapy, but the correct repair of the affected eyelid is essential for maintaining the integrity of the eyeball, particularly, the cornea.

We describe a case of a 68-year-old female patient observed for a progressively enlarging lesion located on the right upper eyelid, over the last year. Physical examination demonstrated a 15x15 mm infiltrated nodule, with an erosive central area, whose incisional biopsy was compatible with moderately differentiated squamous cell carcinoma.

The patient underwent radical excision of the lesion, with a 6 mm margin, resulting in a full-thickness defect that occupied approximately 70% of the eyelid length. The reconstruction was performed using the Cutler-Beard flap, a two-stage procedure. In the first stage, a full-thickness interpolated flap was harvested from the lower eyelid, distally to the tars, and advanced to the upper eyelid, below the eyelash margin. The posterior lamella of the flap was sutured to the conjunctiva and the anterior lamella to the *levator palpebrae superioris* muscle and eyelid skin. After 6 weeks, in the second stage, the pedicle was divided, allowing the reconstruction of the upper eyelid, with an excellent functional and cosmetic result.

The size and thickness, either total or partial, of eyelid defects are the most important factors in selecting the most suitable reconstructive procedure. The reconstruction of full-thickness defects that involve more than > 50% of the length of the upper eyelid is still challenging and surgical options are very limited. In these situations, the Cutler-Beard flap presents as the safest and most reliable technique, allowing the restoration of the eyelid anatomy and functionality. However, it is a technique that requires the performance of two surgical stages, with the need for ocular occlusion between them. Complications of this flap are similar to other eyelid flaps and include loss of eyelashes, entropion and eyelid retraction.

Discussion

Abstract N°: 227

Title: Generalized eruptive keratoacanthomas of Grzybowski (a case report)

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Introduction

Generalized eruptive keratoacanthomas of Grzybowski is an extremely rare atypical form of keratoacanthoma - a benign epithelial skin neoplasm. The disease develops over the age of 40, is characterized by the presence of hundreds or thousands of generalized small itchy papules on the skin of the face, trunk, extremities, genitals, oral and laryngeal mucosae.

Materials and methods

The diagnosis - generalized eruptive keratoacanthomas of Grzybowski was verified by the pathomorphological studies of the biopsy of the affected skin.

Results

A 50-year-old patient A., turned to the clinic with complaints about numerous itchy papules on the skin of the face, trunk and extremities, severe dryness and tightness of the skin up to eversion of lower eyelids. The patient had been ill for 2.5 years, had visited countries with excessive insolation 7 months before the onset of the disease: Costa Rica, Cuba, Nicaragua and Thailand. The skin process is generalized. On the skin of the face, trunk and extremities, hundreds of erythematous nodules with a diameter of 1 mm to 8 mm are observed; the nodules have a smooth surface or are covered in the central part with grey horny crusts which are easily removed with a spatula without bleeding. In the place of the nodules that have undergone spontaneous involution, areas of skin depigmentation are formed. On the skin of the lateral surface of the neck, there is a dome-shaped knot with a diameter of 1.7 cm, in the central part of which there is a crater-shaped depression (pseudo-ulcer) surrounded by a dense roller up to 3 mm wide, pink in color. Ectropion of the upper and lower eyelids of both eyes is noted, eyelashes on the lower eyelid are absent.

Pathomorphological studies of the skin biopsy: there are hyperparakeratosis with the formation of 'horny pearls' in submerged of epidermal outgrowths, which do not have a clear border with the underlying dermis, and foci of dyskeratosis. The length of the epidermal processes reaches the level of the pilosebaceous appendages. Quite a dense mononuclear infiltrate is determined in the stroma of the keratoacanthoma and the underlying dermis. On the basis of the clinical and pathomorphological data the patient was diagnosed with generalized eruptive keratoacanthomas of Grzybowski.

Discussion

The influence of ultraviolet radiation, chemical carcinogens, human papillomavirus, immunosuppressive therapy are assumed to be etiopathogenetic factors in the development of the disease. Differential diagnosis is carried out with squamous cell skin cancer, with ulcerative basal cell carcinoma, with molluscum contagiosum, with Kirle disease, with multiple keratoacanthoma of the Ferguson-Smith type, with cutaneous metastases of internal cancers, with Muir-Torre syndrome, etc.

Abstract N°: 290

Title: Management of rhinophyma with electrosurgery

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Introduction

Rhinophyma is a benign but disfiguring pathology of the nose corresponding to a phenotype of rosacea. It is characterized by thickening of the nasal skin secondary to epidermal hyperplasia, dilation of the follicular infundibulum and hyperplasia of the sebaceous glands, resulting in a bulbous nodular telangiectatic nose. It is a stigmatizing disease, which can have a considerable impact on the quality of life. Rhinophyma's treatment is surgical in most cases. There are a variety of surgical treatments including cold scalpel excision, dermabrasion, cryosurgery, CO2 laser, Er:Yag laser. Electrosurgery is a technique that seems to be forgotten in this pathology, but which offers several advantages. The aim of our study was to present our experience in the treatment of rhinophyma by electrosurgery.

Materials and methods

It was a descriptive study conducted between July 2019 and July 2021 including patients with rhinophyma, treated by electrosurgery.

Results

Over a 2-year period, four patients with rhinophyma were included. All patients were male. The average age was 63 years old. Three patients had moderate rhinophyma and one patient had a giant rhinophyma. The therapeutic protocol was the same for all patients: After locoregional or tumescent anesthesia, a tangential excision of the hypertrophied tissue by electrocautery was performed layer by layer. We used a monopolar electrocautery, in "cut" mode, at 40W. The "coag" mode has sometimes been used for hemostatic purposes. Treatment was carried out side by side, gradually ascending towards the nasal pyramid, while preserving the dermis covering the nasal cartilage. A global resurfacing of the entire nose was then carried out using the same technique until a satisfactory result was obtained. The duration of the intervention varied between 10 and 20 minutes. Postoperative care consisted of fatty dressings until healing. The patients were seen again on day 7 postoperatively and after one month. The postoperative course was simple for all patients. Complete healing was obtained after one month. The final aesthetic result, evaluated at 1 month, was mostly positive, as was patients' satisfaction. Only one patient showed persistent erythema, which he considered insignificant compared to the aesthetic damage of his initial rhinophyma.

Discussion

Interventional treatment is recommended in moderate to severe rhinophyma. Several surgical techniques exist, and each technique has advantages and disadvantages. It should be noted that the risk of recurrence exists, regardless of the technique used. Electrosurgery is a technique that seems to be forgotten in this indication and which offers an excellent alternative to other expensive ablative treatments such as lasers. It is distinguished from other methods by its simplicity, low cost, availability, short duration of intervention, good hemostasis, good aesthetic result and mostly simple postoperative follow-up.

Abstract N°: 634

Title: Reconstruction of a large full-thickness surgical defect of the lower lip

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Introduction

Large surgical defects of the lower lip present a reconstructive challenge because the surgeon must restore proper lip function, oral competence, and achieve a favorable aesthetic outcome. Defects that comprise half the width or more of the lower lip typically require extensive circumoral reconstruction. The ideal technique depends on several factors, including the size, depth, and location of the defect, the patient's anatomy, and the surgeon's experience and skill set.

Materials and methods

We report a case of a patient with a large squamous cell carcinoma on the lower lip, treated surgically with the combination of a cutaneous transposition flap from the labiomandibular crease and a retrolabial mucosal advancement flap.

Results

A 65-year-old man with a previous history of ischemic heart disease and renal failure undergoing chronic hemodialysis, was referred to our Dermatologic Surgery Department for a large hyperkeratotic tumor involving the lower lip. Surgery was performed under local anesthesia with 2% lidocaine. The tumor and a margin of 5mm were excised, resulting in a full-thickness wide defect on the two left thirds of the lower lip, measuring approximately 2x3.5 cm. Immediate reconstruction with a cutaneous transposition flap from the labiomandibular crease and a retrolabial mucosal advancement flap was performed. Firstly, an incision was made on the left labiomandibular skinfold, with a width of 1.5 cm and an upper pedicle. The flap was elevated and mobilized in the direction of the defect and sutured on the anterior margin of the defect. The donor site was closed primarily. For vermillion reconstruction, the retrolabial mucosa was carefully undermined at the submucosal plane, advanced, and sutured with the posterior margin of the previous flap. No postoperative complications were noted. Histopathologic examination was consistent with squamous cell carcinoma and the margins of the specimen were disease-free. Six months after surgery, the cosmetic and functional result is excellent.

Discussion

The combination of cutaneous transposition flap and mucosal advancement flap is a valuable option to repair large full-thickness surgical defects of the lower lip. Using tissue from within the same cosmetic subunit can provide an optimal match for skin color and texture. Our technique achieved the main goals of successful lower lip reconstruction, which is the delicate balance between adequate mouth opening and competent mouth closure and, ultimately, acceptable aesthetic appearance.

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Abstract N°: 639

Title: Management of Pyogenic Granuloma with Intralesional Sodium Tetradecyl Sulfate: A Case Series

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Introduction

Pyogenic granuloma (PG)/ lobular capillary hemangioma (LCH) has several treatment options, mainly surgical excision, cryotherapy, and electrocautery, with variable risk of incomplete clearance and recurrences. Data on sclerotherapy in PG is sparse, limited to a few case reports and series on sodium tetradecyl sulfate (STDS), monoethanolamine oleate, bleomycin, and polidocanol. We present a series of 10 patients of pyogenic granuloma treated with intralesional STDS, and its efficacy, side effect profile, and recurrence rates were assessed.

Materials and methods

10 patients of pyogenic granuloma (based on history and clinical features) of any age giving consent to be part of the trial were included. Intralesional STDS 3% was diluted in physiological saline to a final concentration of 1% and was injected slowly using an insulin syringe until the lesion blanches and a maximum of 1ml will be used in one sitting. Patients were followed up weekly, and the dermoscopy was done on every visit to look for any vascular remnants. If the lesion does not show complete resolution, repeat injections would be given at weekly intervals until a maximum of 3 sittings. A final assessment for relapses would be done at 4 weeks, 8 weeks, and 16 weeks after treatment completion.

Results

All 10 patients had complete clearance (100%) of the lesions with STDS 1% in 1-2 sitting (Figure 1,2,3). Side effects were nil for 7 patients, mild in 2 patients, and moderate to severe in 1 patient (case 10, figure 3). (Table 1) All the side effects resolved completely, and one patient had to take analgesics and oral antibiotics (case 10). No bleeding episodes occurred in any patient after the first sitting itself. Further, none has shown recurrence over a follow-up period of 4 months. 6 patients developed atrophic scar (mild in 5 patients, moderate to severe in case 10) as post-treatment sequelae.

Discussion

Though surgical excision with direct closure is deemed the ideal treatment modality, this may be bothersome for lesions over cosmetically sensitive areas like the face or in close proximity to vital structures and also in larger/deeper lesions with a broader base. Sclerotherapy is a simple office procedure, but surprisingly literature on its use in PG, a very suitable indication for sclerotherapy by virtue of the pathology involved, is sparse. In the present study, sodium tetradecyl sulfate sclerotherapy successfully cleared the lesions in most patients without major complications and recurrence.

Table 1								
					Amount			

Table 1 CaseNo	Age/ sex	Site	Size	Duration	Amount of STDS injected and the No. of sittings	Side effects post Injection	Post-treatment sequelae	Recurre
						Pain and duration	Other side effects	
1	34/M	Thumb	0.5X0.5cm	1.5m	1st - 0.3ml	+, 4days	Swelling x 2days	Mild sca
2	23/F	L foot	1x1cm	1m	1st - 0.5ml	+, 1 day	Swelling x1d Purpuric stain +	Mild sca
3	43/F	scalp	2x2cm	1 m	1st - 0.5ml 2nd - 0.3ml	Nil	Nil	Nil
4	23/M	Scalp	2x1 cm	2.5m	1st - 0.8ml 2nd - 0.3ml	Nil	Nil	Nil
5	61/M	lower lip	0.3x0.3cm	6m	1st - 0.3ml	Nil	Nil	Mild Sca
6	56/M	Chin	1x1 cm	1m	1st - 0.5ml	Nil	Nil	Mild Sca
7	13/M	Scalp	0.3X0.3 cm	4m	1st - 0.4ml	Nil	Nil	Nil
8	53/M	L Palm	0.2X0.2 cm	2m	1st - 0.3ml 2nd - 0.2ml	Nil	Nil	Nil
9	45/M	L thumb	2x 2cm	2m	1st - 0.6ml	Nil	Nil	Pigment Scar
10	10/M	Chin	1X1cm	2m	1st 0.5ml	+++, 5 day	Immediate S/E- urticarial rash around lesion, swelling Purpuric staining, necrosis	Hypopig scar

Table 1							
							paresthesias, ulceration after 2-3 days

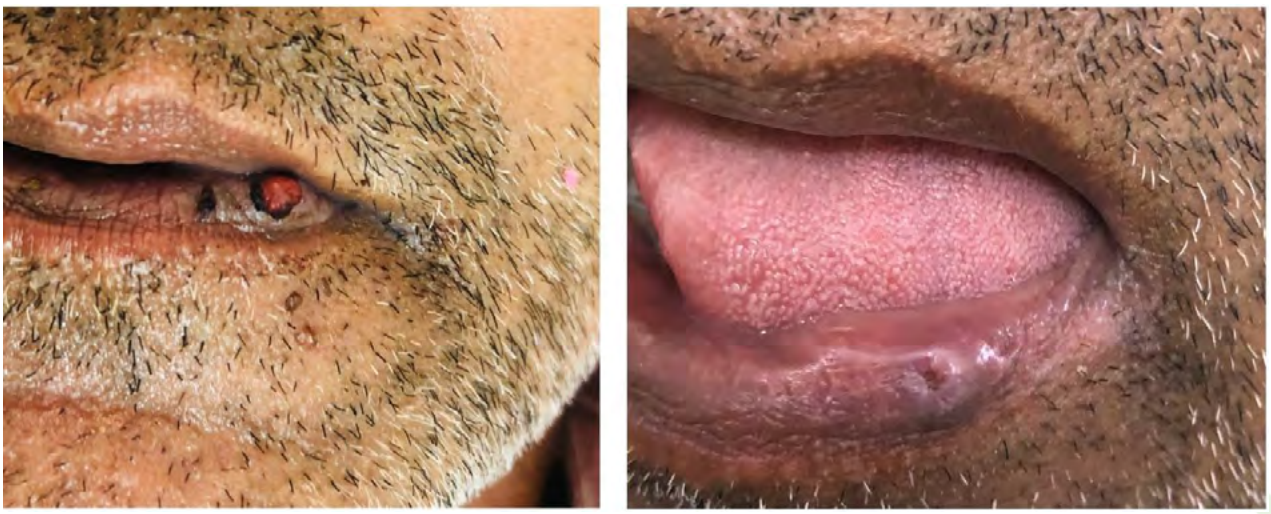

Figure 1, Case No. 5

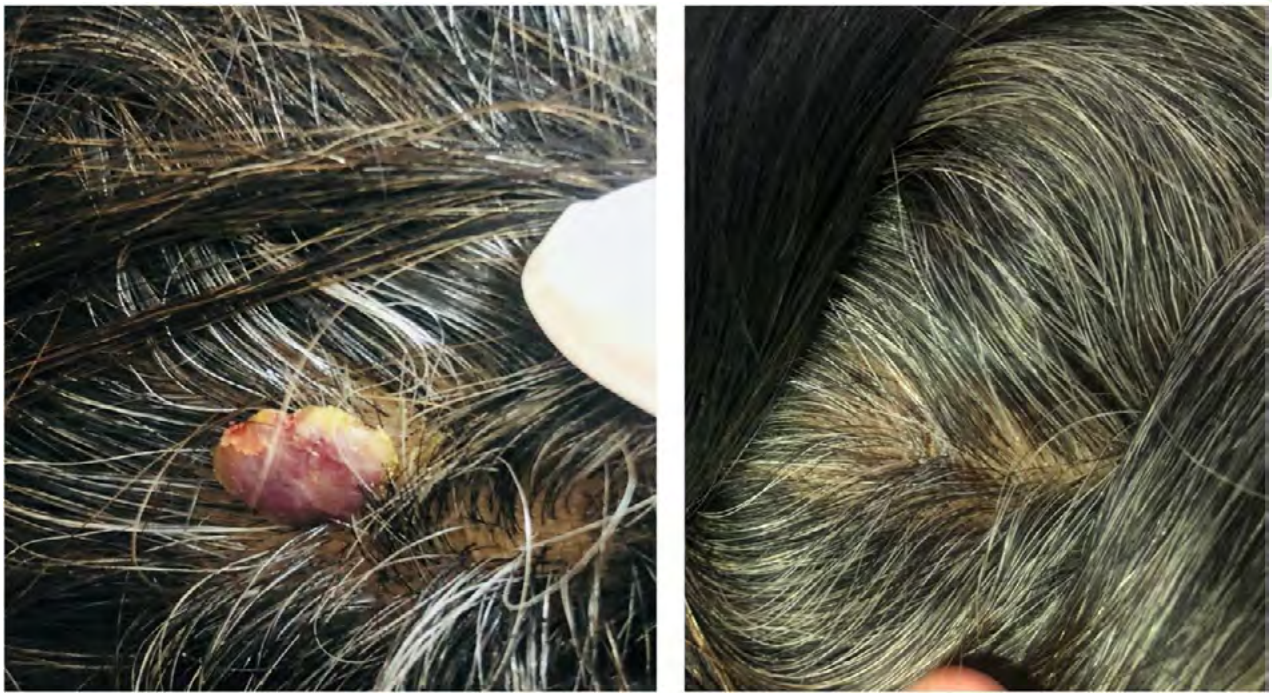

Figure 2, Case No 3

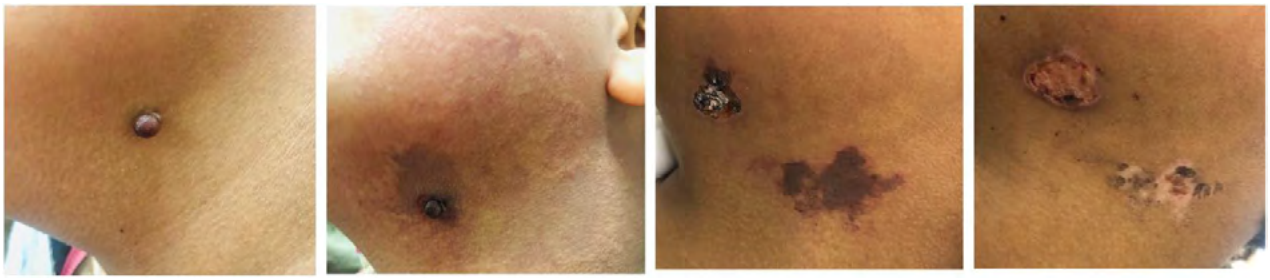

Figure 3, Case No 10

Abstract N°: 63

Title: Incidence of cutaneous Graft-Versus-Host Disease in a Singapore academic medical center - a retrospective cohort study

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Introduction

Cutaneous graft-vs-host disease (GVHD) is a common complication of allogeneic hematopoietic stem cell transplantation (HSCT). Cutaneous manifestations are the most common and often the presenting sign in GVHD. HLA mismatch is the most significant determinant of GVHD occurrence.

With the declining birth rate and an aging population in Singapore, there are increasing difficulties in finding a fully HLA-matched sibling or unrelated donor, leading to a delay in definitive treatment. Alternative donor transplants, including those using haploidentical donors (Haplo), are increasingly being investigated as parents or children have a 50% chance of being haplo-matched. While the incidence of cutaneous GVHD has been shown previously in a Caucasian population to be similar between Haplo and matched unrelated donor (MUD), similar studies in a predominantly Asian population are lacking.

Materials and methods

We conducted a retrospective cohort study of the 2015-2019 bone marrow transplant registry in a tertiary transplant center. Patients with an underlying hematological malignancy who had received a peripheral blood stem cell transplant from MUD, MSD, or haploidentical donor were included. Patients with multiple transplants (≥2), mismatched donors, or had received umbilical cord blood were excluded.

This study aimed to compare the incidence of cutaneous GVHD in Haploidentical (Haplo) transplant recipients with allogeneic matched unrelated donor (MUD) and matched–sibling donor (MSD) transplant recipients. Secondary objectives include the incidence of acute GVHD (aGVHD), chronic GVHD (cGVHD), referrals to dermatology, and the number of skin biopsies.

Results

179 out of 203 cases were reviewed: 17 (9.5%) Haplo, 80 (44.7%) MUDs, and 82 (45.8%) MSDs. Median follow-up for Haplo was 15.2 months (IQR 9.7-22.3), MUD 34.2 months, and MSD patients 35.7 months. The Haplo cohort had a higher cumulative incidence of cutaneous GVHD when compared with MUD and MSD cohorts (p=0.053). Among the 29 GVHD cases, majority had aGVHD (23 [79%]) with predominant exanthem-subtype. cGVHD was only found in the MSD cohort. The most common histology findings were vacuolar interface changes (13 [44.8%]) with a wide range of onset post-transplant (19-456 days).

Discussion

Our findings show that the highest cumulative incidence of GVHD is in Haplo, followed by MSD and MUD. This is clinically significant. There were no cGHVD in our Haplo or MUD group. The most common aGVHD is exanthem,

and the most common cGVHD is lichen planus-like. The histological findings of our GVHD patients show that the traditional acute and chronic GVHD can occur in a variable time frame post-transplant against the traditional 100-day criteria. Our study has several strengths. It is novel, with a predominant Asian population, with comparable ethnic representation between the 3 groups of Haplo, MUD and MSD. Our study also reviewed records over a 5-year duration with few lost to follow up. All our patients with cutaneous GVHD were diagnosed by dermatologist with histopathological correction. Our main limitation includes a small Haplo group.

In conclusion, our study has shown that the highest cumulative incidence of GVHD is in Haplo, followed by MSD and MUD, in a predominantly Asian population. Further prospective studies would be required to validate this.

Abstract N°: 87

Title: Microblading reaction as a first manifestation of a systemic sarcoidosis

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Introduction

Sarcoidosis is a multisystemic inflammatory disease which can affect several organs, most commonly lungs, lymph nodes and skin. Skin manifestaion can be the first presentation of the disease. It is believed that sarcoidosis develops in an immunogenetically susceptible individual triggered by exposure to extrinsic antigens, most commonly microbial agents and environmental substances. Since granulomatous reactions were observed after tattooing, microneedling, injection of Botulinum toxin and injection of dermal fillers, there are growing concerns and data that aesthetic procedures with dermal infiltration can serve as an extrinsic triggering agent.

Materials and methods

We present a case of a 33-year-old female with papulonodular lesions which developed in eyebrows' area one year after microblading procedure.

Results

A 33-year-old female patient presented with orange-red mildly infiltrated plaques of eyebrow area which appeared one year after microblading. Specific color of the lesions (red with orange hue) was suspicious for sarcoid granulomatous reaction. A biopsy confirmed granulomatous dermatitis with epithelioid (sarcoid) granulomas. Chest x-ray revealed hilar lymphadenopathy and reticulonodular opacities in lung, which was consistent with sarcoidosis stage II. She was prescribed a topical treatment for cutaneous involvement with mometasone furoate ointment twice per week with good response.

Discussion

The diagnosis of sarcoidosis is often delayed due to unspecific clinical features. Skin involvement is present in 20-35 % of patients and is often a presenting feature. Sarcoidosis most commonly presents as maculopapular, plaque or subcutaneous lesions, erythema nodosum or lupus pernio. It is believed that sarcoidosis develops in an immunogenetically susceptible person with exposure to an extrinsic antigen. In nowadays era, people are rarely exposed to harmful environmental substances which could serve as a trigger for sarcoidosis, but they frequently undergo aesthetic procedures. During aesthetic procedures various extrinsic antigens are infiltrated into the skin which can serve as an extrinsic triggering factor. As supported by our case, dermal infiltration with foreign materials during aesthetic procedures can serve as a trigger for sarcoidosis manifestation and possibly even its development. Thus, dermatologists should be aware of possible cutaneous presentation of sarcoidosis to make the timely diagnosis. Additionally, all patients with sarcoidosis, should be informed of possible skin sequalae after aesthetic procedures with infiltration of dermis or subcutis. In conclusion, sarcoidosis should be suspected in patients with chronic, especially papulonodular lesions at the site of extrinsic material skin infiltration.

Abstract N°: 146

Title: Cutaneous metastasis of lung carcinoma: a 21-year retrospective study from a Portuguese tertiary care center

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Introduction

The skin is a rare metastatic site of internal malignancies. However, breast and lung cancers have the highest tendency to metastasize to it. Approximately 1–12% of patients with lung cancer develop cutaneous metastases, which can be the first sign of malignancy.

Materials and methods

This is a retrospective study comprising all cases of cutaneous metastases from lung cancer diagnosed in our Dermatopathology Department from January 2000 to December 2021. Data analyzed included the patient's age and sex, histological type of lung cancer, location, clinical form and histopathological features of the cutaneous metastasis, time interval between diagnosis of the primary tumor and the appearance of the skin metastasis, and survival time from the development of the skin metastasis.

Results

Thirteen patients with lung cancer developed histologically-confirmed skin metastases over 21 years, 11 men and 2 women, aged 57–75 years (mean age of 68 years). Among the 13 primary tumors, 9 were located on the right and 4 on the left lung. Lung cancer histological types were adenocarcinoma in 11 cases, squamous cell carcinoma in 1 case, and small cell carcinoma in 1 case. Cutaneous metastases were classified as single nodules in 5 cases, multiple nodules in 3 cases, ulcerated nodules in 1 case, single infiltrated plaques in 2 cases, and multiple infiltrated plaques in 2 cases. Their size varied between 1 and 10 cm. Six were located on the head (3 on scalp and 3 on face), 4 on the anterior chest wall (one of these simultaneously on the trunk and limbs), 2 on the back (1 on the lumbar region, and another with a zosteriform distribution on the neck and upper back) and 1 in the abdomen; there was more than one anatomic location in 2 cases. These metastases revealed the primary tumor in 6 cases, were discovered synchronously in 3 cases and appeared after the primary tumor in 4 cases (with a median delay of 14 months). Histological study of the metastases revealed an infiltrative pattern in 7 cases, glandular infiltrative pattern in 2 cases, solid pattern in 2 cases, trabecular glandular pattern in 1 case, and storiform pattern in 1 case. Immunohistochemistry staining to CK7/CK20 was positive to CK7 but negative to CK20 in all adenocarcinoma cases. In addition, anti-TTF1 antibody staining confirmed that all the 11 cases of adenocarcinoma had the lung as the primary origin. Nine patients were treated by chemotherapy, associated with radiotherapy in 2 cases and surgery in 1 case, and 3 patients with only radiotherapy. After the diagnosis of cutaneous metastasis, the mean survival time was 2,25 months (1-8 months).

Discussion

Cutaneous metastasis can have different clinical presentations. However, it is primordial that the dermatologist

recognizes them as they often represent the first clinical finding of unknown cancer, particularly in lung cancers. Cutaneous metastases revealed the primary tumor or confirmed the suspected diagnosis in 69% of our cases, highlighting the importance of recognizing them and of a histopathology and immunohistochemistry study to identify the origin of the primary tumor. As noted by some authors, adenocarcinoma has the most significant tendency to metastasize, corresponding to 85% of our cases. Our results confirm the poor prognosis of patients with lung cancer who develop skin metastases, with an average survival of 2,25 months after the diagnosis of cutaneous metastasis.

Abstract N°: 181

Title: Pityriasis rubra pilaris: a paraneoplastic case report of prostate carcinoma

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Introduction

Pityriasis rubra pilaris (PRP) is an uncommon inflammatory papulosquamous dermatosis and is characterised by palmoplantar keratoderma, erythrodermic scaly plaques with sparing and follicular papules. The aetiology is largely unknown, and it is categorised into 6 types: classic adult, atypical adult, classical juvenile, atypical juvenile and HIV-associated.

Materials and methods

A MEDLINE search was conducted identifying 18 articles reporting PRP associated with malignancy, only 1 other case report was PRP associated with prostate cancer. We review the literature, report the associations with malignancy, as well as describe the dermatological therapy outcomes.

Results

We present a 84 year old male who presented to dermatology with skin changes in keeping with PRP, palmoplantar keratodermic scaling plaques with sparing on his limbs. He also reported 6 kg weight loss and commenced a malignancy work-up. The patient's prostate-specific-antigen (PSA) was significantly elevated and positron emission tomography (PET) demonstrated avid bilateral pelvic lymph nodes. The patient was referred to urology for further MRI assessment which led to a transperineal prostate ultrasound and biopsy confirming high grade prostate adenocarcinoma.

Discussion

Paraneoplastic associations of PRP and underlying malignancy are rare and reported in the literature less than 20 times, with only one other case report associated with underlying prostate cancer[1].

Abstract N°: 199

Title: Retiform purpura in Haff Disease

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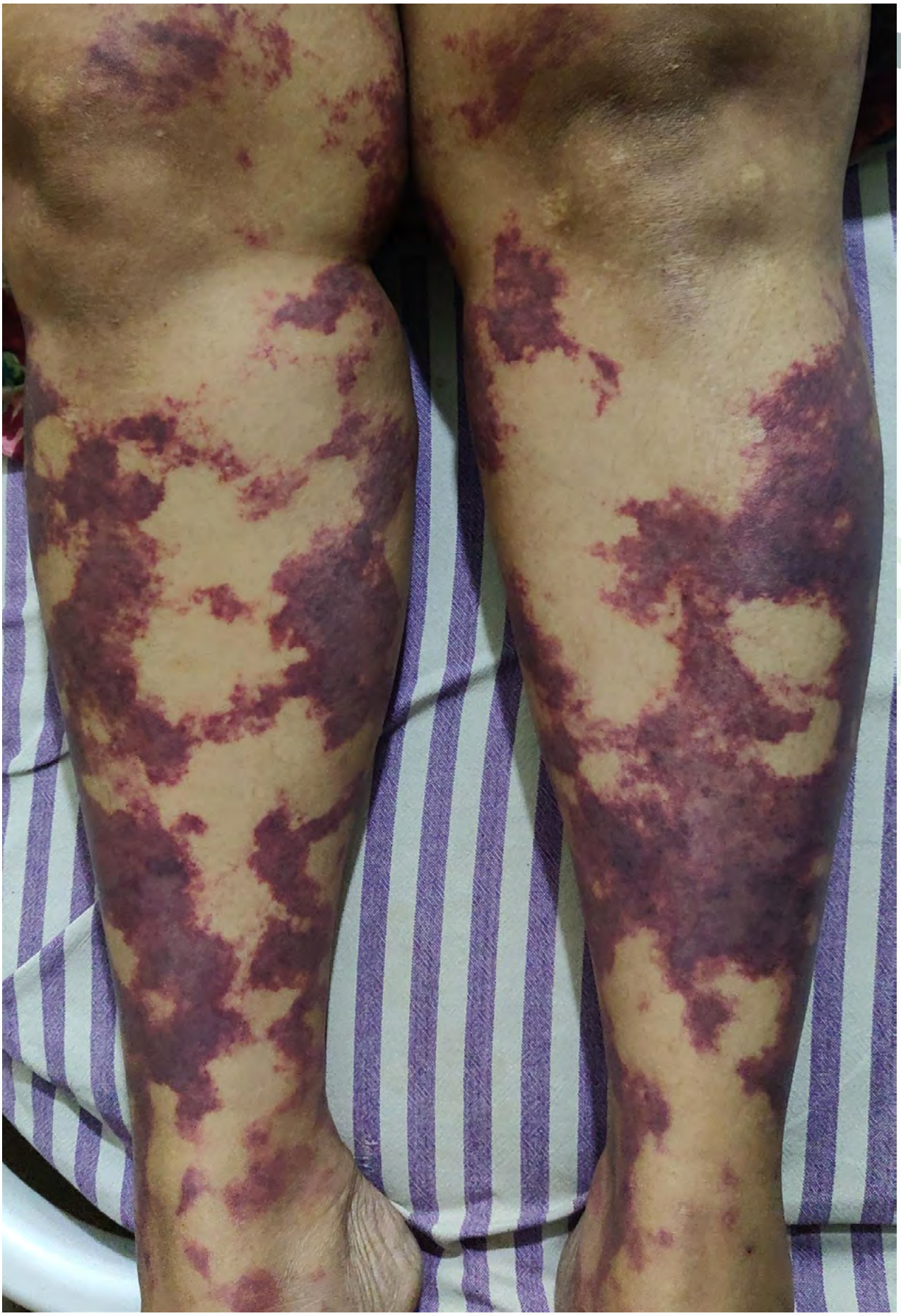
Introduction

Materials and methods

Results

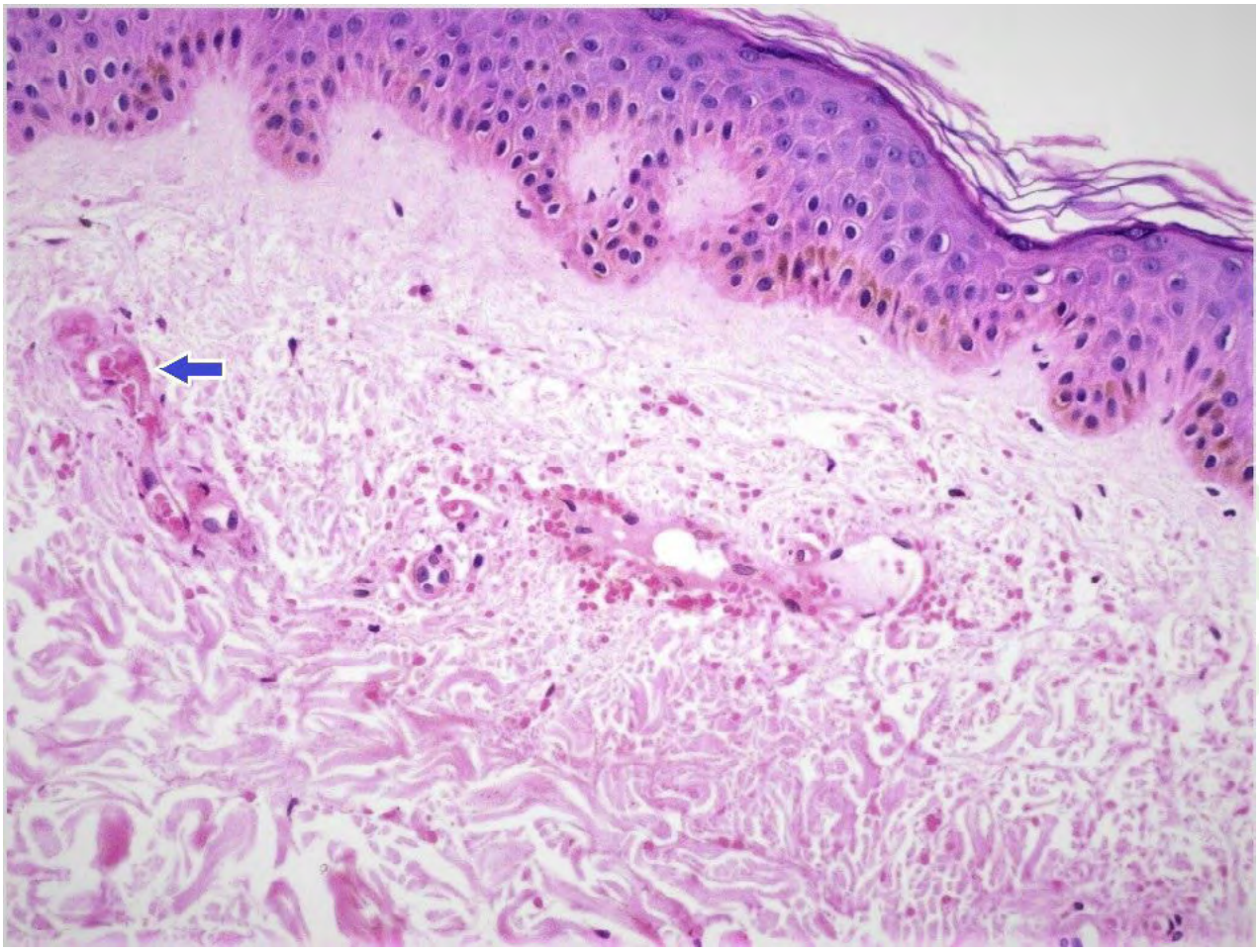
A lady in her 30s presented in December, 2019 with complaints of severe abdominal pain, and numbness of limbs for 2 days, the very next day of consuming cooked 'marine fish'. She had severe myalgia and numbness of hands and feet associated with upper and lower limb weakness. She didn't have fever, dysuria, diarrhea, cough or seizures.

On examination, she was found to have purpuric lesions assuming an open ringed pattern (livedo racemosa) on both limbs (Figure-1).



Her heart rate was 130/minute and blood pressure recorded 150/80 mmHg; she had bipedal edema. She had muscle tenderness on abdominal wall as well as at other parts of body. Neurological examination showed features of polyneuropathy in the form of glove and stocking pattern of sensory deficit. Both upper and lower limbs had grade 1/5 power in proximal muscles and grade 3/5 in distal muscles.

Her initial investigation showed leukocytosis (23,400/mm3) with raised ESR (40mm/1st hour) and CRP (59.3 mg/L). Hepatic enzymes were mildly raised. Creatine phosphokinase (CK) was persistently high (on admission, 60,500 U/L; reference 26-192U/L, CK muscle/brain (CK-MB) fraction <5%). IgM serology for leptospirosis, scrub typhus, as well as the viral markers were negative. ANA, c-ANCA and p-ANCA were negative. Radiological evaluations were non-contributory. Her nerve conduction study (NCS) showed features of axonal polyneuropathy in all the four limbs, but CSF study was normal. Histopathology of the livedo lesion showed features of thrombotic vasculopathy with complement deposits (C3: 3+) on the vessel wall (Figure-2).



She was treated with hydration and supportive measures for rhabdomyolysis. Her glomerular filtration rate remained normal throughout hospitalization period. Her rashes started fading and CK levels showed declining trend. A diagnosis of Haff disease with microvascular thrombotic complications (livedo racemosa, axonal polyneuropathy) due to rhabdomyolysis was made. Her skin lesions healed with hyperpigmentation and muscle symptoms improved within 2-months. At one-year follow up, she didn't have any sequelae.

Haff disease is characterized by severe rhabdomyolysis that occur within 24-hours of ingestion of a fish product. It is thought to be due to the presence of unidentified heat stable toxin contamination of the fish (CDC 1998, Diaz JH 2015). Fresh water fishes and rarely marine fishes are implicated in the causation and usually it comes in outbreaks. The name has been derived from the Königsberg Haff or lagoon that borders the Baltic coasts of Russia and Poland, were first case reported in 1924. It was first reported in United States from Texas in 1984 following the consumption of cooked freshwater, largemouth buffalo fish, Ictiobus cyprinellus.

CDC defined Haff disease as a painful myotoxic condition which fulfills following 3 conditions (1) a positive cooked seafood ingestion history within 24-h, (2) a markedly elevated (fivefold or greater rise over normal levels) serum CK level, and (3) a CK-MB fraction less than 5%. However, purpuric skin lesions and neuropathy were not commonly reported in Haff disease.

Severe rhabdomyolysis may cause acute renal injury due to deposition of myofibrils in renal tubules. Hence, similar myofibril deposition in the microvasculature as evidenced on histology as fibrin thrombi may be the reason for cutaneous (retiform purpura) as well as neurological manifestations (axonopathy) in the lady.

Discussion

Abstract N°: 282

Title: Skin manifestations in obese patients. Medico-statistical study.

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Introduction

Obesity is a chronic relapsing polyetiological disease characterized by excessive deposition of fat in the body. Obesity one of the leading causes of disability and death worldwide. The prevalence of obesity among the adult population of developed countries ranges from 9 to 57%.

Obesity is a systemic pathological process and has a negative impact on all structural elements of the skin, including the epidermis, dermis and subcutaneous fat.

Materials and methods

A medical-statistical study was carried out in adult patients of the clinic "Polyclinika.ru. Moscow", chief physician, Ph.D. Rozhdestvenskaya O.A. (in the period from 2019 to 2022).

There were 131 obese patients under observation who agreed to statistical data processing and agreed to participate in the survey.

Patients received outpatient treatment, regulated by clinical guidelines for the treatment of obesity. In the observation group, obesity of varying degrees was recorded (BMI from 30 to 36 kg/m^2.), the age of patients ranged from 19 to 67 years (median 47.4 years), female patients - 94 (72%), male - 37 (28 %). All patients had one or more skin manifestations associated with obesity.

Results

The most common skin manifestations were: plantar hyperkeratosis - 101 (77%), striae - 78 (60%), acrochordons - 77 (59%), acanthosis nigricans 61 (47%) and psoriasis 39 (30%). The presence of one skin disease was registered in 104 (79%), 2 or more diseases in 27 (21%).

In a survey related to the identification of a subjective relationship between obesity and concomitant skin diseases, the following results were obtained: more than half of the respondents consider the relationship weak or indicate its absence (lack of relationship - 19 patients (15%), weak relationship -53 (40%), a moderate connection was registered in 36 (27%), a strong connection in 23 (18%).

A dependence was found in relation to the weakening of the connection in patients older than 40 years and with a BMI below 33.5 kg/m^2.

Under the supervision of a dermatologist were 45 patients (34%), most often treated for skin problems such as psoriasis, plantar hyperkeratosis and diaper rash.

Discussion

As a result of a medical statistical study, it was found that more than half of 72 patients (55%) do not associate or consider the relationship between skin manifestations and obesity to be non-existent or unlikely. This group includes the majority of obese patients older than 40 years (BMI in the range of 30-33.5 kg/m^2.), who rarely consulted a dermatologist - 6 patients (4%).

In the group of patients who rated the relationship as strong and moderate, the majority were women (BMI from 30 to 36 kg/m^2.), under 40 years old (19-35 years old).

In this group, 39 (30%) patients were under the supervision of a dermatologist. The most common diagnosis is psoriasis, every second in this group.

Abstract N°: 324

Title: Paraneoplastic dermatomyositis or polymyositis in southern Tunisia: series of 20 cases.

Nadine Kamoun[1], Khadija Sellami[2], Madiha Mseddi[3], Mouna Snoussi[4], Faten Frikha[4], Moez Jallouli[5], Sameh Marzouk[5], Abderrahmen Masmoudi[6], Zouhir Bahloul[5], Hamida Turki[7]

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Introduction

Dermatomyositis (DM) and polymyositis (PM)are rare inflammatory myopathies. Their prognosis in adults is mainly determined by their association with neoplasia. The aim of our study is to describe the epidemio-clinical, paraclinical, therapeutic and evolutionary aspects of paraneoplastic DM/PM.

Materials and methods

Retrospective study of all patients with paraneoplastic DM or PM admitted to the dermatology and internal medicine departments at the CHU Hedi Chaker in Sfax between 1996 and 2020.

Results

20 cases of paraneoplastic DM or PM were included. Seventeen patients had DM and 3 patients had PM. The M/F sex ratio was 0.3. The mean age at diagnosis was 58.5 years (range: 34-83 years). In patients with DM, the main clinical manifestations were: impaired general condition (7 cases), facial erythroedema, particularly around the orbit (14 cases), periungual erythema (8 cases), Gottron's papules (2 cases), and myalgia with muscle weakness (14 cases). Cutaneous necrosis and psoriasiform rash of the elbows/knees were noted each in a single patient and pruritus was present in 3 cases. Biological tests noted an acceleration of erythrocyte sedimentation rate (ESR) (15 cases) and elevated muscle enzymes (14 cases). The elevation of creatine phosphokinase (CPK) was constant except in 3 cases. Electromyography (EMG) findings were consistent with myositis in 11 patients. Muscle biopsy (BM) performed in 5 patients confirmed the diagnosis in 4 cases. Three patients had amyopathic DM. The associated cancers were: breast carcinoma (8 cases), nasopharyngeal (2 cases), colic (2 cases), urinary tract (2 cases), ovarian (1 case) and malignant thymomas (1 case). The malignancy had preceded the DM in 53% of the cases with an average delay between the discovery of the cancer and the diagnosis of 3 years (extreme 6 months - 12 years).In patients with PM, general impairment and myalgia, with accelerated ESR and myolysis were constant. The diagnosis of PM was confirmed by EMG and BM in the 3 patients. Associated cancers were breast carcinoma, gallbladder carcinoma and lymphoma. The treatment consisted in all patients of high-dose corticosteroid therapy associated with methotrexate in 4 cases. The evolution was fatal in 6 cases (30%), due to the underlying cancer (3 cases) and swallowing disorders (3 cases). A relapse was observed after the initial improvement, in 3 cases of DM, revealing metastases.

Discussion

Inflammatory myopathies have an increased risk of malignancy. The association is stronger for patients with DM than PM. The risk of malignancy in DM was found in male patients over 50 years old, contrary to the literature, our series is characterized by a female predominance. Paraneoplastic DM is amyopathic in 22% of cases, whereas this association was only noted in 17% of cases in our series. The diagnosis of malignancy can be made before, during or after the diagnosis of DM/PM. In our series, the breast tumor was the first associated cancer.

Abstract N°: 326

Title: Calciphylaxis: series of 10 cases.

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Introduction

Calciphylaxis or uremic and calcifying arteriopathy is a rare pathology, affecting patients with chronic renal failure (CRI). The aim of the study is to specify the epidemio-clinical characteristics and to discuss the interest of skin biopsy.

Materials and methods

Our study was retrospective and was carried out in the dermatology and nephrology departments at the Hédi Chaker hospital in Sfax between 2006 and 2020.

Results

Ten cases were included (7 women, 3 men). The average age was 55 years (38-74 years). All patients had CRF at the hemodialysis stage for an average of 9 years (4-14 years). The associated comorbidities were in order of frequency: obesity (n=5), arteritis (n=5), diabetes (1 case), hypertension (n=4), taking "AVK" anti-vitamins K (n=3), lupus (n=2), and combined thrombophilia (1 case). The clinical examination showed a painful necrotic ulceration in all cases with a livedoid border in eight cases. The lesions were on the legs (6 cases), ankle (2 cases), thighs (4 cases), and abdomen (1 case). Three patients had bilateral and symmetrical involvement. Hyperparathyroidism was found in six cases. A biopsy was performed in 4 patients and confirmed the diagnosis in 2 cases, but the consequences were marked by the aggravation and the lack of healing of the lesions.

Discussion

Calciphylaxis is a serious complication in uremic patients. It is characterized by predominantly distal necrotic hyperalgesic ulcerations. Our series is characterized by proximal involvement in 50% of cases. The symmetrical character is only found in a third of the cases. In accordance with data from the literature, the risk factors found are: female gender, length of dialysis, diabetes or hypertension, advanced age, obesity, AVK intake, phosphocalcic disturbance and arteriopathy. Healing remains a challenge and the prognosis remains reserved. In conclusion, the diagnosis of calciphylaxis is based on the clinic, the risk of aggravation of the necrosis calls into question the interest of the skin biopsy.

Abstract N°: 390

Title: Systemic Follicular Lymphoma with Isolated Cutaneous/Subcutaneous Relapse: Case Report

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Introduction

Materials and methods

Results

Background

Systemic follicular lymphoma is the most common type of B cell Non-Hodgkin lymphoma with a slow progression and good prognosis. It presents with nodal and extra nodal involvement, with spleen, gastrointestinal tract and bone marrow infiltration. Although possible, skin manifestations are rare.

Case report

We present a case of a 70-year-old man suffering from a systemic follicular lymphoma with secondary skin involvement. Patient was diagnosed 12 years ago when he presented with diffuse painless lymphadenopathy and biopsy of enlarged lymph node was performed. Diagnosis was confirmed with histology and immunohistochemical staining that showed positive results for CD20, bcl-2 and bcl-6 and negative for CD3, CD5 and cyclin D1. Bone marrow biopsy showed bone marrow infiltration. The disease is WHO grade I with less than 5 centroblasts/high power field and it is stage IVA with multiple lymph nodes and bone marrow involved but without constitutional symptoms. Until now, our patient suffered from 2 relapses (5 and 3 years ago) and in the meantime developed arterial hypertension, diabetes mellitus type 2 and hypogammaglobulinemia. He was successfully treated with BR protocol (bendamustine- rituximab) 6 cycles and maintenance therapy with rituximab every 3 months for additional year. During his 3rd relapse 9 months ago, he developed skin changes for the first time and was referred to a dermatologist. The lesions were slowly growing and asymptomatic. Clinically they presented as indurated confluent erythematous violaceous papules forming a plaque, with one skin lesion in the left retroauricular region and another in the right anterior axillary line. Patient had no other symptoms, with normal CBC, LDH and β2- microglobulin values. Biopsy of the skin lesion was performed and histology with immunohistochemistry showed positive results for CD20, bcl-2 and bcl-6 which was consistent with follicular lymphoma. PET/CT scan showed moderate FDG (fluorodeoxyglucose) uptake in dermis and subcutaneous tissue in nuchal, right supraclavicular and right axillary region (SUV max 8,2). Treatment was delayed due to covid-19 infection that presented as pneumonia and resulted in patient hospitalization. When the patient stabilized and was in good health again, he was referred to radiation therapy with low dose of 2x2 Gy because cutaneous lesions of follicular lymphoma are highly responsive to radiotherapy.

Conclusion

Only a few cases of cutaneous relapse of systemic follicular lymphoma have been reported where there was an absence of primary cutaneous involvement. Secondary skin manifestations are rare and biopsy must be performed due to possible transformation to diffuse large B cell lymphoma that has much worse prognosis. Correct diagnosis and staging are vital in order to choose the right treatment and make the correct prognosis. Therefore, dermatologists as well as hematologists must be aware of cutaneous presentation of systemic follicular lymphoma because it can be the only symptom of the disease.

Discussion

Abstract N°: 447

Title: A challenging case of subcorneal pustular dermatosis

Ioana Dragomir[1], Mariana-Georgiana Ristea[2], Stefan Neaga[3], Liliana Gabriela Popa[4], Calin Giurcaneanu[5]

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A challenging case of subcorneal pustular dermatosis

Introduction

Subcorneal pustular dermatosis (SPD), also known as Sneddon-Wilkinson disease, is a rare, benign, relapsing pustular eruption of unknown etiology, that affects primarily middle-aged women. It consists of numerous, sometimes pruritic soft pustules on an erythematous base, at the skin surface. It is important to diagnose this condition because of its frequent association with IgA monoclonal gammopathies, multiple myeloma, inflammatory bowel disorders or pyoderma gangrenosum. The clinical differential diagnosis of SPD includes pemphigus foliaceus, subcorneal type of IgA pemphigus, pustular psoriasis and dermatitis herpetiformis, among others. Histopathologic examination of skin lesions should be performed in order to confirm the diagnosis.

Case report

We present the case of a 63 year old male patient, with a history of stroke, arterial hypertension and dyslipidemia, whose first skin lesions appeared a year previous to the admission in our clinic and consisted of small erythematous, mildly squamous plaques that gradually extended and became generalized, being diagnosed as psoriasis. Eventually, the skin became erythematous and desquamative, with numerous erosions and crusts, accompanied by intense pruritus. Pemphigus foliaceus was suspected and a skin biopsy was performed from an ulcerated lesion. The histopathologic examination could not exclude foliaceus pemphigus. Treatment with high dose corticosteroids and azathioprine was initiated, but had little clinical benefit. The patient was referred to our clinic and a new skin biopsy was performed, the histopathologic examination showing the presence of ortho and parakeratosis, with numerous polymorphonuclears and extensive pustules, transepidermal spongiosis, minimal acanthosis and no acantholysis, consistent with the diagnosis of subcorneal pustulosis. No associated disease could be identified. The doses of systemic corticoids were gradually tapered and azathioprine treatment was discontinued. We recommended treatment with Dapsone, but it proved inefficient. Oral retinoids were not an option given the patient's comorbidities. Methotrexate was therefore initiated and the patient achieved almost complete remission, but relapsed as soon as the dose was tapered. Disease control was once again obtained with systemic corticotherapy and an increase in the dose of Methotrexate.

Conclusions

Our case is particularly interesting as subcorneal pustulosis is far less frequent in men compared to women. The case posed real diagnostic and therapeutic challenges. The lack of response to Dapsone, which is still the first line treatment for SPD, as well as to high doses of systemic corticosteroids associated with immunosuppressants is unusual. We wish to discuss the treatment options for patients suffering from severe forms of SPD, with frequent relapses and poor response to treatment.

EADV SYMPOSIUM 2022
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Abstract N°: 466

Title: Curious cases of umbilical cutaneous nodules

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Introduction

Materials and methods

Results

Skin cancer clinics are a major part of Dermatology workload with the rising incidence of skin cancer. We report two cases of umbilical cutaneous nodules initially referred as possible skin cancers on the two weeks wait pathway. Major differential diagnosis of umbilical cutaneous nodules includes metastasis from visceral cancer (Sister Mary Joseph nodule), benign tumours, keloid, melanoma and endometriosis.

Case 1 (primary umbilical endometriosis)

A 25-year-old, female, research assistant presented with 2-month history of pink umbilical lesions which bled during her menstrual cycle. She was otherwise well, denied any menstrual irregularities, dysmenorrhoea, abdominal pain, bowel/bladder symptoms, abdominal surgeries, no regular medications or contraception, nulligravida, and planning for pregnancy in the future. Clinical examination showed multiple, reddish pink, firm nodules in umbilicus. She was discussed in our regional dermatology clinical meeting, referred and seen by endometriosis service. MRI pelvis showed stage 4 endometriosis with endometriotic umbilical nodule, bilateral endometriomas, and posterior cul-de-sac deep infiltrative endometriosis tethering both ovaries and recto-sigmoid junction. Her treatment included three monthly gonadorelin analogue injections, hormone replacement therapy as add-back whilst awaiting surgery as per the patient's choice.

Case 2 (secondary umbilical endometriosis)

A 34-year-old, female, dentist presented to accident and emergency with a 10-day history of left sided abdominal pain, 2-month history of progressively enlarging umbilical nodule which bled during and in between the menstrual cycles and was referred to cancer exclusion clinics in gynaecology and dermatology. She was otherwise well, with regular periods, pain in the coccygeal region during menstruation, not on any regular medications, and had a 6-year-old son delivered by caesarean section. Clinical examination showed a 2-cm measuring firm, dark nodule in the umbilicus. MRI pelvis with contrast showed indeterminate solid, nodular umbilical lesion with bilateral ovarian endometriosis, endometriotic, fibrotic plaques in the pouch of Douglas and pelvic adhesions. Due to diagnostic uncertainty and to rule out malignancy, she had ultrasound guided biopsy of the umbilical cutaneous nodule. Histology revealed cores of fibromuscular tissue with foci of endometriosis, positive immunohistochemistry for oestrogen and progesterone receptors, pan-cytokeratin AE1/AE3 with no evidence of malignancy. She has been started on continuous Desogestrel by endometriosis team and listed for surgery.

Umbilical endometriosis remains a rare and under-recognised entity. It can be primary without a prior surgical history with unknown pathogenesis or secondary occurring at surgical scars after abdominal laparoscopies due to proposed iatrogenic implantation of endometrial tissue. Diagnosis is confirmed by histopathology. Surgery is

considered as definitive treatment with low risk of recurrence or malignancy. Hormonal therapy can be used for debulking pre-operatively or to relieve symptoms.

We wish to highlight considering endometriosis as an important differential of umbilical skin nodules. Further, we aim to raise awareness of umbilical cutaneous endometriosis as the sole presenting manifestation of otherwise asymptomatic pelvic endometriosis in young women, as in our first case.

Discussion

Abstract N°: 505

Title: Hydroxyurea induced nail pigmentation, onycholysis and dermopathy: A case

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[1] Ankara City Hospital, Ankara, Turkey

Introduction

Materials and methods

Results

Discussion

Hydroxyurea is a cytostatic agent that has been used for the treatment of myeloproliferative disorders and sickle cell anaemi. We observed pigmentation on the finger and toenails, onycholysis and hand hydroxyurea dermopathy in a 55-year-old male patient using hydroxyurea with the diagnosis of essential thrombocytopenia. Since the use of hydroxyurea has become widespread recently due to its ease of oral use, we present this case to make physicians aware of the many cutaneous side effects of this drug.

Abstract N°: 517

Title: Nodular prurigo's comorbidities in Morocco : Experience of IBN Rochd university hospital

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Introduction

Nodular prurigo (NP) is a chronic skin condition characterized by highly pruritic nodules that have a strong negative impact on quality of life. Across a hospital series, we describe the comorbidities of NP in the Moroccan context

Materials and methods

A retrospective study was performed in the dermatology department of Casablanca over a period of 6 years (2015 to 2021) including hospitalized patients for PN and outpatients consulting for PN.

Results

We collated 48 cases with a female predominance 75% of patients. The median age was 43.2 years (range 2-65 years). The average duration of evolution of the lesions was 7.5 years. A psychiatric background was found in 50% of the patients, mainly due to depression and schizophrenia. The pathologies listed were: diabetes 31 cases (64.5%), arterial hypertension 23 cases (47.9%), chronic heart failure 15 cases (31.25%), asthma 9 cases (3.8%) and adrenal insufficiency (1 case). The etiologic investigation retained a dermatologic cause in 41.6% (20 cases) including atopic dermatitis in 22.9% (11 cases), an infectious origin notably viral namely HIV in 7 cases (14.5%) or parasitic such as the scabies in 18.7% of cases (9 cases). The hepatic causes included chronic viral hepatitis C, cirrhosis and Budd Chiari disease in 4.8 (10%). Renal etiology such as renal failure was found in 7 patients (14.5%). A hematological origin of the PN was found in 15.3% of the cases, namely anemia (7 cases), and myeloproliative syndrome (1 case).

Discussion

PN is a chronic inflammatory skin disease characterized by intensely pruritic hyperkeratotic nodules that affects mostly middle-aged adults with slight predilection in women. A wide range of systemic diseases and mental health conditions are associated with this disease. Knowledge of these associated comorbidities can help the provider to fully assess and manage patients with PN. Psychiatric disorders (depression, anxiety) were reported as major associated tares, this co-occurrence was found throughout our series. According to a recently published cross-sectional study, the association between PN and a variety of systemic, cardiovascular and psychiatric comorbidities was significant compared to matched controls, including: chronic renal failure, chronic hepatitis C, congestive heart failure, depression and atopic dermatitis. All these associations were authenticated in our series.

Conclusion:

PN is chronic dermatosis that can have various etiologies . It can be associated with a mainly systemic and cardiovascular comorbidity. In addition to its significant impact on quality of life, the burden of comorbidities in

PN is considerable.

Abstract N°: 560

Title: Necrobiotic xanthogranuloma without paraproteinemia: A case report

Ines Chabchoub[1], Noureddine Litaiem[2], Soumaya Gara[2], Takwa Bacha[2], Meriem Jones[2], Soumaya Rammeh[2], Faten Zeglaoui[2]

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Introduction

Necrobiotic xanthogranuloma (NXG) is a granulomatous skin disease classified as a non-Langerhans cell histiocytosis. The clinical course is chronic and often progressive. NXG is known to be closely associated with paraproteinemia with a monoclonal gammopathy. Other hematologic or lymphoproliferative diseases may also appear in association with NXG

Materials and methods

Herein, we present a case of NXG without systemic involvement or paraproteinemia in an adult woman.

Results

A 57-year-old woman with a medical history of systemic lupus erythematosus, primary biliary cirrhosis and Sjögren's syndrome, was referred to our department for facial skin lesions evolving for 5 years. Dermatological examination found papulonodular, yellow-purplish, firm, well-defined plaques located in the periorbital region. The rest of the examination was without abnormalities. The skin biopsy showed a diffuse dermal histiocytic infiltrate made up of foam cells with eosinophilic necrosis surrounded by palisade histiocytic cells. The diagnosis of XGN was made. A CT scan of the facial bone showed osteolytic lesions at the base of the skull. The biological assessment was without abnormalities (absence of anemia, renal insufficiency, phosphocalcic disorders and 24-hour proteinuria). Protein electrophoresis and serum immunofixation were normal. The search for cryoglobulinemia was negative. Skeletal x-rays showed no bone gaps. Therapeutic abstention was indicated with clinical and biological monitoring.

Discussion

XGN involve mainly the skin, manifesting as papulonodular plaques located preferentially in the periorbital region, but all viscera can be affected. Contiguous subcutaneous bone involvement is possible as in our patient. Plasma cell dyscrasia is associated in 80% of cases. Clinicobiological monitoring is necessary to detect malignant transformation, which may appear late. Our patient had not developed a hematological malignancy with a follow-up of five years. Our observation is also particular because of the association of XGN with autoimmune pathologies. The mechanism of this association is not elucidated but could be linked to a particular cytokine microenvironment, as evidenced by the observations of XGN associated with a hyper-IgG4 syndrome. The management of NXG is challenging and the recurrence is not rare. Because of the rarity of the disease, data on the treatment of NXG are limited. Future studies for the pathogenesis and therapeutic outcome are required.

Abstract N°: 573

Title: The efficacity of intravenous immunoglobulins in treatment of Schulman's fasciitis : about a case

Asmaa Elkissouni[1], Hali Fouzia[2], Soumia Chiheb[2]

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Introduction

Shulman's fasciitis is a rare scleroderma syndrome associating cutaneous induration with blood eosinophilia and lympho-histiocytic and eosinophilic infiltrate in the fascia

First-line treatment is based on systemic corticosteroid, but several therapeutic options have been tested. We report here a case of Shulman's fasciitis treated with immunoglobulin .

Observation :

A 49-year-old patient, presented diffuse cutaneous sclerosis sparing the face and neck, with an orange peel appearance, and positive canyon sign, the body surface area affected was estimated at 47% and Rodnan score was18 .

Paraclinical investigations had shown blood Eosinophilia at 1720 and an inflammatory, lymphohistiocytic and eosinophilic infiltrate in the fascia in favor of Shulmann's eosinophilic fasciitis

The patient was put on systemic corticosteroid :1mg / kg / day with good evolution initially but she had relapsed during the decline of corticosteroid, immunoglobulin cures were initiated at a rate of 2g / kg / cure every 3 months with good evolution , rodnan score was 6 VS 18.

We currently have a one-year follow-up

Discussion

Given the rarity of the disease, there are no controlled studies to guide therapeutic management. , several authors recommend oral corticosteroid therapy at a relatively high dose of 0.5 to 1mg /kg/day or even steroid bolus in first intention, several therapeutic alternatives have been proposed to manage relapse or the corticosteroid resistance, among other immunoglobulins; to date there is no consensus on the dosage or the rate of administration, in our study immunoglobulins were used at a rate of 2g/kg/cure every 3 months with very good evolution

Conclusion

Intravenous immunoglobulins can be a good therapeutic alternative in the treatment of Shulmann's fasciitis in case of corticosteroid resistance or relapse. Further randomized studies are needed to define treatment modalities

Abstract N°: 597

Title: Inflammatory bowel disease is accompained by cutaneous manifestations

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Introduction

Inflammatory bowel disease is accompanied by cutaneous manifestations in about 10% of cases. Erythema nodosum (EN) is most frequently observed, which often subside on treatment of the underlying disease. The so called specific lesions (perianal fissures, metastatic Crohn's disease), which are part of the skin symptoms associated with IBD, show a intimate connections with the bowel disease itself, as they histologically show granulomatous inflammation with epitheloid cells, similar to the ones seen in the intestines.

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In this paper, we want to show our modest experience with patients who were diagnosed with EN and IBD was diagnosed due to gastrointestinal symptoms and colonoscopy.

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In this paper, we want to show our modest experience with patients who were diagnosed with EN and IBD was diagnosed due to gastrointestinal symptoms and colonosc

Materials and methods

A 22-year-old patient with subcutaneous nodules on the lower legs. Treated according to the diagnosis of Erythema nodosum, Sarcoidosis, systemic corticosteroids and systemic antibiotics, after which there is a milder regression, but also the appearance of new nodules with inflammation of the old ones. Status: subcutaneous nodules on the lower legs, in some places with active erythema, involving the knees with a clear border towards the proximal two thirds of the upper leg. Nodules palpably moderately painful, skin above warm.Due to indigestion, alternating constipation, diarrhea, mucous stools, refer to a gastroenterologist who does:Colonoscopy: The endoscopic image corresponds to acute ulcerative colitis (UC).

Th. Corticosteroides, IPP, Azithromccin, Mesalazin , Metronidazol

Results

The patient was admitted to the Clinic due to protracted subcutaneous nodules on the lower legs and suspected pulmonary sarcoidosis. Due to indigestion, intermittent constipation, diarrhea, mucous stools, refer to a gastroenterologist who performs a colonoscopy and due to changes in the colonic mucosa a sample is taken for PH. Conclusion: endoscopic picture of acute ulcerative colitis-IBD which may be correlated with skin changes.

Discussion

Erythema nodosum have an association with IBD activity.

After systemic corticosteroid therapy, there is a regression of skin changes in EN and alleviation of IBD.

Abstract N°: 620

Title: Behcet's disease of fatal evolution.

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Introduction

Behcet's disease is a systemic vasculitis that can affect all vessels. We report the observation of a patient with Behcet's disease that remained unrecognized for eight years, until its revelation by the cutaneous involvement during his hospitalization for a neurological distress.

Case report

A 31-year-old patient, followed for 8 years for depression and posterior uveitis (not investigated), presented with a consciousness disorder for which he was hospitalized in intensive care. On clinical examination, he had diffuse pseudofolliculitis lesions, a positive pathergy test, and oral aphthosis. Biology showed lymphopenia at 260 elements / mm^3, low prothrombin time at 55%, prolonged activated partial thromboplastin time at 39.1%, and increased C-reactive protein at 236 mg/L. A brain Magnetic Resonance imaging showed inflammatory lesions (hypointense on T1 and hyperintense on T2) with significant perilesional edema concluding to a meningoencephalitis. Bacteriological and mycological samples were sterile. Antiphospholipid antibodies were normal. Human Immunodeficiency Virus serology was negative. The diagnosis of Behcet's disease was retained clinically according to the international criteria for the classification of Behcet's disease (2013). A bolus of methylprednisolone with oral corticotherapy was planned but the patient died.

Discussion

Behcet's disease is a systemic vasculitis of unknown etiology. The diagnosis is based on a number of factors: oral or genital aphthosis, pseudofolliculitis, erythema nodosum, positive pathergy test, anterior or posterior uveitis, vascular involvement, and neurological involvement (poor prognosis). For our patient, the diagnosis remained unknown for a long time, even though he presented several elements in favor. It was only during his hospitalization for a febrile consciousness disorder that the skin lesions associated with the notion of posterior uveitis, depression and meningoencephalitis made the diagnosis. The treatment is based on colchicine +/- oral corticotherapy or immunosuppressants depending on the systemic involvement.

Abstract N°: 637

Title: Paraneoplastic exfoliative erythroderma: an unusual presentation of a systemic T-cell lymphoma

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Introduction

Exfoliative erythroderma is a relatively rare but severe dermatologic condition with variable underlying conditions. Among the most common causes of erythroderma are exacerbation of a pre-existing dermatosis (psoriasis, atopic dermatitis), cutaneous lymphomas, drug reactions, and occult visceral malignancies. The association of erythroderma with an occult malignancy is a relatively uncommon finding, which, however, can be accompanied by devastating consequences.

Results

A 50-year-old Caucasian male, Fitzpatrick's phototype III, presented to our dermatology department with a 6-month history of generalized intense pruritis followed by exfoliative erythroderma and palmoplantar keratoderma. The patient did not report any constitutional symptoms, such as fever, weight loss, or night sweats. He had a previous diagnosis of ankylosing spondylitis and long term immunosuppression with Tumor Necrosis Factor (TNF)-alfa inhibitors. On physical examination, there were several enlarged palpable lymph nodes on the cervical, axillary, supraclavicular, infraclavicular and inguinal regions. We established the diagnostic hypotheses of erythrodermic psoriasis, pityriasis rubra pilaris and cutaneous T-cell lymphoma. Blood tests showed anemia with leukocytosis with lymphomonocytosis. On full-body CT scan, there were multiple generalized peripheral and visceral adenopathies, alongside with hepatosplenomegaly. On peripheral blood immunophenotyping, we identified a CD4/CD8 ratio of 6 and an aberrant T-cell population of 8% (CD3+ CD4+ CD8-, CD7+, CD5+, CD56-, CD2-). Histopathologic and immunohistochemical studies in several cutaneous biopsies showed an unspecific psoriasiform epidermal acanthosis with lymphocytic inflammation in the dermis. The excisional biopsy of an axillary lymph node showed altered nodal architecture with diffuse infiltration of pleomorphic median to large lymphocytes. Immunohistochemical studies showed a positivity for CD3 and CD4, but negativity for CD30 and ALK1. We established a diagnosis of paraneoplastic erythroderma in association with stage III systemic T-cell lymphoma not otherwise specified (NOS). We excluded mycosis fungoides and Sezary syndrome based on clinical, laboratory and histologic findings.

Discussion

Paraneoplastic erythroderma has been described in association with breast, prostate, lung, and gastrointestinal solid tumors, as well as systemic B-cell lymphomas. However, exfoliative erythroderma as the presenting symptom of systemic T-cell lymphomas, as in this current case, is very uncommon. Paraneoplastic erythroderma is rare and the diagnosis of the underlying condition is challenging. The delay in diagnosis can lead to a late treatment, increasing the risk of complications and conferring a worst prognosis.

Abstract N°: 646

Title: Communicating with patients thorugh pictograms and pictures- A scoping review

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Introduction

Communication between patients and Health Care Workers (HCW) may on occasion be challenged by disparities in cultural background, age and educational level. Written educational material is commonly used to reduce the risk of miscommunication. However, reading abilities among patients may also differ and it is therefore speculated that the use of pictograms may improve patients' understanding and adherence. The aim of this review was to evaluate the scientific literature and investigate the effect and practical utility of pictograms in medical settings with focus on dermatological patients.

Materials and methods

Pubmed, EMBASE, and Cochrane Library were searched July 2021 for studies regarding use of pictograms in medical settings and dermatology.

Results

No study has investigated the use of pictograms in relation to dermatology, but studies in other fields of medicine report a positive effect of using pictograms in communication.

Discussion

Pictograms have shown to have a significant positive effect when presented alongside verbal or written explanations. The development process is however important to ensure the utility of any pictogram. It is of the great importance that patients are involved in the design and validation of pictograms. In the validation process, testing of transparency and translucency should follow international recommendations.

Abstract N°: 669

Title: Acquired ichthyosis associated with multiple myeloma

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Introduction

Acquired ichthyosis is clinically and histologically similar to icthyosis vulgaris. It can be associated to underlying diseases such as systemic disorders, nutritional deficiencies, infections and malignant tumors. Multiple myeloma can be associated rarely to acquired ichthyosis.

Results

A 67-year-old male patient, early diagnosed with multiple myeloma 3 years ago, presented with a three-month history of a scaly pruritic eruption. His disease was complicated by a spinal cord compression and he had both radiotherapy and a decompressive surgery with no reported relapses up to this date. Physical examination showed fine scaly patches on the lower extremities, relatively sparing the flexural areas and larger brown ichthyosiform patchs on the trunk, more pronounced on the abdomen. He has no family or personal history of congenital ichthyosis. Skin biopsy showed orthokeratotic hyperkeratosis and a diminished granular layer consistent with the diagnosis of acquired ichthyosis.

Discussion

Acquired ichthyosis can be identified as a paraneoplastic syndrome requiring thorough investigations. Initially associated to Hodgkin disease, this skin condition is now related to several other malignancies including breast and lung carcinomas and multiple myeloma. Acuired ichthyosis often occurs in already known cancer patients. The pathogenesis of paraneoplastic ichthyosis is poorly understood. Some authors postulated that alterations in cellular lipid content, suggesting changing in lipogenesis, may lead to an abnormality in cornification. For others, an abnormal host immune response would explain association of the disease with malignancies, as well as sarcoidosis and AIDS. It has also been proposed that tumor cells could secrete a growth factor, responsible for the skin changes. The severity of the cutaneous manifestations generally mirrors the course of the malignancy and their recurrence can be a marker of relapse. Nevertheless, our patient had been in remission for 2 years and did not show signs of relapse concomitantly with his cutaneous condition. Further follow-up is however needed.

Abstract N°: 685

Title: Localized nodular amyloidosis:A case report

Maria Zoumpiadou[1], Dimitra Dimou[1], Magdalini Mastorakou[1], Edison Jahaj[1], Nikolina Stavrinou[2], Christina Vourlakou[2], Kalliopi Skrepetou[1]

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Localized nodular amyloidosis: a case report

Maria Zoumpiadou[1], Dimitra Dimou[1], Magdalini Mastorakou[1], Edison Jahaj[1], Nikolina Stavrinou[2], Christina Vourlakou[2], Kalliopi Skrepetou[1]

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Results The present case is described due to the rarity of the case and the difficulty of diagnosis. A 51-year-old female patient was referred to the outpatient dermatology clinic with skin lesion since 5 years ago. From the examination and the medical history atopic dermatitis was found, so the patient attributed the lesions to this condition and proceeded to local treatment with corticosteroids, without clinical improvement. A skin biopsy was performed, which showed severe scleroderma-type lesions compatible with scleroderma. The lesions remained constant for years, so the patient visited the outpatient clinic of our Hospital. The clinical dermatological examination revealed two reddish plaques with the presence of a nodule, without accompanying symptoms in the trunk and left tibia. Biopsy was performed again and Congo Red immunofluorescence and histochemical staining were carried out, which showed findings compatible with amyloidosis. The patient was referred for further systematic examination. Amyloidosis is a rare skin condition characterized by the deposition of proteins that form amyloid fibrils. It is distinguished into primary (macular, papular, nodular, atypical) and secondary. Patients with nodular amyloidosis should be monitored for a long time for the possibility of developing plasma cell dyscrasia.

Abstract N°: 711

Title: Necrotizing vasculitis - the expression of amyloidosis in a patient with multiple myeloma

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Introduction. Amyloidosis is a group of conditions characterized by the extracellular deposition of amyloid on the skin and/or visceral level. Clinical manifestations such as petechiae or ecchymotic purpura, necrotizing vasculitis, are relatively common in the context of secondary amyloidosis due to immunoproliferative disease. Amyloidosis lesions are present in 15% of the patients with multiple myeloma, which is why it is necessary to investigate myeloma in patients with amyloidosis and vice versa.

Clinical case. Female, 71 years old, known with chronic kidney disease stage III, diabetes mellitus type II, presents for a month of ulceronecrotic and purpuric lesions spread to the upper and lower limbs, including the palmo-plantar areas. Laboratory investigations revealed worsening of nephropathy, moderate anemia, IgG-type monoclonal hypergammaglobulinemia, hypoalbuminemia, increased α1 globulin and gammaglobulin. Osteomedullary biopsy showed bone marrow with myelomatous cell infiltrates. Cutaneous histopathological exam showed moderate spongiosis of the spinal and basal layer, parcelled of fibrinoid necrosis of the vascular walls, pericapillary lymphocytic inflammatory infiltrate in dermis. Congo red staining revealed amyloid deposits in the papillary dermis and in blood vessels (intraluminal). The data obtained outlined the diagnosis of Multiple Myeloma IgG and amyloidosis. The patient is undergoing chemotherapy (proteosomal inhibitors) with a favorable evolution of both diseases.

Discussions and Conclusions. The association between amyloidosis (manifested dermatologically as necrotizing vasculitis) and newly diagnosed multiple myeloma aggravates the evolution and prognosis of the case. The detailed evaluation of the vasculitis lesions and the good interdisciplinary collaboration of the dermatologist-hematologist-nephrologist allowed the timely treatment of both diseases, with a positive impact on the patient's life expectancy.

Abstract N°: 796

Title: Acquired ichthyosis and severe hypercalcemia revealing a multisystemic sarcoidosis in a 46-year-old woman.

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Sarcoidosis is a potentially life-threatening, multisystemic, granulomatous disease whose skin manifestations vary widely in morphology, often causing confusion. Ichthyosis is a rare specific cutaneous manifestation of sarcoidosis, mostly reported in dark-skinned patients and frequently associated with internal involvement. Here, we report a 46-year-old woman presenting with severe hypercalcemia and ichthyosiform lesions on lower limbs, whose pathological examination led to the diagnosis of sarcoidosis. This diagnosis was confirmed by typical radiographic and histological lung findings as well as a bilateral posterior uveitis.

A 46-year-old woman from Martinique, was admitted for severe hypercalcemia. During the last 2 years, she presented a general state alteration with a loss of 15 pounds as well as depression. Three months before her admission, she developed asthenia, muscular weakness and ichthyotic lesions. She was referred to the emergency room because of confusion, visual hallucinations and loss of balance. Physical examination revealed cachexia, temporospatial disorientation, acquired large polygonal adherent pretibial scales (fig. 1), squamous papules of the arms, forearms and thighs (fig. 2) and bilateral temporo-parietal nonscarring alopecia. Workup showed hypercalcemia (4.2 mmol/L) complicated by an acute renal dysfunction, both controlled with intravenous hydration and pamidronate administration. PTH was decreased under the level of detection and 1,25(OH)2-vitamin D3 level was increased (233 pg/mL, N<190). Serum protein electrophoresis showed hypoalbuminemia and normal gammaglobulins. Brain CT scan was normal. However, her thoracic CT scan revealed micronodules of basal lobes and bilateral hilar and mediastinal lymph node enlargement. A lymphoma was suspected initially, but skin biopsy of an arm papule revealed orthokeratotic hyperkeratosis and epithelioid granulomas in the dermis. Bronchial and salivary glands biopsies showed similar granulomatous inflammation, while myco-bacteriological cultures were negative. Further explorations revealed high levels of angiotensin converting enzyme (161 IU/L, N<70). These findings were consistent with sarcoidosis. Oral corticosteroids and hydroxychloroquine were introduced, leading to clinical improvement of cutaneous and neurological manifestations. The bilateral posterior uveitis discovered during the ophthalmologic assessment prior to hydroxychloroquine initiation, was equally controlled.

Ichthyosiform cutaneous sarcoidosis is an extremely rare entity with approximately 35 cases reported to this day. Skin lesions occured mainly in lower extremities. Cutaneous biopsy always revealed dermal granulomas; hyperkeratosis, diminished granular layer and acanthosis may be observed in the epidermis. Extracutaneous findings included involvement of lungs, lymph nodes and eyes. Five patients presented an additional hypercalcemia. The coexistence of ichthyotic lesions with hypercalcemia is highly suggestive of sarcoidosis and permit to exclude other etiologies of skin granulomas (atypical mycobacterial infections, foreign body granulomas). Regarding acquired ichthyosis with hypercalcemia lymphomas may also be other causes than sarcoidosis but dermal granulomas on biopsy permit to exclude lymphomas. In conclusion, dermatologists must be aware that acquired ichthyosis could reveal sarcoidosis and is a marker of internal involvement in this disease.

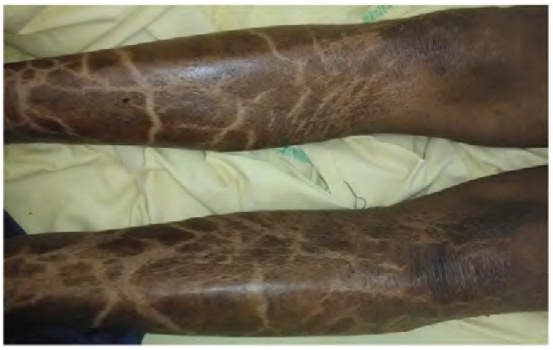

Figure 1.

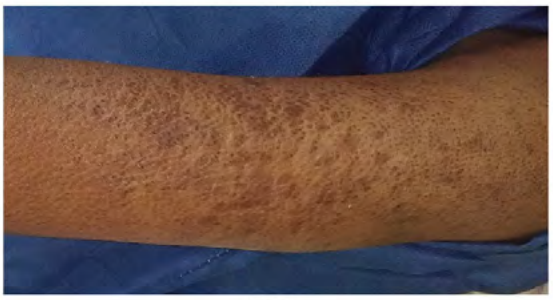

Figure 2.

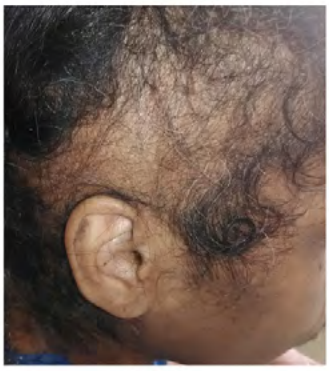

Figure 3a.

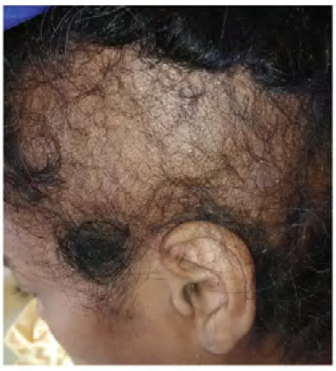

Figure 3b.

Abstract N°: 805

Title: Cutaneous cholesterol embolization - a case report

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Introduction

Cutaneous cholesterol emboli, the most frequent cutaneous embolic syndrome, appear due to distal cutaneous vessels obstruction by fragments of ulcerated arteriosclerotic plaques that release cholesterol crystals. Peripheral vascular disease, diabetes, hypertension, smoking predispose to the occurrence of cholesterol emboli. Disintegration of the atheromatous plaques may be precipitated by angioplasty, angiography, vascular surgery, or prolonged anticoagulation. This disorder usually presents with leg pain, preserved peripheral pulse, renal insufficiency, and eosinophilia.

Materials and methods

Results

We present the case of a 70-year-old patient, who was referred to our clinic for the presence of painful necrotic lesions on three of his toes and on the lateral aspect of the left foot of a 6 weeks duration. Livedo reticularis of the lower limbs was also noticed. The peripheric pulse was palpable. The patient was undergoing chronic treatment for arterial hypertension, ischemic cardiac disease, hypertriglyceridemia. He also suffered from peripheral vascular disease, for which a femoropopliteal bypass had been performed 6 months previously. Soon after the angiographic exam and vascular surgery, the patient developed renal insufficiency, which gradually worsened, eventually requiring dialysis.

Laboratory findings revealed marked peripheric eosinophilia (28.6%) and a high level of total IgE levels (229 IU/ml), as well as high values of creatinine (4.42 mg/dl), urea (67.29 mg/dl), cholesterol (216.mg/dl) and a biologic inflammatory syndrome (ESR 77 mm/h).

Extensive etiologic investigation ruled out infectious, autoimmune causes and the coexistence of a subjacent visceral or hematologic malignancy.

The patient received anticoagulants and potent vasodilators (Prostaglandin E1), with significant improvement of the skin lesions and rapid pain remission. The number of blood eosinophils and the total IgE titer decreased slowly, but significantly, in the absence of other therapeutic interventions.

Discussion

Considering that cholesterol emboli usually appear within hours or days after vessel surgery or in months after prolonged anticoagulation, a combination of factors may be incriminated in this case. Current therapeutic options usually have limited success in these cases, therefore the significant improvement of the lesions in our case is remarkable. We wish to underline the association of hypereosinophilia with cholesterol emboli, which seems to be a negative prognostic factor, correlated with a more severe renal disease, as it is also illustrated in this case.

Abstract N°: 826

Title: Ungueal lesions in systemic scleroderma : Retrospective study of 14 patients

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Introduction

Cutaneous disorders in systemic scleroderma (SSc) are well known, but nail manifestations have been rarely described, The aim of this study is to describe our experience with ungual lesions in patients with systemic sceroderma and to search for a correlation between ungual damage and other manifestations of SSc

Materials and methods

A retrospective descriptive study was performed at the department of dermatology chu ibn rochd casablanca, Morocco , and involved reviewing the medical records and photographs of patients with ungual lesions , from september 2010 to April 2021

Results

68 patients were included: 52 (76 %) were women with a median age of 41 years (24–58 years). Nail disorders were identified in 60 patients (88%) : Trachyonychie (26 patients, 38%), scléronychia (54 patients, 79%), bradyonychia (35 patients , 51%), un pterygium inversum unguis (8 patients, 11,76%), nail flare hemorrhaging (10 patients , 14%) and a thickened cuticle (42 patients , 61,76%)

The presence of nail anomalies correlated with the following manifestations of SSc: digital ulcers (48 patients, 70%), subcutaneous calcinosis (6 patients, 8,8%), severe abnormalities on peri-ungual dermoscopy (52 patients, 76,47%).

Discussion

Our study has the interest to highlight that ungual involvement is frequent in SSc, our results are consistent with the literature . It shows that the ungual locations constitute a criteria of severity of the microcirculatory involvement in these patients

No nail involvement seems to allow a specific diagnosis of SSc. In fact, these disorders can occur outside of SSc, particularly in other collagenoses. However, their diagnosis is important, because some of these anomalies, such as pterygium, can lead to ungual dystrophies, which can be severe and have significant functional consequences.

Abstract N°: 879

Title: Skin manifestations in chronic hemodialysis patients

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Introduction

Terminal chronic renal failure is associated with significant morbidity and mortality. Dermatological damage is frequent and may be responsible for an alteration in the patient's quality of life. The skin of hemodialysis patients may be the site of precancerous lesions that may progress to skin cancer after renal transplantation. The objective of this study is to evaluate the prevalence and nature of skin manifestations in hemodialysis patients, to discuss some pathogenic mechanisms, and to detect the presence of precancerous lesions.

Materials and methods

This is a cross-sectional, observational study conducted at the hemodialysis center of CHU Ibn Rochd, involving 56 patients. The patients underwent interrogation and a complete dermatological examination. A biological assessment was performed, including a blood count, a hydro-electrolytic, phospho-calcium, and hepatic assessment. The data were entered into Excel and analyzed using SPSS.

Results

56 chronic hemodialysis patients were collected. The sex ratio was 1.06. The mean age was 44.87 years +/- 1.64. The causal nephropathy was undetermined in 51.5% of the patients. Diabetic nephropathy was found in 5.9% of patients, chronic glomerulonephritis in 11.8%, and lupus nephropathy in 7.35%. The average length of time on hemodialysis was 15.84 years +/- 10.02.

25 patients reported pruritus, intense in more than 50% of cases. It was associated with the length of time on hemodialysis, with a higher prevalence in patients who had been on hemodialysis for more than 10 years. There was no correlation between pruritus and phosphorus levels.

All patients had at least one skin disorder, dominated by pigmentary disorders (75%), mainly melanoderma in photo-exposed areas (66.1%), skin xerosis (64.7%), mucocutaneous pallor (23.2%), keratosis pilaris (10.3%), followed by skin infections, mainly intertrigo (16.2%), and folliculitis of the back (10.3%)

Nail involvement was present in 19.1% of cases, consisting of onychomycosis and chromonychia.

Telogen effluvium was present in 39.7% of cases. It was mostly found in patients with hemoglobin lower than 10g/dl.

Discussion and Conclusion

The interest of this study is to describe the dermatological manifestations encountered in chronic hemodialysis

patients and to detect possible dermatoses that could be malignant.

Skin manifestations in chronic hemodialysis patients are frequent and polymorphic. Their incidence varies from 50 to 100% of cases depending on the series.

Among these manifestations, some require specific treatment, others may be indicative of cancer.

Dermatological examinations must be performed regularly in hemodialysis patients to properly manage any dermatoses and thus improve their quality of life.

Abstract N°: 910

Title: Two cases of amyloid lichen associated with genitalia hypertrophy

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Introduction

Papular amyloidosis (PA) or amyloid lichen is the most common form of primary cutaneous amyloidosis.

Materials and methods

We report the observations of 2 patients with amyloid lichen associated with labia hypertrophy. To our knowledge, this association has never been reported in the literature.

Results

Case1:

A 27-year-old female patient, free of pathological history, consulted us for pruritic papular skin lesions evolving for 6 years. Skin examination revealed brownish papular lesions 1 to 5 mm in diameter, rough to palpation, on the back and hyperpigmented plaques on the forehead, arms and back. The oral mucosa was examined without abnormalities and a hypertrophy of the labia majora and minora was observed at the genital level. The hormonal balance and the abdominal ultrasound were normal. Skin biopsy confirmed the diagnosis of amyloid lichen. She was treated by local steroids and the evolution was favorable by improvement of the pruritus.

Case 2:

A 24-year-old female patient consulted our clinic for hyperpigmented and pruritic lesions of the back and arms that had been evolving for 4 years. The dermatological examination had shown brownish pigmented pruritic papules located on the arms and the back. Genital examination showed hypertrophied labia and hormonal assessment and abdominal ultrasound were without abnormalities. The skin biopsy was in favor of amyloid lichen. She was treated by local steroids and the evolution was partially favorable with improvement of itching.

Discussion

PA is a form of primary cutaneous amyloidosis that is characterized by extracellular deposits of abnormally polarized amyloid fibrils leading to filamentous degeneration of keratinocytes. This condition has a predilection for the extensible surfaces of the upper back and extremities and presents as small, often hyperpigmented, hyperkeratotic and pruritic papules. Its pathogenesis remains poorly elucidated to this day. Some authors suggest that AP is simply a particular form of lichenification in which the amyloid deposits are the consequence of scratching maneuvers or that it is an alteration of epidermal cytokeratins leading to the release of the amyloid substance. Diagnosis is based on anatomopathological examination. Several endocrinopathies are associated with certain cutaneous signs. In multiple endocrine neoplasia (MEN) syndromes, the most frequently found dermatological manifestation is amyloid lichen. This is explained by specific genetic mutations. In our two patients, the hormonal balance and abdominal ultrasound were without abnormalities. Also, their blood pressure was

normal and somatic examinations were normal. They presented anisolated and unexplained labia hypertrophy at the genital level.

As for the treatment of PA, topical steroids are the first-line treatment with satisfactory responses, as in the case of our patients. Other therapeutic alternatives have been tried in isolated cases such as calcipotriol, topical tacrolimus, CO2 laser and trichloroacetic acid peeling.

PA remains a rare condition of unknown etiology. To our knowledge, these are the first case reports that associate amyloid lichen with lip hypertrophy.

Abstract N°: 975

Title: Cutaneous amyloidosis: the experience of a Moroccan dermatology department

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Introduction

Amyloidosis is a rare disease defined by the presence of extracellular deposits of fibrillar proteins in different organs, including the skin. The aim of this work is to study the epidemiological and clinical characteristics, the histological types, the therapeutic modalities and the evolutionary profile of cutaneous amyloidosis.

Materials and methods

We carried out a descriptive retrospective study including 10 cases of histologically proven cutaneous amyloidosis followed in the Dermatology department of the Mohammed VI University Hospital Center in Oujda since its inauguration in June 2014 until May 2021.

Results

There were 7 male and 3 female patients, with a male/female sex ratio of 2,3. The mean age at diagnosis was 58 ± 9.28 years. The mean duration between the appearance of the first lesions and the diagnosis of amyloidosis was 8 years. Pruritus and hyperpigmentation were the main symptoms. Skin examination revealed papules in 40% of cases and macules in 20%. These lesions were located on the back in all cases, with additional involvement of the limbs in 2 patients, the buttocks in one patient and the face and neck in another patient. Multiple papulo-nodular lesions were found in 40% of the cases, the location of which was genital in all cases with anal extension in half of them.

All patients had undergone skin biopsy and systematization assessment. Primary localized cutaneous amyloidosis (PLCA) was present in 60% of the cases, of which 67% were diagnosed as papular amyloidosis (PA) and 33% as macular amyloidosis (MA). Systemic AL amyloidosis was found in 40% of patients, represented by nodular amyloidosis (NA) and associated with multiple myeloma (MM) in all of them.

Four patients were treated with dermocorticoids, 3 with colchicine, 3 with antihistamines, 1 with UVB phototherapy and all cases of systemic AL amyloidosis with MM received chemotherapy, of which 2 patients died.

Discussion

PLCA is characterized by amyloid deposits in the dermis without systemic involvement, including PA and AM and AN. The combined appearance of papular and macular amyloidosis is described as a mixed amyloidosis called biphasic (1).

There are geographic variations in various forms of PLCA (1). In our study, PA was the most common at 67% followed by MA at 33%, agreeing with data from the study by Sinha A et al (2). Pruritus and hyperpigmentation

were the most common symptoms, joining data from the literature (1).

Nodular cutaneous amyloidosis is rare, and genital localization is even rarer. All our cases of NA were genital. This form is often associated with a systemic disease notably a MM, as in the case of our patients (3-4).

The treatment of cutaneous amyloidosis is not standardized. Up till now, there are no definitive recommendations on the therapeutic modalities for this disease (3-4).

The diagnosis of cutaneous amyloidosis involves clinical, histological and immunohistochemical data. The search for a MM is an essential step in the diagnosis of NA. Treatment depends on the type of amyloidosis and remains empirical.

Abstract N°: 981

Title: Cutaneous leukemia revealing an acute leukemia without circulating blasts

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Introduction

Specific skin lesions during leukemias are defined by the presence of neoplastic leukocyte infiltration in the skin (1). In rare cases, these lesions may initially present as the primary manifestation without circulating blasts or even without blastic infiltration of the marrow (2).

Materials and methods

We report a rare case of cutaneous leukemia revealing an acute leukemia without circulating blasts in a young Moroccan man.

Results

A 27-year-old Moroccan man with no previous pathological history, presented with a diffuse rash of firm papulo-nodular lesions, and rapidly increasing in number, with a pink color at the trunk and upper limbs and purpuric at the lower limbs, evolving in a context of fever and alteration of the general condition. The clinical examination also revealed a poorly tolerated anemic syndrome and bilateral cervical and inguinal lymphadenopathy. The blood count revealed a pancytopenia consisting of neutropenia, monocytopenia, lymphopenia, aregenerative normochromic normocytic anemia and thrombocytopenia.

The cutaneous histology of a nodular lesion was in favor of a leukemic process by showing a diffuse infiltration of the dermis arriving at the hypodermis by medium-sized tumor cells, with an ovoid nucleus, an irregular contour and strongly nucleated, surrounded by an abundant eosinophilic cytoplasm. The immunomarkings showed that these tumor cells diffusely expressed CD45, CD4, BCL2 and more focally CD68. Eighty percent of the cells expressed the Ki67 proliferation marker.

Several blood smears and three myelograms did not show blast cells. Osteomedullary biopsy was repeatedly inconclusive. The diagnosis of acute leukemia was retained and the patient was treated by chemotherapy (COP: Cyclophosphamide-Vincristine-Prednisone). The evolution of the dermatological lesions was favorable with normalization of the blood count. After 9 days of treatment, the patient died of septic shock before the type of acute leukemia could be determined.

Discussion

Aleukemic leukemia cutis is an extremely rare clinical form in which leukemic cells invade the skin before they appear in peripheral blood or bone marrow samples. The incidence of this form is 2 to 3% of cases (3-1). Its probable mechanism is based on the accumulation in the skin of myeloblasts present in very small quantities in the marrow and having a great tropism for the dermis (2).

Aleukemic leukemia cutis is difficult to diagnose because additional investigations do not reveal circulating blast

cells. Their prognosis is most often dark (2-3).

This observation seems to correspond to a leukemic skin infiltration with absence of circulating blast cells, hence the need for skin biopsy.

Abstract N°: 1007

Title: Lupus mimicking rasacea

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Introduction

The term red face is reserved for an erythema of the face. It is an easily recognizable clinical sign in dermatology. The diagnosis is based on the interrogation, the clinical examination in addition to the paraclinical exploration. We report a case of Lupus erythematosus in a woman mimicking a Rosacea.

Materials and methods

Results

This is of one patient 45 years old, with phototype clear, Without Atcd particular. She presented for 15 years episodes of red face surmounted by pustules treated with dermocorticoid associated with arthralgia inflammatory . where the exam clinical found a placard erythematous infiltrated face, symmetrical and crusty, associated with an edema of the face surmounted by telangiectasias and some scaly lesions at the level of the pavilion of the ear and the CC. Exploration found a leukopenia a2620/ ul with Neutropenia at 870/ ul. Anti-nuclear antibodies were positive and anti-DNA antibodies were negative. The biopsy cutaneous in favor of lupus erythematosus. The patient was put under Hydroxychloroquine 2OO mg*2 per day, with a photoprotector, with good clinical evolution.

Discussion

The originality of our observation lies in the difficulty diagnosis between rosacea and lupus in this patient. The diagnosis of lupus erythematosus is complex, due to the large number of pathologies likely to have a clinical aspect close to this disease. These "imitators" are represented Essentially by a very common pathology, which is rosacea (which can mimic malar erythema). Rosacea is a chronic disease that affects the central part of the face which is characterized by vasomotor flushes; persistent erythema of the face; telangiectasias; and episodes of inflammation interspersed with swelling, papules and/or pustules. Lupus erythematosus can take on the appearance of a red face. This case underlines the importance of paraclinical examinations in order to avoid diagnostic errors.

Abstract N°: 1033

Title: Generalised Acanthosis Nigricans in an adult - a case report

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Introduction

Materials and methods

Results

Acanthosis Nigricans (AN) is characterised by velvety thickening and hyperpigmentation of the skin, most commonly on the neck, axillae, groin or other body folds. Generalised AN is rare and most often reported in children in the literature. Adult AN can be idiopathic or it can present in association with endocrine disorders characterised by insulin resistance, metabolic syndrome, certain medications or internal malignancies (most frequently adenocarcinomas of the gastrointestinal or genitourinary tract).

We present the case of a 42-year-old normoponderal female, mother of two, otherwise healthy, who presented with generalised velvety thickening, hyperpigmentation and bilateral axillary papillomatosis, with mild pruritus. The patient reports the onset of symptoms 7 years ago after she started a treatment with oral contraceptives (desogestrel), which she stopped after 2 months and worsening of cutaneous lesions after her second pregnancy. She tried multiple topical treatments with no significant result.

We screened her for diabetes, metabolic syndrome, neoplasia, polycystic ovary syndrome (PCOS) and endocrinologic abnormalities - blood chemistry and complete blood count, glycosylated hemoglobin test (HbA1c), gastroenterology consult, gynecology consult, endocrinology consult. No internal malignancies, diabetes, or metabolic syndrome were found, except for a chronic autoimmune thyroiditis with subclinical hypothyroidism for which she was prescribed a selenium supplement. A cutaneous biopsy was obtained from the right axilla (orthokeratotic hyperkeratosis and papillomatosis with hyperpigmentation of the basal cell layer, with minor perivascular inflammatory infiltrate) and the patient started treatment with an oral retinoid (acitretin) 0.8mg/kg/day and moisturising therapy.

Discussion

Abstract N°: 1066

Title: Hand-foot syndrome in a breast cancer patient: a challenging diagnosis

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Introduction

Materials and methods

Results

A 36-year-old female patient, phototype III, presented with painful cutaneous lesions, dysesthesia, and tingling in the palms and soles. Her past medical history included breast cancer cT2N2M0. She was going through the third cycle of quimiotherapy with doxorubicin-cyclophosphamide. Her daughter was diagnosed with hand-foot-mouth disease in the same week. Physical examination revealed erythematous papules, vesicles, and bullae on the palms and soles.

The following diagnostic hypothesis were considered: hand-foot-mouth disease, palmar-plantar erythrodysesthesia, erythema multiforme, and other infectious exanthema. Two skin biopsies were performed. After discussion with the Oncology department, it was decided to delay the next quimiotherapy cycle. Supportive treatment consisted of emollients, betamethasone 1 mg/g cream twice daily and paracetamol 1 g every 8 hours.

One week later there was a dissemination of the dermatosis. The patient presented erythematous papules, patches, and bullae on the palms, soles, forearms, and thighs. Additionally, maculopapular exanthema was present in the trunk, without mucosal involvement. The patient also mentioned recent onset of fever and dry cough. Blood work revealed leucopenia 1,10 $x10^9$/L , neutropenia 0,24 $x10^9$/L and c-reactive protein 12,2 mg/dl. Coxsackievirus serology was positive for IgG and IgM. Histopathological examination was compatible with a viral infection in one specimen and with palmar-plantar erythrodysesthesia in the other. The patient maintained the previously prescribed treatment. Due to neutropenia, amoxicillin/clavulanate 875/125 mg every 8 hours and pegfilgastrim 6 mg were added. Upon revaluation, two weeks later, the dermatosis was resolving. Systemic symptoms had subsided. She was sent to the Oncology consult to schedule the next quimiotherapy cycle.

We describe a case of synchronous presentation of hand-foot-mouth disease (HFMD) and palmar-plantar erythrodysesthesia (PPE) in a breast cancer patient undergoing chemotherapy. PPE and HFMS are mimickers and their diagnosis in this patient was only possible through two biopsies with different findings, revealing typical features of each.

Epidemiologic features allowed the suspicion of HFMD. However, it is less common in adults, with a more heterogeneous presentation. In published case series of HFMD in adults, clinical manifestations were described as purpuric and bullous lesions on the palms and soles. Additionally, adult patients may present cutaneous signs without any mucosal lesions, like in this case. In our patient, we were concerned about the need for chemotherapeutic dose reductions or a switch to other drugs associated with lower rates of PPE. Therefore, we also considered the diagnosis of PPE, a common skin reaction to systemic therapy that should be anticipated with chemotherapeutic treatments with doxorubicin.

To the best of our knowledge, synchronous presentation of HFMD and PPE has not been reported in the literature to date. PPE and immunosuppression may be responsible for the atypical presentation and severity of HFMD in our patient.

Discussion

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Abstract N°: 1067

Title: Systemic sarcoidosis revealed by semi-permanent eyebrow make-up

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Introduction

Semi-permanent eyebrow make-up is a cosmetic tattooing technique that has been gaining ground in recent years. In addition to its allergic and infectious complications, granulomatous reactions have been reported. We describe a case of systemic sarcoidosis revealed by a sarcoid reaction to semi-permanent eyebrow make-up.

Materials and methods

Results

A 33-year-old woman with hypothyroidism on oral levothyroxine and allergic rhinitis under symptomatic treatment, consulted for a 12-month history of micropapular lesions of the eyebrows, occurring a few weeks after a semi-permanent eyebrow make-up.

The dermatological examination revealed erythematous micropapular lesions of the eyebrows, lupoid, painless, non-pruritic and strictly limited to the tattoo, associated with a roughly rounded erythematous patch of 3 cm on the flexion side of the right forearm surmounted by multiple painless, non-pruritic flesh-coloured micropapules. There were no associated extracutaneous signs and the rest of the clinical examination was normal.

Histopathology of a skin biopsy showed granulomatous dermatitis of sarcoidosis type, the angiotensin converting enzyme level was normal, a thoracic scan showed multiple bilateral pulmonary parenchymal nodules and micronodules associated with multiple bilateral mediastinal and hilar adenopathies suggestive of pulmonary sarcoidosis. Pulmonary function tests found a restrictive disorder.

The diagnosis retained was systemic sarcoidosis with a stage II pulmonary involvement revealed by a sarcoid reaction to semi-permanent eyebrow make-up.

The treatment consisted of oral hydroxychloroquine associated with topical corticosteroids on the lesions and oral corticosteroids initiated by the pulmonologists. Clinical evolution was good with a subsidence of the skin lesions after 1 month without appearance of new lesions.

Discussion

The particularity of our observation lies in the discovery of cutaneous and pulmonary sarcoidosis through a sarcoid reaction to semi-permanent eyebrow make-up.

Sarcoidosis is a systemic disease characterized by non-caseating epithelioid granulomatous inflammation. therefore, it is essential for the dermatologist to carry out a skin biopsy in front of granulomatous lesions localized on the line of a cosmetic tattoo, for prompt diagnosis of the disease. And to undertake further investigations for a systemic dissemination than can be asymptomatic and delay an adequate management.

Abstract N°: 1073

Title: Ulcerative necrobiosis lipoidica successfully treated with hydroxychloroquine in a patient with diabetes, dyslipidemia and hypothyroidism

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Introduction

Necrobiosis lipoidica (NL) is a rare granulomatous disease often associated with diabetes, but can present also in association with other diseases, such as dyslipidemia and thyroid disease. Lesions typically occur on pretibial side of the legs of middle-aged women as ovoid reddish-brown plaques with a violaceous border and a yellow central atrophic area with telangiectasia. Ulceration of the lesions occurs in 15-30 % of cases and is a troublesome complication, often resistant to treatment. Local steroid use is common in nonulcerated plaques, however in ulcerative NL steroids can aggravate or cause new ulcerations if used on atrophic skin. Thus other treatment needs to be considered. Different treatment modalities (topical calcineurin inhibitors, phototherapy, antimalarials, pentoxifylline, tumor necrosis factor alpha inhibitors) have been used in ulcerative NL in single cases or in small case series with varying outcomes.

Results

We present a case report of a 59-year-old female patient with more than a 10-year history of relapsing painful ulcerations on pretibial side of both legs. Lesions started as brownish plaques 20 years ago and were histopathologically confirmed as necrobiois lipoidica. Later the plaques spontaneously ulcerated and were resistant to local dressings and local steroid therapy. The patient refused compression stockings and was examined by an angiologist who excluded peripheral arterial disease. Her medical history included arterial hypertension, diabetes and hypothyroidism. She was taking perindopril, metformin, levothyroxine, NSAIDs and paracetamol. Skin examination revealed one small and one large (9,5 x 5 cm) ulceration on her left shin and several smaller ulcerations and erosions on her right shin. The surrounding skin was hyperpigmented on the borders with a whitish-yellowish atrophic centre. Laboratory work up (complete blood count, metabolic panel, C-reactive protein, cholesterol and uric acid levels, thyroid hormone levels, protein electrophoresis, tumour markers, Angiotensin-Converting Enzyme) revealed slightly elevated triglycerides and cholesterol levels. Levels of TSH (Thyroid Stimulating Hormone) were increased and levels of free thyroxine (T4) hormone and triiodothyronine hormone (T3) were decreased. Chest X-ray was normal. Patient was introduced a hypolipidemic diet and dose of levothyroxine was adjusted according to the consultation with the thyroidologist. Biopsy of the ulceration was performed and consistent with necrobiosis lipoidica. Histopathology described spongiotic epidermis with compact orthokeratosis, mixed dermal inflammatory infiltrate with predominance of plasma cells, fibrosis, slight necrobiosis and proliferation of the intimal layer of the blood vessels. Giant cells and some eosinophils were also present in the dermis. As only slight improvement was noted after eight weeks of topical steroid and calcineurin inhibitor use, treatment with hydroxychloroquine 200 mg per day was commenced. Within eight weeks of therapy complete healing was noted and the patient remains on the same treatment for almost two years with no relaps so far.

Discussion

Ulcerative NL poses an important treatment challenge and choosing the best option can be quite uncertain due to somewhat limited knowledge of its pathogenesis. Hydroxychloroquine is a promising therapeutic option with an immunosuppressive and antiinflammatory effect used also in the treatment of other granulomatous diseases.

Abstract N°: 177

Title: Aneurysmal dermatofibroma in a Filipino male

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Introduction

Dermatofibroma (DF) is a common, benign fibrohistiocytic tumor with unknown pathogenesis. There are multiple histologic variants of DF reported in literature. One rare variant is aneurysmal DF.

Materials and methods

We report the case of a 25-year-old Filipino male who presented to our clinic with a solitary dome-shaped dark purple nodule on the lateral aspect of left knee. Simple excision of the lesion was done.

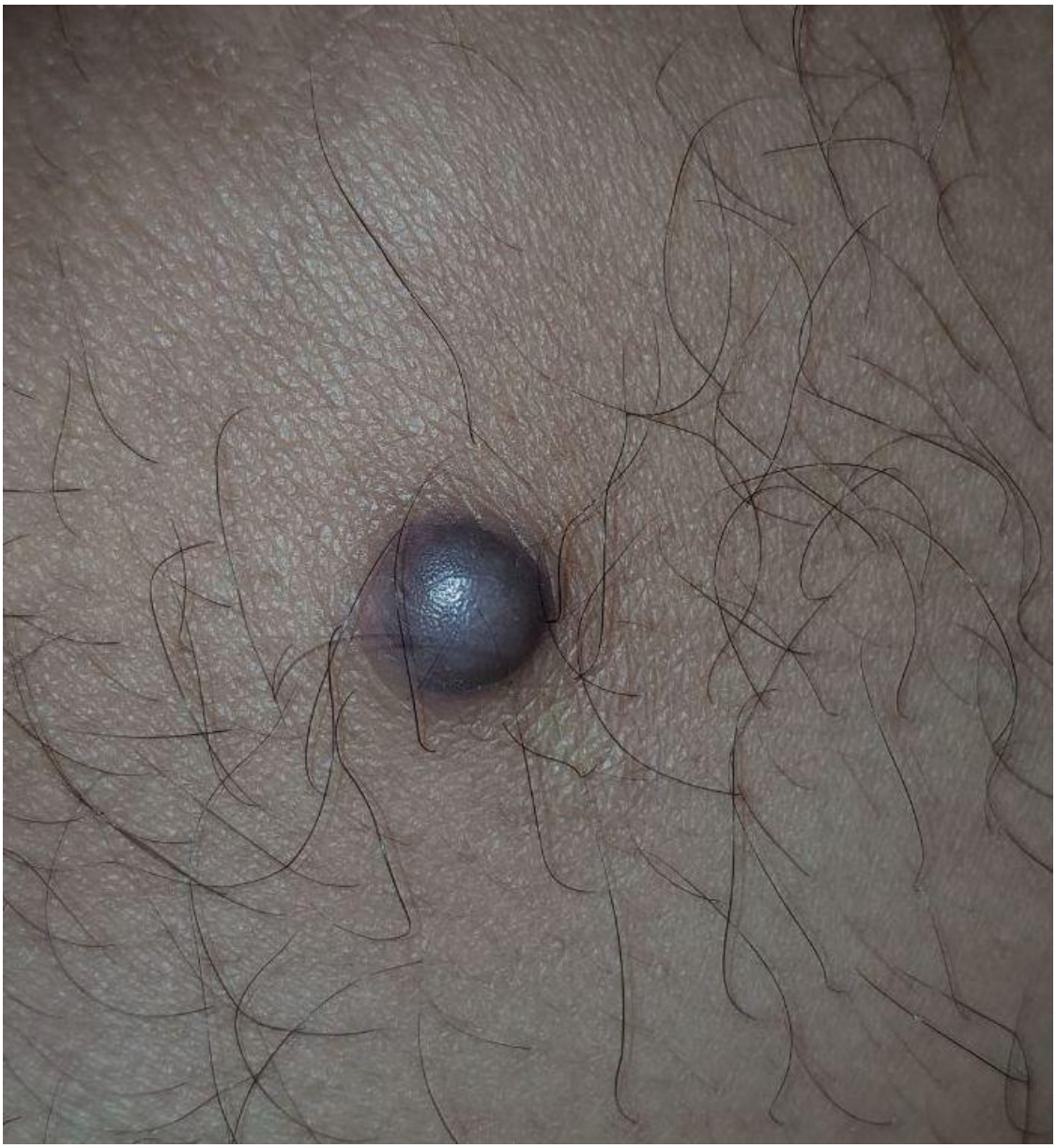

Figure 1. Photograph of nodule on lateral aspect of left knee

Results

Histopathological examination revealed a relatively well-circumscribed dermal proliferation of spindle cells arranged in a storiform and haphazard pattern consisting of fibroblasts and histiocytes with peripheral collagen trapping. Scattered Touton giant cells with siderophages and small lakes of erythrocytes were also noted confirming the diagnosis of aneurysmal DF.

Discussion

An uncommon mesenchymal tumor, aneurysmal DF arises from fibroblast and histiocytic cells in the dermis. It can present as a variably pigmented papule or nodule commonly located on the lower extremities. To date, no case of aneurysmal DF in the Philippines has ever been published or reported to the best of our knowledge.

Abstract N°: 398

Title: Greasy and Malodorous Crusty Vesiculobullous Eruption in a 54-Year-Old Male Patient

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Introduction

Materials and methods

Results

A distinct, gender-independent, autosomal dominant pathogenic entity, Darier's disease represents a scarce dermatological condition, with an estimated incidence regionally varying between 1:30000 and 1:100000 people, that frequently evolves undiagnosed due to its challenging dermatopathological expression and difficulty in ATP2A2 mutation recognition.

A 54-year-old male patient, diagnosed with pemphigus vulgaris 6 years ago and following a chronic treatment scheme for primary arterial hypertension, dyslipidemia, degenerative mitral insufficiency, was initially admitted to our dermatology clinic for a polymorphous cutaneous eruption composed of vesicles, bullae, exulcerations and post-bullous erosions, occasionally covered by yellow-brownish crustae; the clinical examination also identified post-inflammatory hyperpigmentations of various diameters (0.5 – 1 cm), disseminated on the antero-posterior thorax, abdomen and lower limbs, bilaterally. On the scalp, the patient presented hyperkeratosis associated with greasy pruriginous exudative malodorous squamous-crustous lesions, with ostraceous shape and chromatic, of firm consistency, accompanied by fissures and circumscribed cicatricial alopecia (Fig. A). The lesions were observed in different evolutionary stages.

Punch biopsies were performed from both a posterior truncal, and an occipital lesion. The microscopic examination of the specimens revealed hyperplastic epidermis, parakeratosis with significant neutrophilic abscesses and noteworthy acantholysis. The presence of corps ronds and grains epitomized dyskeratotic phenomena. Immunofluorescence was negative, so the entire pathological picture oriented towards the diagnosis of vesiculobullous dermatitis with acantholytic reaction patterns, pleading for Darier's disease.

A crucial step was discriminating from pemphigus vulgaris, where immunofluorescence is – contrastingly – positive and the histopathological report describes the "tombstone" pattern comprised of intact keratinocytes. Moreover, clinical and anatomical correlations were requisite for completing the differential diagnosis with Hailey-Hailey and Grover's diseases.

After the invalidation of pemphigus vulgaris, systemic Prednisone for a period of 30 days followed by tapering after reaching disease control, and topical administration of Betamethasone/Gentamicin ointment were initiated. A psychiatric evaluation was also recommended to exclude a potentially associated mood disorder. 10 days after the therapeutical debut, the patient presented significant improvement of the scalp fissures and reepithelization of the ulcerations (Fig. B). Regular dermatological follow-up and dermoscopies were implemented, targeting the early diagnosis of a squamous cell carcinoma arising from a Darier's disease lesion.

In conclusion, the present case highlights the contingency of overlapping clinical features in the spectrum of vesiculobullous diseases. The fine differentiation between the exponents of this disease group may determine diagnostic pitfalls that can be alleviated by the performance of pathological examinations on the biopsy samples. As a further matter, the multidisciplinary approach represents the fundamental element that must be appraised to establish a tailored therapeutical management, especially taking into consideration the absence of spontaneous resolution.

Discussion

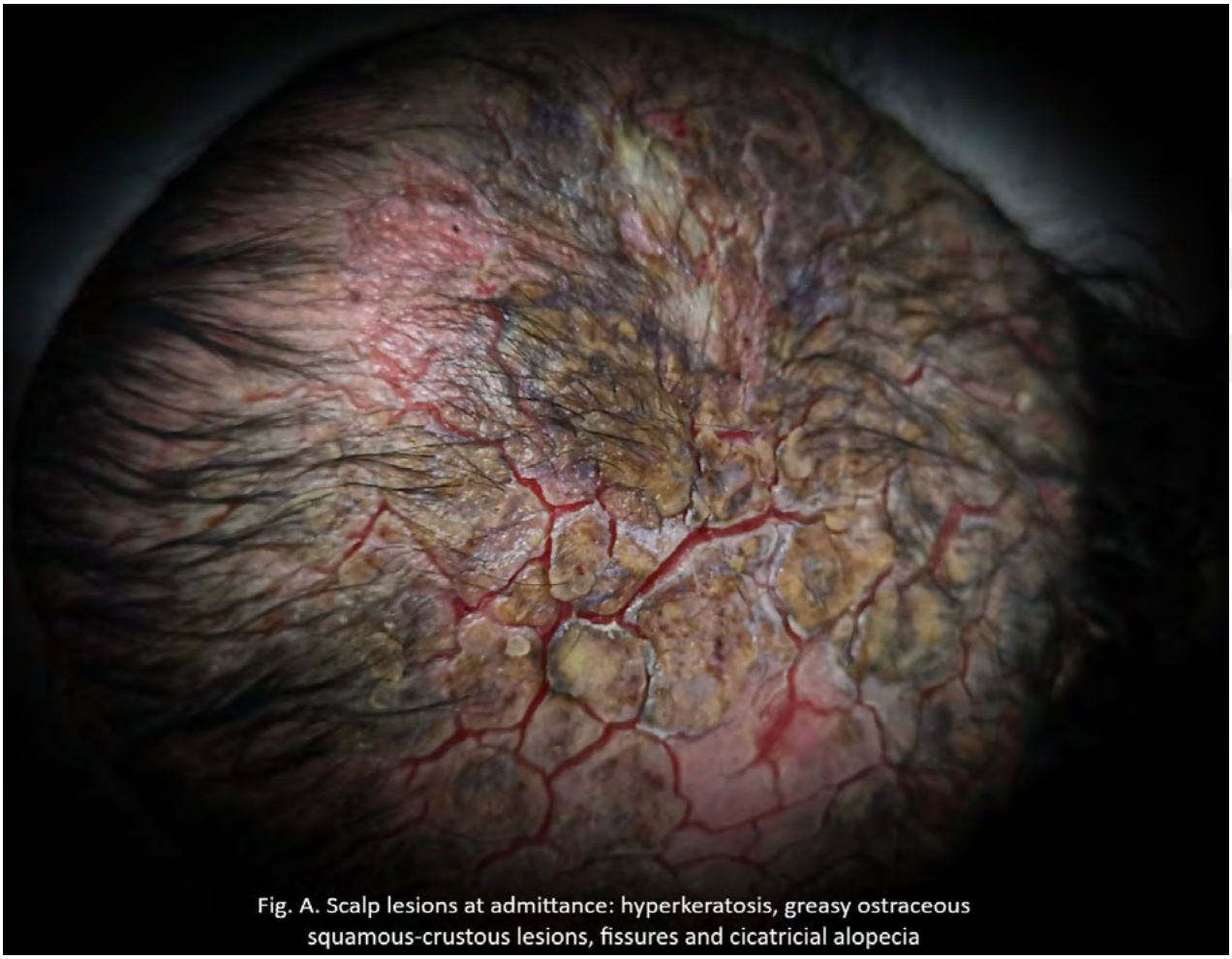

Fig. A. Scalp lesions at admittance: hyperkeratosis, greasy ostraceous squamous-crustous lesions, fissures and cicatricial alopecia

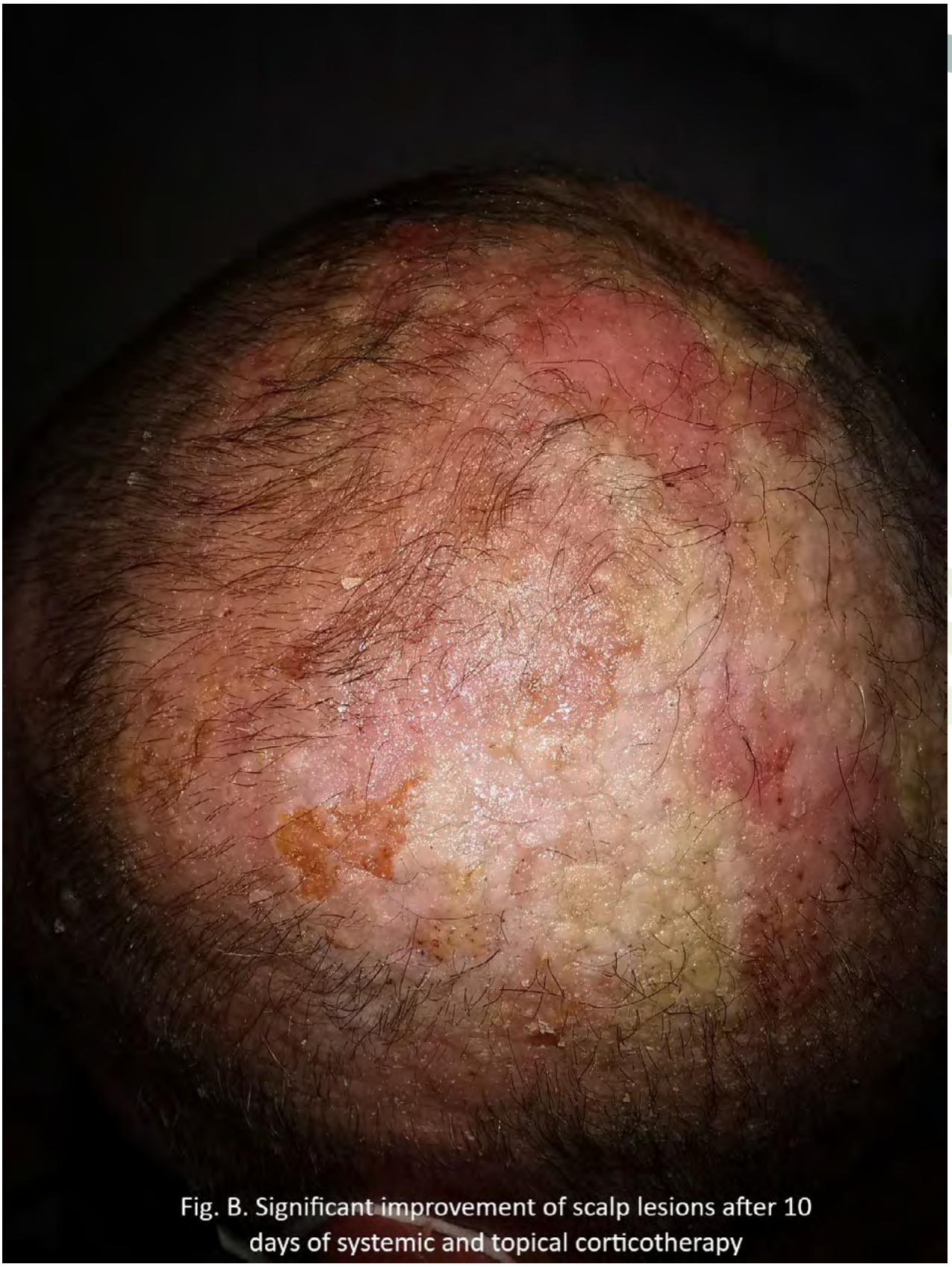

Fig. B. Significant improvement of scalp lesions after 10 days of systemic and topical corticotherapy

Abstract N°: 452

Title: An Umbilical Nodule: A Cyclical Clue

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[1] Our Lady Of Lourdes, Drogheda, Ireland, [2] Our Lady Of Lourdes Hospital, Drogheda, Ireland

Introduction

N/A

Materials and methods

N/A

Results

Primary cutaneous endometriosis arising within the umbilicus was first described by Villar in 1886 and is an exceptionally rare phenomenon. We present the case of a 40 year old female who presented with an unusual, exophytic lesion arising from the umbilicus which was histologically confirmed as endometrial tissue consistent with cutaneous endometriosis.

A 48 year old female was referred to the Dermatology Department by General Surgery with a lesion arising from the umbilicus. She described a non-tender mass that had been present for the past 2 years. The lesion exuded a serosanguinous fluid cyclically with menses. She reported menorrhagia and dysmenorrhoea but had no medical or surgical history, was not on any regular medications and was otherwise well.

On examination there was a 2x2cm glandular, well-defined nodule arising from within the umbilicus. Dermoscopy demonstrated erythematous, polypoid lobules with active bleeding clinically suggestive of cutaneous endometriosis. Important differential diagnoses to consider in an umbilical lesion include granuloma, amelanotic melanoma, malignancy (a Sister Mary-Joseph nodule), keloid and umbilical hernia. Skin punch biopsy was performed and histology demonstrated a *"dermal lesion of glandular structures lined by endometrial type epithelial cells"* confirming the clinical diagnosis of cutaneous endometriosis. The patient was referred to Gynaecology for excision and further appropriate management to limit further potential complications of endometriosis.

Cutaneous endometriosis is defined as the presence of endometrial tissue within the skin and represents less than 1% of all cases of endometriosis. It can be subdivided into two forms;

- Primary which arises spontaneously, the pathogenesis of which is unclear.
- Secondary which occurs in post-operative scar sites due to implantation of endometrial tissue intraoperatively to the skin.

Umbilical endometriosis, or 'Villar's Nodule' is especially rare representing 0.5%-1% of extra-pelvic endometriosis cases. Definitive management is surgical however hormonal therapy can be considered as a pre-operative adjunct to aid excision and for symptomatic relief. Prognosis is favourable with a low risk of recurrence. There is a very low risk of malignant transformation and this should be considered in those patients presenting with clinical recurrence, rapid growth or with associated regional lymphadenopathy. Follow-up may be warranted in high-risk

cases.

This case highlights how clinical history and recognition of dermoscopic features can assist in a timely diagnosis in a patient presenting with an umbilical nodule. Standardisation of the dermoscopic features of cutaneous endometriosis will aid Dermatologists in identifying this rare presentation of a complex and often debilitating disease.

Discussion

N/A

Abstract N°: 494

Title: Cutaneous lymphangiectasia of varied etiology: series of 10 cases

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Introduction

Acquired cutaneous lymphangiectasia (ACL) represents a dilation of the lymphatic vessels caused by various processes leading to their obstruction. The aim of our study is to identify the clinical, histological and etiological particularities of ACL.

Materials and methods

This is a retrospective study conducted over a period of 17 years (2005-2021) including all histologically confirmed cases of ACL in our department.

Results

Ten cases were identified with a mean age of 42 years (32-47). The sex ratio was 1/3. The evolution period varied from 2 months to 8 years. The reasons for consultation were: aesthetic discomfort (n=4) and secondary infection (n=1). The other cases were discovered incidentally. Clinically, we found: translucent papulonodular lesions (7 cases), angiomatous lesions (3 cases) with paroxysmal fluid flow (1 case). Lymphedema was associated in 7 cases. The lesions were located at the level: vulva (n=3), lower limb (n=3), breast (n=2) and scrotum (n=2). Dermoscopy (DSC) was performed in 3 cases: multiple gaps, whitish streaks and hypopion levels. Biopsy was performed for all cases, confirming the presence of dilated lymphatic vessels. The etiologies retained were: recurrent erysipelas (4 cases), genital tuberculosis (TBC) (1 case), treated breast cancer (2 cases), vulvar Crohn's disease (2 cases). Previous radiotherapy was found (3 cases). The recommended procedures were: cryotherapy (n=3), excision in localized forms (n=2) and abstention (n=5). The evolution was marked by: recurrence of lesions (n=3) and repeated superinfection (n=1).

Discussion

ACL result from lymphatic obstruction at the base of the dermis, from an accumulation of lymph, responsible for dilation and fistulization of the skin of the superficial lymphatic channels. The consequence is the formation of cutaneous lymphatic vesicles. We report a large Tunisian series. They usually occur between the ages of 40 and 60. They occur one to several years after the installation of the cause. They have an apparent predilection for the genital area. Our series included 3 cases of vulvar ACL associated with Crohn's disease or urogenital TBC and 2 cases of scrotal ACL associated with recurrent erysipelas (n=2). Genital ACL often presents as warty papules mimicking warts, molluscums, and syringomas. In addition, we report 2 cases of breast ACL treated by surgery and radiotherapy. Many cases of ACL with limb lymphoedema have been reported in the literature. Their main complication is their rupture with a clear or blood-tinged discharge. This can lead to super infection and erysipelas, sometimes recurring as in one of our cases. Diagnosis is based on clinical aspects with increasing interest for the use of the DSC. Skin biopsy can be performed in doubtful cases. ACL treatment includes surgical excision,

cryotherapy, sclerotherapy, electrodesiccation and CO2 laser vaporization. Awareness of the various etiologies of ACL, and appropriate explorations are important to avoid misdiagnosis and for better management.

Abstract N°: 545

Title: Palmo-plantar fibromatosis

Inas Chikhaoui[1], Sara Nejjari[1], Ghita Basri[1], Fatima-Zahra Agharbi[1], Soumia Chiheb[2], Abderrahmane Al Bouzidi[1], Abderrahim El Ktaibi[3]

[1] Hopital Cheikh Khalifa, Casablanca, Morocco, [2] Chu Ibn Rochd, Université Hassan Ii, Uhc, Casablanca, Morocco, [3] Um5, Rabat, Morocco

I.Chikhaoui,G.Basri,S.Nejjari,M.Allaoui,A.Al bouzidiFZ.Agharbi,S.Chiheb.

Service de dermatologie de l'hôpital cheikh khalifa.

Introduction

Ledderhose disease or plantar fibromatosis is a benign pathology of unknown etiology.

Described for the first time in 1894 by George Ledderhose, it is characterized by a localized proliferation of connective tissue leading to the formation of plantar nodules(1) .

The association of plantar fibromatosis (leddrhosis) with palmar fibromatosis (dupuytren), of which we report one case, is rare.

Materials and methods

A 61 year-old patient with a history of type 2 diabetes presented with palmo-plantar subcutaneous nodules evolving for several years, painless but hindering walking.

The dermatological examination revealed bilateral palmoplantar nodules of hard consistency, adherent to the deep layers.

Results

The palmo-plantar ultrasound showed hypoechoic, homogeneous formations with a smooth and regular contour of benign appearance (figure 2)

A biopsy of a plantar nodule was performed and the anatomical-pathological examination revealed a hyperkeratotic acanthosis epidermis associated with a dermal proliferation of regular fibroblasts arranged in bundles, entangled and dissociated by thick bands of collagen, without cytonuclear atypia, containing clusters of regular lymphocytes and poorly limited in the periphery, corresponding to a fibromatosis related to ledderhosis disease.

Discussion

The disease of Ledderhose or plantar fibromatosis corresponds to a proliferation of connective tissue, common in middle-aged males, this condition is clinically manifested by subcutaneous nodules of progressive evolution often asymptomatic at the beginning but can be responsible for discomfort in advanced stages in connection with the contracture (2).

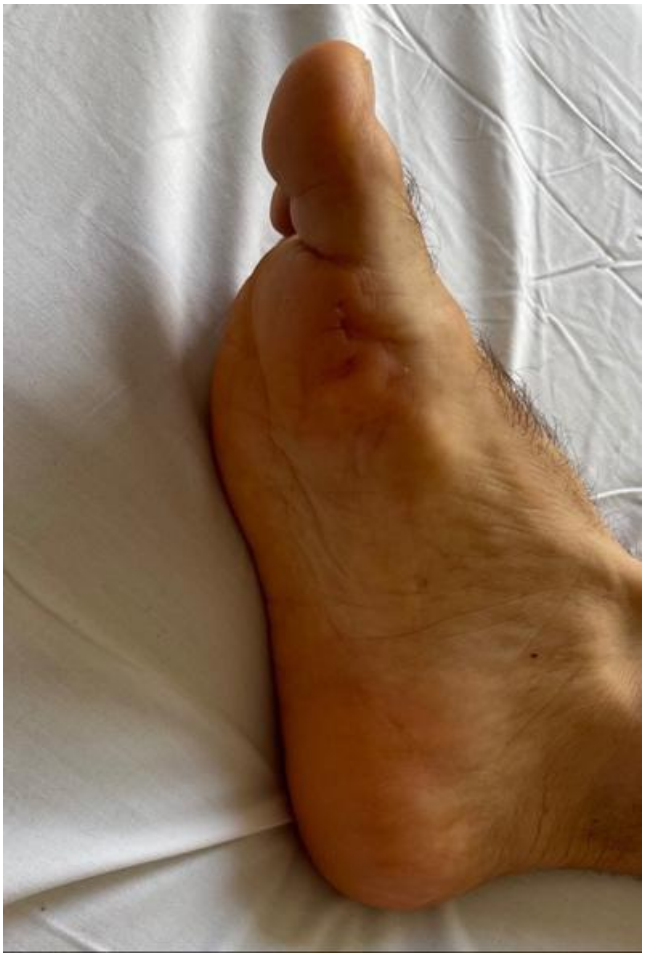
The pathophysiology of this pathology remains unknown but its association with repeated microtrauma, diabetes

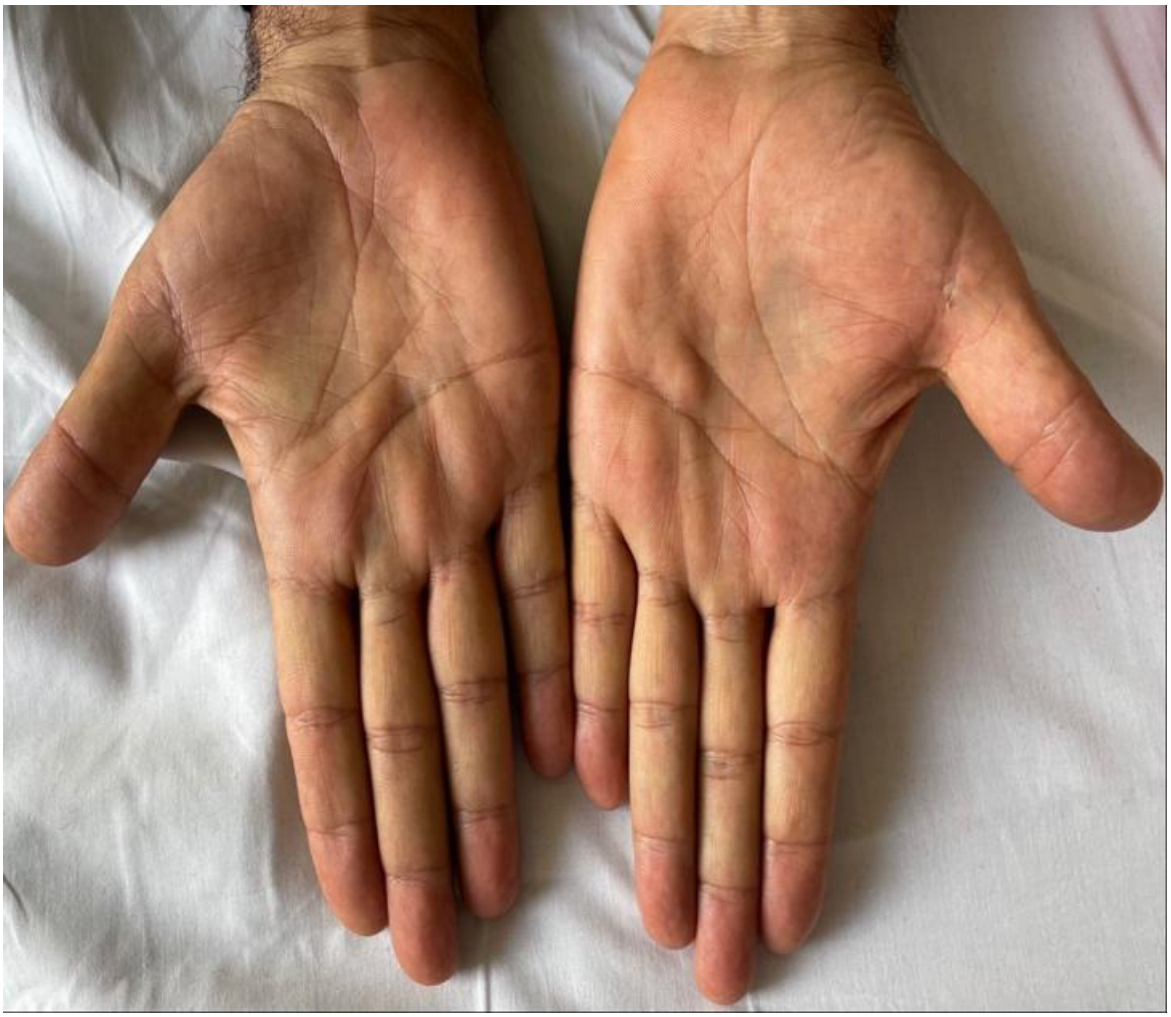
and epilepsy has been described.

The diagnosis is essentially clinical, ultrasound and MRI can contribute to the diagnosis but are mainly indicated in the pre-therapeutic management the histological confirmation is rarely requested unless a diagnosis of sarcoma is evoked.

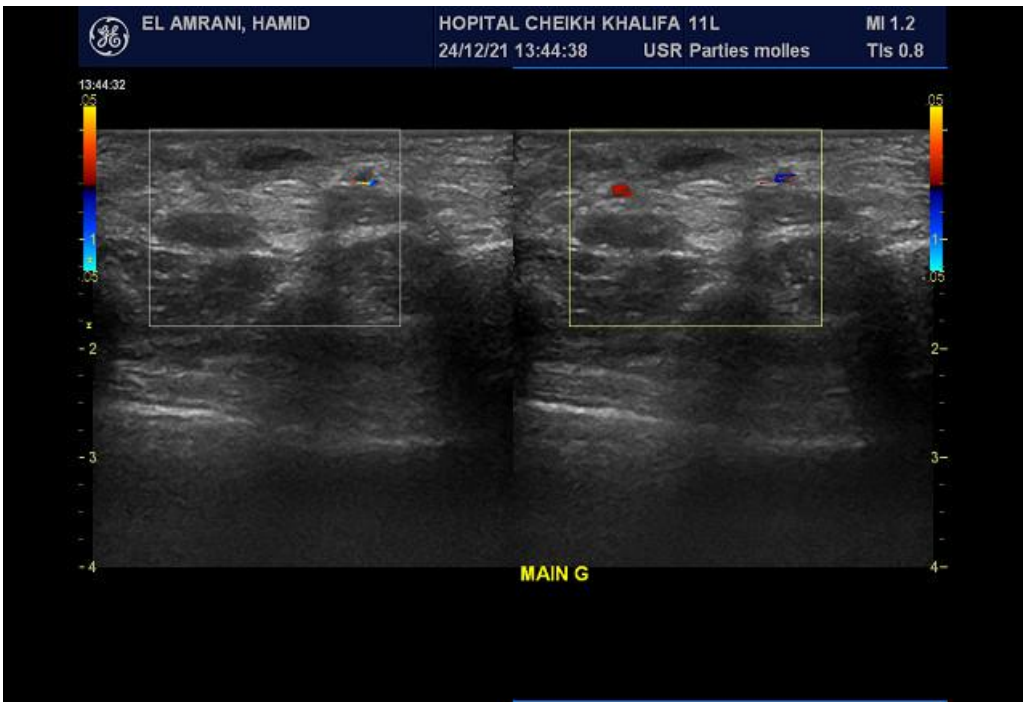
It is noted that the incidence of this condition is of 15% in patients with dupuytren's disease, which corresponds to a palmar localization of this pathology (3).

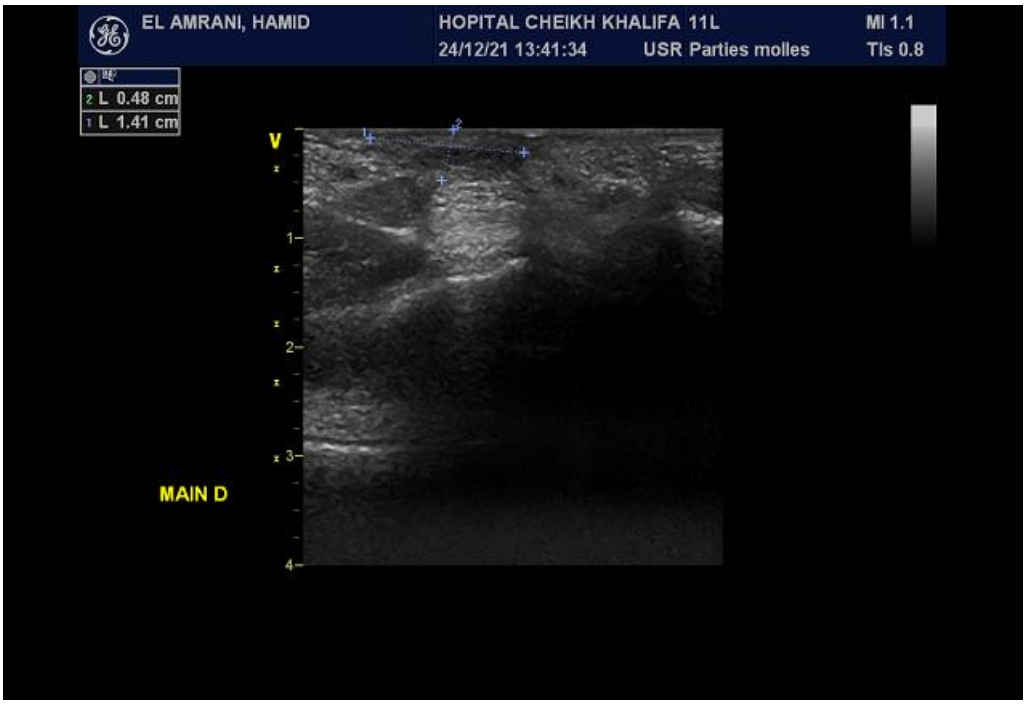
In conclusion, palmoplantar fibromatosis is a rare and benign condition whose management depends essentially on the symptomatology and the discomfort caused.



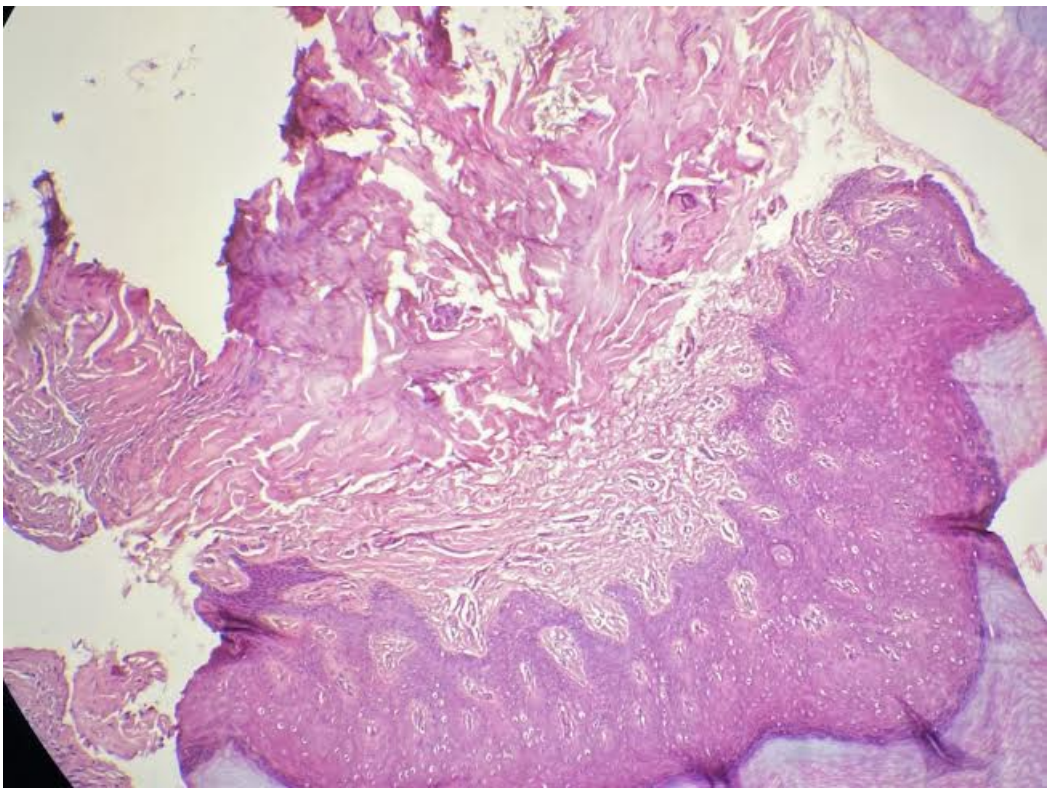


Sub cutaneos palmo-plantar nodules

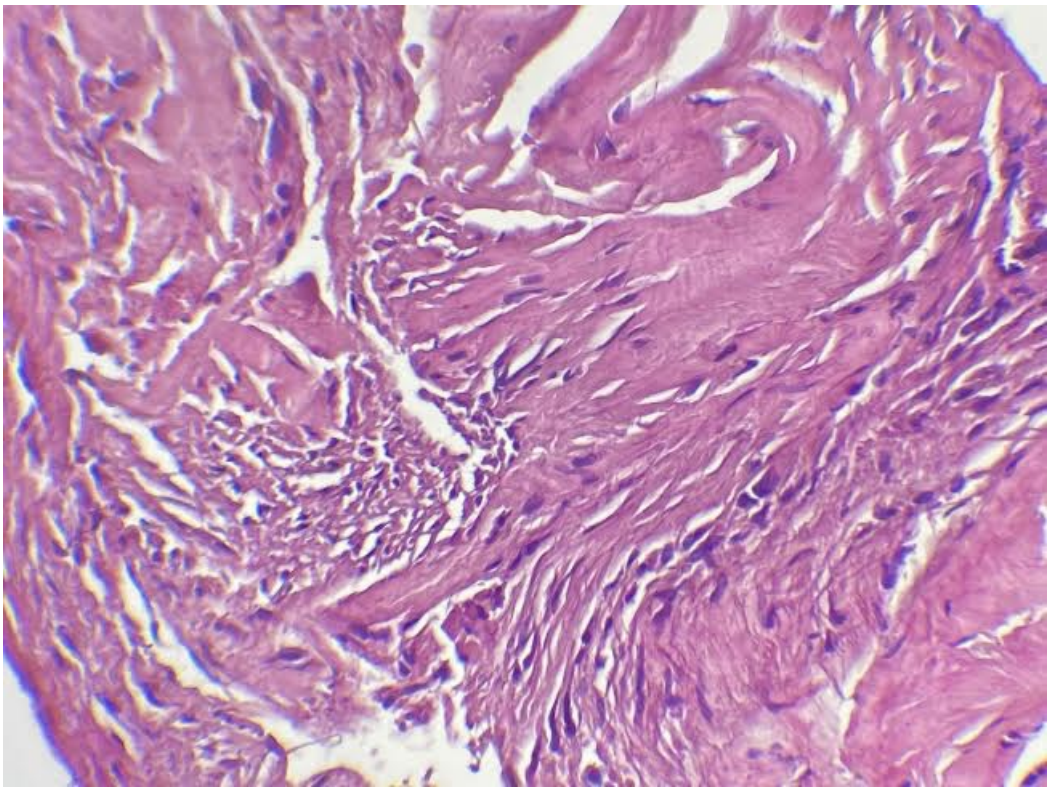




Palmo-plantar ultrasound showing a hypoechoic, homogeneous formations with a smooth and regular contour of benign appearance.



Regular skin covering in which the underlying dermis is the site of fibroblastic proliferation (HE, Gx50)



Proliferation arranged in tangled bundles of cells lacking atypia (HE, Gx400)

1. Meyers AL, Marquart MJ. Plantar Fibromatosis [Internet]. StatPearls [Internet]. StatPearls Publishing; 2021 [cité 19 janv 2022]. Disponible sur: https://www.ncbi.nlm.nih.gov/books/NBK557674/2. S SS, Thygarajan U, Raj DG, Susruthan M. Ledderhose Disease: Pathophysiology Diagnosis and Management. J Orthop Case Rep. 2019;9(2):84-6. 3. Gudmundsson KG, Jónsson T, Arngrímsson R. Association of Morbus Ledderhose with Dupuytren's contracture. Foot Ankle Int. juin 2013;34(6):841-5.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 621

Title: A retroauricular apocrine hydrocystoma: A clinical and histological case report

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Introduction

Apocrine hidrocystoma (AH) is a rare, benign, cystic tumor of the apocrine sweat glands [1].

Materials and methods

We report a case of apocrine hidrocystoma occurring on the retroauricular area in a 56year-old female with a literature review.

Results

A 56-year-old woman consulted for a painless mass in the left retroauricular region that had been evolving for 7 years. She had not noticed any increase in size with temperature or seasonal variation. Physical examination showed a mass measuring 10×10 mm, smooth-surfaced and dome-shaped in the left retroauricular region (Figure 1). The overlying skin was intact and blue in color. Dermoscopic examination revealed a pale bluish homogeneous network and some linear vessels (Figure 2). The lesion was removed under local anesthesia. Anatomopathological examination showed a regular epidermis, surmounted by an orthokeratotic keratosis. The dermis contained a cystic formation bordered by a double cell bed, an outer layer composed of cubic myoepithelial cells forming intracavitary papillary digitations and an inner layer composed of secretory columnar cells with eosinophilic cytoplasm with a characteristic apical secretory decapitation projection. There were also numerous granulations in the cytoplasm of the epithelial cells. They were positive to PAS staining (Figure 3).

Discussion

Apocrine hidrocystomas are benign cystic tumors of the apocrine sweat glands. Their incidence remains unknown [2]. Their pathogenesis is not fully understood. It affects adults between the ages of 30 and 70 years, with no ethnic, gender or geographic predilection [1]. Clinically, HA presents as well-defined, dome-shaped, clear, cystic nodules with smooth surfaces, flesh-colored or blue in color, and ranging in size from 1 to 15mm [3]. They are usually localized on the face, most commonly on the eyelid. Some localizations on the trunk or limbs have been reported [3]. Solitary HA does not have seasonal variations, but multiple lesions have seasonal variations as do eccrine hidrocystomas, which tend to appear more in warm, humid weather [4]. The main interest of dermoscopy is to ensure the absence of dermoscopic features of a malignancy [1]. Histologically, HA is characterized by unilocular or multilocular cysts that are lined with a double layer of epithelium, the outer layer comprising flat myoepithelial cells and the inner layer containing large columnar or cuboidal cells with eosinophilic cytoplasm and round or oval vesicular nuclei at the base of these cells [4]. The first-line treatment for HA is surgical excision with narrow margins, due to the benign nature of the lesion [1]. Needle puncture can be performed, but with frequent local recurrence [1].

Abstract N°: 626

Title: Intradermal nevus with mixed granulomatous reaction: an unusual histopathologic finding

Cláudia Brazão[1], Dora Mancha[2], Luís Soares-De-Almeida[2], Paulo Filipe[2]

[1] Centro Hospitalar Universitário Lisboa Norte - Hospital De Santa Maria, Lisboa, Portugal, [2] Centro Hospitalar Universitário Lisboa Norte, Portugal

Introduction

Melanocytic nevi are most commonly acquired and their incidence peaks in the third decade of life. According to the histological location of nevus cells, nevi are classified into junctional, intradermal and compound. We report an unusual case of intradermal nevus with granulomatous inflammation and mixed giant cell reaction.

Materials and methods

We report a case of a female patient who presented with a rapidly growing hemorrhagic erythematous papule, imposing a thought-provoking histopathologic diagnosis.

Results

A 28-year-old Caucasian female, Fitzpatrick phototype III, without relevant comorbidities, presented to our dermatology department with a rapidly growing hemorrhagic erythematous papule on the right flank area, in the post-partum period. The patient had family history of malignant melanoma in a first degree relative (her father). Surgery was performed to rule out melanoma. The histopathologic study showed an intradermal nevus with mixed granulomatous inflammatory infiltrate, showing some multinucleated foreign-body giant cells, some Langhans-type giant cells and some Touton-like giant cells. There was no clinical or histologic evidence of folliculitis or ruptured epidermal cyst underneath the nevus. Immunohistochemistry studies showed a mirrored positivity for Melan-A in the upper portion of the lesion and for CD68 in the mid portion, confirming the granulomatous reaction within the intradermal nevus.

Discussion

Intradermal nevus is the term given to nevi in which all the melanocytes are in the dermis. It may be papillomatous, pedunculated or flat and, when traumatized, may present as ulcerated or hemorrhagic. Granulomatous inflammation is an unusual histopathologic finding in an intradermal nevus. It can be seen as a part of halo phenomena or associated with foreign-body reaction. The granulomatous inflammation as a part of halo phenomenon is seen in nevi undergoing regression and can be associated with malignant melanoma. Histologically it is characterized by a heavy infiltration of the nevus by lymphocytes and histiocytes and represents expression of the host immune response. Foreign-body type granulomas adjacent to benign intradermal naevi imply a subnevic folliculitis or ruptured epidermal cyst. These may develop secondary to the pressure of the nevus cells on the hair follicle causing its obstruction or secondary to strangulation of pilosebaceous follicle by the fibrosis associated with nevus maturation. Acute infection of the follicles within the nevus may result in exposure of the hair shaft and stimulation of foreign body reaction. In this current case, there was a mixed granulomatous inflammation, with Langhans-type, foreign-body and Touton-like multinucleated giant cells, without histologic evidence of folliculitis or foreign material, which a very unusual histopathologic finding.

Abstract N°: 678

Title: purely cutaneous rosai-dorfman disease of the face with dermoscopy

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[1] Faculty Of Medicine And Pharmacy Of Casablanca, University Hospital Center Of Ibn Rochd, Casablanca, Morocco, [2] Chu Ibn Rochd

Introduction

Materials and methods

Results

Introduction

Rosai-Dorfman disease (RDD) is a benign non-Langerhans cell histiocytosis mainly affecting lymph nodes, Cutaneous RDD (CRDD) is an extremely rare form of RDD, which is limited to the skin

and only few cases have been reported. The present study aimed to examine a case of purely cutaneous RDD and describe its dermoscopic features.

Case report

We report a case of a 36-year-old female patient presented with an 18-month history of painless erythematous plaques located on both cheeks, evolving and gradually increasing in size without history of fever or weight loss.

On clinical examination, macular erythematous infiltrated plaques measuring a few centimeters were found, with irregular borders located on both cheeks with the presence of a few satellite plaques. The lymph node examination was normal.

Additional tests (blood count, , erythrocyte sedimentation rate, C-reactive protein, angiotensin-converting enzyme, protein electrophoresis, complement, antinuclear antibodies, syphilis serology, hepatitis and human immunodeficiency virus (HIV), and chest radiography) were normal.

The dermoscopic image showed a red background traversed by several telangiectatic vessels, and multiple milia cysts

Histological examination on a skin biopsy revealed a histiocytic dermal infiltrate with images of emperipolesis. And the immunohistochemical staining was positive for S-100 and CD68 protein, and negative CD1a.

The diagnosis of RDD was made on the basis of clinical, histological and immunohistochemical findings. The patient was put on oral corticosteroid therapy at a dose of 0.5 mg/kg associated with methotrexate at a dose of 15 mg/week, the evolution was marked by the central paleness of the plaques and an IPL laser was recommended.

Discussion

There are three main clinical presentations of the pure cutaneous RDD: the papulonodular form which is the most frequent and located usually on the face or on the upper body, the indurated plaque form which is the case of our patient, and the tumoral form. This variability makes clinical diagnosis of CRDD hard to confirm despite the

distinctive histological features (emperipolesis associated with CD68+, PS100+ and CD1a-), resulting a difficult and delayed diagnosis for up to 5 years.

The RDD is an entity to be considered in the differential diagnosis of facial lesions not only of granulomatous appearance but also in front of isolated erythematous plaques, which emphasis the complementarity of the clinic, dermoscopy, histology and immunohistochemistry in the presence of a cutaneous form.

Discussion

Abstract N°: 753

Title: Cellular neurothekeoma of the scalp : a diagnostic challenge

Maryem Rimaoui[1], Hali Fouzia[2], Marnissi Farida[3], Chiheb Soumiya[4]

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Introduction

Cellular neurothecoma is a rare benign tumour.Histology is the cornerstone of the diagnosis which constitutes a real challenge; cellular neurothecoma must be differentiated from myxoid neurothecoma and melanocytic or nervous tumours and from certain malignant tumours notably fibro-histiocytic plexiform cell tumours, neurotropic melanomas and clear cell sarcomas. We report a new observation of a patient with cellular neurothecoma of the scalp .

Results

The 20-year-old patient with no particular medical history consulted for a nodular lesion which had been evolving for 3 months. Clinical examination revealed a 2 cm skin-coloured nodule located in the left temporal area. . Biopsy of the lesion revealed an epithelioid and fusocellular tumour proliferation respecting the epidermis, dissecting the collagen fibres and extending to the hypodermis. Immunohistochemistry showed diffuse expression of CD68 but no expression of cytokeratin, PS 100, CD20, CD3, CD34, CD 45, HMB45, melan 5 or EMA. Treatment consisted of surgical excision. No recurrence was reported.

Discussion

Cellular neurothecoma is a rare benign tumour usually located in the head and neck in children and young adults, most often women. The diagnosis is histological showing a proliferation of epithelioid to filiform cells with abundant and slightly eosinophilic cytoplasm associated with nuclear polymorphism with atypical nuclei. There are no immunohistochemical markers specific to the neurothecoma. Cellular neurothecoma must be differentiated from plexiform Spitz nevus, neurotropic malignant melanoma, clear cell sarcoma, schwannoma, plexiform neurofibroma. The diagnosis is made by immunohistochemical study in the absence of expression of S100 protein and HMB45 by the tumour cells. Treatment is based on surgical resection and the prognosis remains good.

Abstract N°: 759

Title: Epithelioma of Malherbe with a rare localization : a new case report

Maryem Rimaoui[1], Hali Fouzia[2], Marnissi Farida[3], Chiheb Soumiya[1]

[1] Dermatology Department, Uhc Ibn Rochd, Casablanca, Morocco, [2] Ibn Rochd Hospital, Casablanca, Morocco, [3] Anatomical Pathology Department, Uhc Ibn Rochd, Casablanca, Morocco

Introduction

Pilomatricoma(or epithelioma of Malherbe) is a rare, benign skin tumour that occurs less than 2% of all primary skin tumours and is most common in young people with a predilection for the head and neck. We report a rare observation of a 20 year old female patient with a pilomatricoma of the arm.

Results

A 20 year old female patient, with no significant medical history, consulted for a painless nodule of the arm that had been evolving for 3 months. The clinical examination revealed a nodular lesion of 1 cm in size, mobile to the deeper plane but adherent to the skin, firm to palpation, located on the left arm. The skin adjacent to it was normal in appearance. The ultrasound scan showed a subcutaneous nodule with an echogenic centre and hypoechoic periphery with a posterior shadow cone image. The tumour nodule was encapsulated, indurated, measuring three centimetres.Anatomopathological investigation noted basaloid and mummified cells with clearly visible cytoplasmic borders and nuclei with a clear imprint. There were focal zones of keratinisation and calcification. The diagnosis of a pilomatricoma was confirmed. No recurrence was noted at 6 months.

Discussion

Pilomatricoma is a benign, calcified tumour of the pilar matrix .It was first described in 1881 by Malherbe and Chenantais..Classically, it is clinically manifested by a small, solitary, asymptomatic, sometimes painful subcutaneous nodule, which frequently affects women. It occurs mainly during the first two decades. This is compatible with our observation. The usual localizations are the neck and the head. Its occurrence in the limbs is exceptional. The diagnosis is confirmed histologically, showing a mummified cells surrounded by bone trabeculae with foci of calcification. The prognosis of this disease is very good.

Abstract N°: 883

Title: Rapidly extensive generalized morphea in an aged patient

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Introduction

Morphea is a form of localized scleroderma with no systemic involvement. The generalized form is exceptional. We report a case of rapidly extensive generalized morphea in a 72-year-old female patient.

Case report

A 72-year-old female patient, diabetic for three years on ADO, presented pruritic skin sclerosis for three years, initially on her legs then diffused, in a context of 10 kg weight loss.

Clinical examination revealed diffuse skin sclerosis involving 90% of the skin, and white scleroatrophic patches on the trunk. The face and mammary areolas were respected. The Rodnan score was 40. The fingers were boudinous and sclerotic with a positive prayer sign. There was a diffuse pigmentation disorder. There was no Raynaud's phenomenon, no limitation of mouth opening, and no pulpal ulceration.

Therefore, we suspected generalized morphea, paraneoplasic morphea, systemic scleroderma, and then scleroderma in the context of his diabetes.

Skin biopsy showed dermal fibrosis compatible with scleroderma.

Anti-nuclear, anti-DNA, anti-Scl 70, anti-centromere antibodies were negative. The cardiac ultrasound was without abnormality. A functional workup was done, chest CT and EFR/DLCO were normal. A paraneoplastic workup was performed to look for a possible neo primary with blood count, chest CT, abdominal and pelvic ultrasound, lymph node ultrasound, and echomammography, which did not reveal any abnormality.

The diagnosis of generalized morphea was made, and the patient was put on corticosteroid therapy at 1.5mg/kg/day, methotrexate 15mg/week, and phototherapy.

Discussion and conclusion

The originality of our case resides in the age of onset of generalized morphea and its rapidly extensive character.

Morphea is a rare autoimmune disease characterized by inflammation and sclerosis of the skin. Its etiopathogenic is still poorly understood.

There are different types of morphea, mainly linear morphea and plaque morphea. The generalized form is exceptional.

Generalized morphea often begins in childhood and tends to progress. Its evolution is generally long.

The diagnosis is clinical.

Generalized morphea represents a therapeutic challenge. It requires systemic treatment such as corticosteroid

therapy and methotrexate. Phototherapy can also be helpful.

Abstract N°: 919

Title: cutaneous sarcoidosis

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Introduction

Materials and methods

Results

Sarcoidosis is a multisystem granulomatous disease of unknown aetiology. Cutaneous sarcoidosis is seen in up to one-third of patients and may be the first or the only clinical sign of the disease. We report a case of cutaneous sarcoidosis without systemic involvement. Lesions mimicked various other common dermatologic conditions. In this case we describe the clinical and histopathological findings of cutaneous sarcoidosis.

A 31 years old Ethiopian female patient, presented with multiple asymptomatic lesions of 3 months duration over the face. There was no history of fever, joint pain, cough weight loss, eye complaints or any other systemic complaints. Past and family history was not contributory. There was no significant drug history. General physical and systemic examinations were normal.

Dermatologic examination revealed multiple brownish papules all over the face, measuring 1-3 mm, mainly periorbital, perioral and, involving forehead. Some of the papules were coalescence together forming a plaque. Lesions were non-tender. Palms, soles, hair, nail and mucosal areas were uninvolved. Ophthalmologic examination was normal.

Skin biopsy revealed noncaseating granulomas involving the full thickness of the dermis. The granulomas predominantly composed of epithelioid cells, with Langhan's giant cells and sparse lymphocytic infiltrate (naked granulomas). PAS, Giemsa, modified Zeil Nelson stains and polarization are negative.

Sarcoidosis is a disease with multiple organs' involvement. Cutaneous manifestations of sarcoidosis are different and non-specific. The diagnosis is confirmed by the presence of non-caseating epithelioid granulomas in histological findings.

Discussion

Abstract N°: 935

Title: Cutaneous Nodule revealing an angioleiomyoma

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Introduction:

Angioleiomyoma is a rare benign vascular smooth muscle tumor arising from the middle coat of veins and arteries. It is also called "angiomyoma" or "vascular leiomyoma".

We report a case of angioleiomyoma revealed by a painful thigh nodule.

Observation :

A 24-year-old patient with no particular pathological history who had a skin nodule for 6 months on the left thigh. The consultation was motivated by the embarrassing and very painful nature of the lesion. On clinical examination, she presented with a cutaneous nodule of 3 cm, it was soft but painful with an angiomatous-looking skin located at left thigh. A Doppler ultrasound was performed showing a hypervascular heterogeneous hypoechoic lesion with pulsed Doppler venous flow.

The patient underwent complete excision of the nodule. The histological study revealed the presence of a well-circumscribed nodular formation, polychrome in appearance and the site of hemorrhagic changes with a highly vascular spindle-shaped cell proliferation made of tangled bundles and separated by a fibrous stroma. The limits of the resection were healthy. Thus, the diagnosis of angioleiomyoma was retained.

Discussion:

Angioleiomyoma is a benign tumor that usually presents as a small, slowly growing, painful mass arising from the skin or subcutaneous tissue.

Angioleiomyomas are twice as common in women as in men and mainly affect the middle-aged population between the fourth and sixth decades. The majority of all angioleiomyomas found are located in the lower limbs, particularly in the calf and ankle. Localization of the thigh as in our patient is rare.

The pathogenesis of this tumor is unknown, however factors such as trauma, infection, hormones, and arteriovenous malformations have been discussed.

Diagnosis of angioleiomyoma is histological. The evolution of a vascular leiomyoma is classically benign without malignant transformation or recurrence after complete surgical excision.

Abstract N°: 951

Title: Solitary nodule of the face: A rare diagnosis to keep in mind !

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Introduction

Isolated cutaneous involvement in Rosai-Dorfaman disease (RDD) is rare. This form exhibits multitudinous clinical and dermatoscopic aspects, making delays in diagnosis frequent. We describe a case of exclusive cutaneous RDD presenting as a solitary nodule of the face.

Materials and methods

Results

A 43-year-old man presented to our dermatology department with a 2-month history of asymptomatic nodule of the right cheek. On physical examination, non-ulcerative, erythematous and firm nodule of 1 cm was found. Satellite papule with similar aspect was also seen. The patient didn't complain of any constitutional symptoms. No lymphadenopathy was found. Polorised dermoscopy using DermLite dermatoscope revealed erythematous background with yellow keratosis plugs and prominent central yellow foci. We also identified multiple branching vessels at the periphery of the lesion. White structureless areas and white keratosis were present. Laboratory investigations showed isolated hyperleukocytosis. Complete surgical excision of the lesion was made. Histological examination showed massive infiltration of the dermis made of histiocytes with pale cytoplasm and multinucleate aspect. Admixed with these cells, multiple plamocytes, lymhocytes and neutrophils were seen. Marked emperipolesis was obvious. By immunohistochemistry, histiocytes showed positive staining for CD68 and S100 but negative for CD1a. Diagnosis of cutaneous Rosai-Dorfman disease (RDD) was made. No recurrence was seen after surgical treatment.

Discussion

RDD is an infrequent subtype of the R group of non-Langerhans cell histiocytoses. The sporadic form of the disease is mainly associated with lymph nodes painless involvement. Extra-nodal localization is found in 43% of the cases. The skin and soft tissues are the most affected sites. Nevertheless, exclusive cutaneous presentation in RDD is rare. This form is more frequent in middle-aged females. The disease exhibits variable clinical aspects. Multiple erythematous papules and nodules are commonly seen. In our case, solitary nodule of the face made diagnosis challenging. Only few studies described dermoscopic features of CRDD. Erythematous background with branched vessels, as seen in our patient, have been reported. The presence of yellow central foci as well as yellow keratosis plugs may be explained by the compression of follicules by intensive histiocytes infiltration. The hallmark of the disease is the histopathologic aspect along with the results of immunohistochemistry. Observation or surgical excision are the main treatment options in focal cutaneous RDD. The disease is usually self-limited with a good outcome.

Abstract N°: 966

Title: A case of dermoid cyst of the sternal midline

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Introduction

We report a case of a dermoid cyst of the sternal midline. A 19 year old female, with type 6 skin, developed a firm, tender 3cm nodule on the anterior chest. It enlarged gradually over 3 years and became tender to light touch. There was no central punctum and the lesion did not improve with a course of oral antibiotics. There was no apparent sinus in the lesion and it did not transilluminate. Abnormal hair growth was noted in perilesional skin. She was otherwise asymptomatic and had no significant past medical or surgical history.

Materials and methods

The lesion was completely excised under local anaesthetic by ellipse excision with a good cosmetic outcome. Type 6 skin is at increased risk of keloid scarring1. She was counselled regarding this given the cosmetically sensitive area involved2.

Results

The histology revealed a benign dermoid cyst with normal epidermis overlying a dermal cyst which is lined by keratinising squamous epithelium with attached pilosebaceous structures. There was evidence of cyst rupture demonstrated by surrounding chronic inflammatory infiltrate with numerous melanophages. Apocrine, eccrine glands and smooth muscle are found within the wall of the cyst.

Discussion

Dermoid cysts are most commonly seen in infants along embryonic fusion planes as subcutaneous nodules, particularly in the periocular region3. They are generally recognised at birth but diagnosis can be as late as the sixth decade of life as they are not noticed unless enlarging, tender or infected. They are typically 1-4cm in diameter and are non-pulsatile and non-compressible subcutaneous nodules. The gradual enlargement is due to the aggregation of debris centrally4. They are rarely malignant but cases have been reported5.

This case describes the excision of a rare tumour in type 6 skin which is atypical in this age and area6.

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Abstract N°: 1010

Title: An unusual presentation of fungoides with large cell transformation

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Introduction

Mycosis fungoides (MF) is the most common cutaneous T-cell lymphoma. Transformed mycosis fungoides (T-MF) is a rare variant of MF with an aggressive course. Although the lesions of MF are often quite distinct, several atypical clinical variants have been described that can mimic other dermatologic conditions.

Materials and methods

We present a case of pustular MF sitting only on the folds.

Results

A 63-year-old patient has been followed in our department for a CD30+ T-MF (T3N0M0). He was initially treated with chemotherapy (R-CHOP) for one year. Due to a poor response, he was put on gemcitabine. Two months later, he developed a subacute pustular rash on the folds. Skin examination showed erythematous infiltrative plaques surmounted by numerous non-follicular pustules of 2-3 mm on the armpits, neck, groin and inguinal folds associated with palmoplantar pustular keratoderma. Bacteriological and mycological skin and blood samples were negative. Skin biopsy showed a dermal infiltrate of CD30+ T-cells associated with intra-epidermal pustules. Direct immunofluorescence was negative. Pustular T-MF was diagnosed. The pustular eruption regressed with corticosteroids and novatretin. Gemcitabine cures were prosecuted.

Discussion

Here we report an unusual presentation of pustular T-MF located only on the folds associated with PPP. In the differential diagnosis, acute generalized exanthematous pustulosis (AGEP) was unlikely based on clinical presentation of large pustules instead of pinhead-sized pustules and absence of fever, neutrophilia and inflammatory marker. Furthermore, our patient had no recent history of drugs or infection. Also, away from intraepidermal papules, no other features of AGEP, similar as papillary dermal edema, vasculitis, exocytosis of eosinophils and cell necrosis of keratinocytes, were observed. Pustular psoriasis was also excluded histologically. Impetigo contagiosa was excluded by microbiological analysis. The negative of direct immunoflourescence ruled out IgA pemphigus. Atypical manifestations of MF have been described, such as pustular, bullous granulomatous, hypopigmented and verrucous. Although some of them have been identified as distinct entities, they are now interpreted as being merely clinicopathological variants of MF. Patients with uncommon clinical manifestations of MF often also have classic MF. Moreover, transitional periods of different clinical variants are possible, as we have seen in our patient who had a one year of classic MF at the onset of the disease.However, our patient's presentation was different from previously reported pustular cases To our knowledge this is the first case of "inverse" pustular T-MF. In conclusion, pustular MF should be included in the differential diagnosis when an intraepidermal pustular eruption appears histologically in association with epidermotropism of atypical lymphocytes.

Abstract N°: 4

Title: Dermoscopy in Actinic Lichen Planus Showing Brown Pigment Splash: Defining a New Sign

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Introduction: Actinic lichen planus (LP) is an uncommon variant of lichen planus which is seen over photo-exposed parts of the body. Although the exact aetiopathogenesis is unknown, ultraviolet (UV) radiations are the most important triggers as the name suggests. Artificial UV radiation sources may also trigger this condition. Thorough literature search revealed scarce data on dermoscopy of this uncommon condition. We herein report a case of actinic lichen planus following chronic sun exposure to describe the features and a new dermoscopy finding which may aid in its early diagnosis especially in skin of color.

Results: A 20-years-old armed forces recruit presented with multiple asymptomatic discrete hyperpigmented patches with surrounding hypopigmentation over both the cheeks (Figure 1A) for last two weeks. There was no involvement of any mucosa, nails or hairs. He did not give any history of drug intake, topical application or trauma prior to these lesions. Dermoscopy performed in all the lesions showed diffuse light and dark brown background with peppering, mild blotchy erythema, pigment pseudonetwork, multiple follicular white dots and absence of Wickham's striae (Figure 1B and 1C). The periphery of each lesion showed hypopigmentation and granular brown pigment which appeared like a splash within the hypopigmented zone and merged imperceptibly with the surroundings. We did not find any such reported findings in literature on dermoscopy of actinic lichen planus. We propose to call this the "**Brown splash sign**" and hypothesize that the pigment network disruption secondary to inflammation especially in the hypopigmented zone of actinic lichen planus could have led to this type of appearance. It may be an extension of the peppering pigment as defined previously in a case and was seen in all the six discrete lesions which were examined dermposcopically in our patient and may be more common in skin of color. The patient was started on topical pimecrolimus and is under regular follow-up with favourable response.

Discussion: The characteristic presentation of actinic LP includes developing hyperpigmented lesions with a surrounding hypopigmented halo over sun-exposed areas of the body and a lack of involvement of other sites which may be seen in classical LP like the mucosa, hairs and nail. Koebnerisation too is uncommon and the lesions are commonly asymptomatic. Literature search revealed scarce data on dermoscopy of this condition and a peppering pigment over a brown background is defined in early phases of the disease with isobar sign (hyperpigmented follicular opening) and absence of vascular pattern or Wickham's striae. A starry sky appearance of white follicular dots has been described as one of the dermoscopic feature of Wickham's striae in LP. We found similar findings in our patient except a few as mentioned previously and in addition propose to define a new dermoscopic sign which may be more common in skin of color as compared to Caucasians. There are no guidelines for treatment of actinic LP, however, sun-protection along with topical corticosteroids, calcineurin inhibitors, hydroxychloroquine and oral retinoids may be used.

As the data on dermoscopy of actinic LP is limited, our case adds to the literature and dermoscopy along with the clinical examination may become a diagnostic modality in future for this uncommon condition.

Abstract N°: 94

Title: Dermoscopic findings in dermatomyositis

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Introduction

Dermatomyositis (DM) is an autoimmune disorder that belongs to the spectrum of inflammatory myopathies. Skin manifestations of the disease may vary significantly in each patient and include Gottron's papules, Gottron's sign, "holster sign", "V-neck sign", "shawl sign", periungual teleangiectasia, dystrophic cuticles, fissures and hyperkeratosis on the palms and fingers ("mechanics hands"), calcinosis, flagellate erythema on the trunk, inverse Gottron's papules and non-scarring alopecia. Dermoscopy is a non-invasive imaging technique that has been increasingly used in the evaluation of inflammatory dermatosis.

The aim of the current study is to analyze the (video)dermoscopic features of cutaneous manifestations of DM.

Materials and methods

Patients who fulfilled the Bohan and Peter criteria for the diagnosis of DM and presented with active skin lesions were included in the study. Videodermoscopic assessments were performed at 20-70-fold magnification. Capillaroscopy and trichoscopy was performed in all study participants. In addition, dermoscopy of active skin lesions was performed. Standardized dermoscopic parameters recommended for the assessment of non-neoplastic dermatosis were used.

Results

Fifteen patients with DM (10 women and 5 men) participated in the study. 11 out of 15 patients showed nailfold abnormalities, which included elongated capillaries (90.9%), avascular areas (81.8%), disorganized capillary architecture (81.8%), tortuous capillaries (72.2%), dilated capillaries (72.7%), hemorrhages (72.2%), "bushy capillaries" (45.5%) and giant capillaries (36.4%). Trichoscopy was performed in all patients and showed presence of yellow dots (60%), hair diameter diversity (60%), interfollicular honeycomb pigment pattern (46.7%), perifollicular pigmentation (40%), perifollicular erythema (33.3%), perifollicular scaling (20%) and white (20%) or pink (13.3%) structureless areas. Linear branched vessels were the most common vascular morphology (80%), followed by linear (60%) and linear curved vessels (53.3%). Lake-like structure were rarely observed (13.3%). Cutaneous manifestations of DM, including Gottron's papules, and Gottron's sign, showed under dermoscopy predominantly polymorphic vessels (linear, linear branched and / or linear curved vessels) and white or pink structureless areas.

Discussion

Dermoscopy of the nailfolds, scalp and active cutaneous lesions may be useful in the preliminary diagnosis of DM. Further studies evaluating the dermoscopic features of specific skin manifestations are needed.

Abstract N°: 237

Title: Enhancing medical education in Dermatology with an LED loupe magnification device

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Introduction

Dermoscopy is an important tool in identifying skin lesions, however medical students have minimal dermatology training and even less exposure to it. Skin cancer examination is an important skill that can be useful in all fields of medicine but is especially necessary in primary care. One barrier to implementation of the device in education is cost, as dermatoscopes can be a large investment especially for medical students or junior doctors in an early stage of their career. A device which can provide good quality dermoscopic imaging at low cost would therefore be useful to support education and ensure proficiency of future clinicians. In this study we evaluated the possibility of medical students analysing skin lesions with a cost effective LED loupe magnification device, which is used to inspect linen thread counts.

Materials and methods

We assessed the usefulness of the LED loupe magnification device with a questionnaire comparing dermoscopic and loupe magnification images. We provided teaching on how to recognise features of benign skin lesions and malignant lesions from microscopic images. We then tested the usefulness of the loupe device by asking a group of mostly final year medical students to analyse three images of the same lesion; one macroscopic, one dermoscopic and one microscopic image from the loupe device. For each image the participant was asked if they would refer the lesion to a dermatologist. They were also asked to rate their confidence for each referral out of 10, 10 being the most confident.

Results

With the responses of 19 medical students, we calculated the percentage of accurate referrals based on each type of imaging. Decision accuracy depended on whether respondents could differentiate benign lesions from malignant ones, with malignant lesions being referred.

Only 49% of students made accurate referrals using macroscopic images compared to a result of 59% and 58% when assessing images from the loupe device and dermatoscope respectively.

The mean confidence rating when using macroscopic images compared to the loupe device was 6.0/10 and 6.4/10 respectively. Unsurprisingly, the confidence rating was the highest for dermatoscopic images, showing 6.7/10.

When evaluating the data with a paired t-test, there was a statistically significant mean increase of 10.5% ($p=0.049$) in referral accuracy when using the loupe device compared to macroscopic examination. Similarly, there was a significant increase in mean confidence ratings by 0.43 points out of 10 ($p=0.00009$) when using the loupe device.

Discussion

Our data demonstrates that the technology of an LED loupe device is well suited for dermatological examination. With appropriate training, using a loupe device can lead to an increase in diagnostic accuracy and confidence. Currently, dermatology teaching at universities largely consists mainly of lectures and limited clinical exposure. However, by implementing a low-cost yet practical device, dermatology teaching can easily be transformed from being passive to interactive. Not only will this active approach enhance memory recall and lead to more effective teaching of the dermatology curriculum in medical school, but the resulting positive engagement may ultimately inspire more students to pursue the road of dermatology.

Abstract N°: 300

Title: Contribution of dermoscopy in Dowling-Degos Disease

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Introduction

Dowling Degos disease (DD) is a rare genodermatosis associated with a loss of function of the keratin-5 gene. It is distinguished by specific clinical and histological features. We report a case of DD whose diagnosis was guided by dermoscopy.

Observation

A 35-year-old patient presented to our dermatology department with hyperpigmented lesions on the flexures associated with diffuse comedonal lesions beginning at the age of 20 and progressively worsening. She had a history of hypothyroidism and obesity. She is from a non-consanguineous marriage and she had no similar cases in the family. Dermatological examination revealed diffuse comedo-like lesions distributed over the trunk, back, axilla and neck associated with reticular pigmentation of the axilla. Dermoscopy in polarized mode using ×10 magnification showed multiple black rounded structures corresponding to comedo-like lesions with irregular star-shaped pigmentation. The diagnosis of Dowling-Degos disease was suspected based on the clinical and dermoscopic appearance. A skin biopsy was performed showing an orthokeratotic hyperkeratosis, elongated and thinned rete ridges, focally anastomosed. These rete ridges showed hyperpigmentation of their distal part with several horny cysts. The thin, branching, pigmented projections involved the infundibula of the follicles. Thus, the diagnosis of DD was confirmed.

Discussion

Dowling Degos disease is an autosomal dominant genodermatosis with variable penetrance and expressivity but which can be sporadic as in our case. Several phenotypic variants were described: the follicular, acantholytic, hypopigmented variant and variant associated with comedo-like lesions, as in our case. This variability would be explained by the heterogeneity of genetic mutations. Dermoscopy can be of significant help and can guide the diagnosis of DD and eliminate certain differential diagnoses manifesting by acquired pigmentation or comedonal lesions. Dermoscopic aspects of DD are rarely reported in the literature. Characteristic dermoscopic signs include irregular star-like pigmentation around a whitish center and brown or reddish-brown background. The star-shaped pattern is histologically correlated with branched rete ridges and the whitish center corresponds to follicular plugging. Thus, through our observation, we underline the interest of dermoscopy in DD and its distinction with other pathologies.

Abstract N°: 622

Title: Dermoscopy of cutaneous tuberculosis

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Introduction

Cutaneous tuberculosis (CT) is a rare form of extrapulmonary tuberculosis, occurring in 1-2% of tuberculosis cases. Positive diagnosis is difficult due to the clinical polymorphism. It is based on a combination of clinical, biological, immunological and histological findings. Dermoscopy is a simple tool that can help confirm the diagnosis of cutaneous tuberculosis.

Materials and methods

This is a retrospective, descriptive and mono-centric study, conducted in the Dermatology Department of the Mohammed VI University Hospital of Oujda, spread over a period of 6 years and 9 months, since its inauguration in June 2014 until March 2021, including all cases of cutaneous tuberculosis managed in our department.

Results

We collected 10 cases of cutaneous tuberculosis and the average age of the patients was 39.30 years with a sex ratio M/F of 1. Tuberculous gummies predominated in our series with a percentage of 60% and the scrofuloderma form occupied the 2nd place with a percentage of 20%. Dermoscopic examination was performed in 5 patients. The dermoscopic aspects found, according to the clinical form, are

- Patient 1 (Gum at the crudeness stage): A peripheral pinkish halo, pearly white structures and shiny whitish scales

- Patient 2 (Gum in fistulization stage): A clean central oval erosion, a peripheral pinkish halo and peripheral white scales

- Patient 3 (Bazin's erythema): Central ulcerations with a fibrinous background and an erythemato-violaceous halo

- Patient 4 (Gum at ulceration stage): Yellowish lupoid areas, hemorrhagic structures and whitish scales

- Patient 5 (Gum at ulceration stage): central erosion, peripheral pink halo and white scales

Discussion

Morocco is considered as a tuberculosis endemic country, where cutaneous tuberculosis ranks 5th. Our study allowed us to determine the epidemiological, clinical and dermoscopic aspects of cutaneous tuberculosis cases treated in the Dermatology Department of the Mohammed VI University Hospital of Oujda. The scrofuloderma form predominated in all Moroccan series, but it occupied the 2nd place with a percentage of 20% in our series

and it is the tubercular gums that predominated in our series. Dermoscopic aspects of cutaneous tuberculosis are rarely described in the literature. Some authors have described some dermoscopic aspects of tuberculous lupus, tuberculosis verrucosa and lichen scrofulosorum.

-Lichen scrofuloderma: round perifollicular spots, central brown follicular plug and white marginal border

-Tuberculosis verrucosa: yellowish and reddish background, a papillated surface and thick, dirty white scales

Lupus vulgaris: pinkish-red background, lupoid appearance, teardrop vessels and white areas without structure

To our knowledge, no publication describes the dermoscopic aspects of tubercular gum or Bazin's erythema.

Abstract N°: 794

Title: Trichoscopy: Diagnostic accuracy in trichotillomania

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Trichoscopy: Diagnostic accuracy in trichotillomania

Introduction

Trichotillomania is a non-scarring alopecia resulting in compulsive and repetitive pulling out of hairs. This disorder is classified as an obsessive-compulsive disorder in the latest update of the Diagnostic and Statistical Manual of Mental Disorders (DSM)-5. Herein we report a case of trichotillomania that caused a 15years diagnostic wandering, and we detail trichoscopic characteristics confirming the diagnosis.

Materials and methods

Results (Case report)

A 25-year-old woman with no medical history presented with a non-scarring alopecia evolving for 15 years. Clinical examination found a diffuse alopecia of the vertex and frontal area with geometrical borders and variable hair length. The pull test was negative. Trichoscopy showed multiple short hairs broken at different levels, trichoptilosis, flame hairs, tulip hairs, V-sign, hook hairs, coiled hairs, black dots, hair powder, and bleeding in places. There were no exclamation mark hairs or yellow dots. The rest of the scalp was normal. The patient denied any hair manipulation but her familly confirmed a compulsive hair pull and anxiety. A biological assessment showed low ferritinemia and vitamin D, which were supplemented, and the patient was referred to psychiatry.

Discussion

Trichotillomania most often affects children between 9 and 13 years old with a female predominance. Onset in adulthood may be secondary to psychiatric disorders. Clinical differential diagnosis are tinea capitis and alopecia areata. Trichoscopy sets the diagnosis and avoids a scalp biopsy. It shows patterns resulting from both hair shafts stretching and their division at different distances:

- Coiled hairs: the hair shaft fractures and the proximal part contracts and rolls up. Partial contraction of the hair gives a hook hair appearance;

- Trichoptilosis (split ends), flame hairs and tulip hairs: they result from the hair stretching which breaks irregularly;

- V sign: 2 hairs coming out from the same follicular opening are broken at the same level;

- Black dots: hairs are broken close to the scalp. This sign is frequent but non specific to trichotillomania;

- Hair powder: corresponds to hair debris resulting from the hair shaft complete destruction;

- Bleeding: the hairs are torn out until they bleed;

Tricoscopy has a prominent place in diagnostic accuracy in trichotillomania.

Abstract N°: 1055

Title: Dermoscopy of fixed drug eruption: report of two cases

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Introduction

Dermoscopy is a reliable tool for dermatologists to help diagnose pigmented tumors. However, the application of dermoscopy in other pigmented lesions including post-inflammatory hyperpigmentation is limited. We repot the dermoscopic features of hyperpigmentation induced by fixed drug eruption (FDE) in two patients.

Results

The first case is about a 58-year-old woman with a history of systemic scleroderma. She was sent to our dermatology department for two hyperpigmented patches. On clinical examination, she had two round well demarcated hyperpigmented patches on the right buttock and left thigh that were present for two years. Dermoscopy of lesions showed diffuse light brown background with sparing of follicular and glandular ostia and discret erythema on the background, multiple blue-gray granules and scattered hypopigmented areas. The second case is about a 24-year-old man, with a history of dialysis for interstitial nephropathy, he had a hyperpigmented macule on the right cheek that was present for one year. Dermoscopy of lesions showed diffuse light brown background with sparing of follicular and glandular ostia, multiple blue-gray granules and scattered hypopigmented areas with a peppering appearance. Biopsy of the lesions in both cases showed accumulation of melanophages in the superficial dermis that was compatible with the diagnosis of non-inflammatory FDE. Identification of the causative drug was difficult due to the long period between the occurrence of the eruption and the diagnosis.

Discussion

FDE is a drug-induced cutaneous reaction that usually manifests as round or oval, sharply demarcated erythematous or edematous plaque with residual post inflammatory brown pigmentation and recurrence of same lesions at the same location of skin upon re-administration of the causative drug. Clinical presentation and evolution are specific to FDE. However, sometimes the diagnosis is challenging in the presence of residual hyperpigmentation. The dermoscopy of FDE was described previously in one case showing brownish-black and gray structureless areas and dots as well as a subtle white scale. In both our cases, diffuse light brown background with sparing of follicular and glandular ostia, multiple blue-gray granules and scattered hypopigmented areas were found. Dermoscopy of FDE-induced hyperpigmentation seems to have distinctive features which would help to differentiate it from other causes of hyperpigmentation, thus avoiding biopsy at the non-inflammatory phase. However, additional research with a larger number of patients is needed to confirm these findings.

Abstract N°: 239

Title: Dynamic optical coherence tomography enables the differential diagnosis of melanocytic lesions based on their vascularisation

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Introduction

Melanomas are not only a common dermal malignancy but also the most aggressive one and currently cause over 90% of skin cancer mortality. The increasing incidence and difficulty in distinguishing benign lesions from early and in situ melanomas by a clinical-dermoscopic evaluation stress the need for a reliable diagnostic method. So far, invasive, time-consuming and costly bioptic techniques with histological evaluation are the gold standard, but especially for watch and wait approaches, follow-ups and screening programs, a non-invasive, in vivo, and real-time approach is desirable. Optical coherence tomography (OCT) is a CE marked and FDA approved skin imaging technique presenting these features. It has proven reliable in evaluating tissue morphology in non-melanoma skin cancer (NMSC) but failed to distinguish melanocytic lesions. The use of its angiographic variant, dynamic OCT (D-OCT), has been suggested to overcome this shortcoming. However, no larger D-OCT studies of nevi and dysplastic lesions have been conducted yet.

Materials and methods

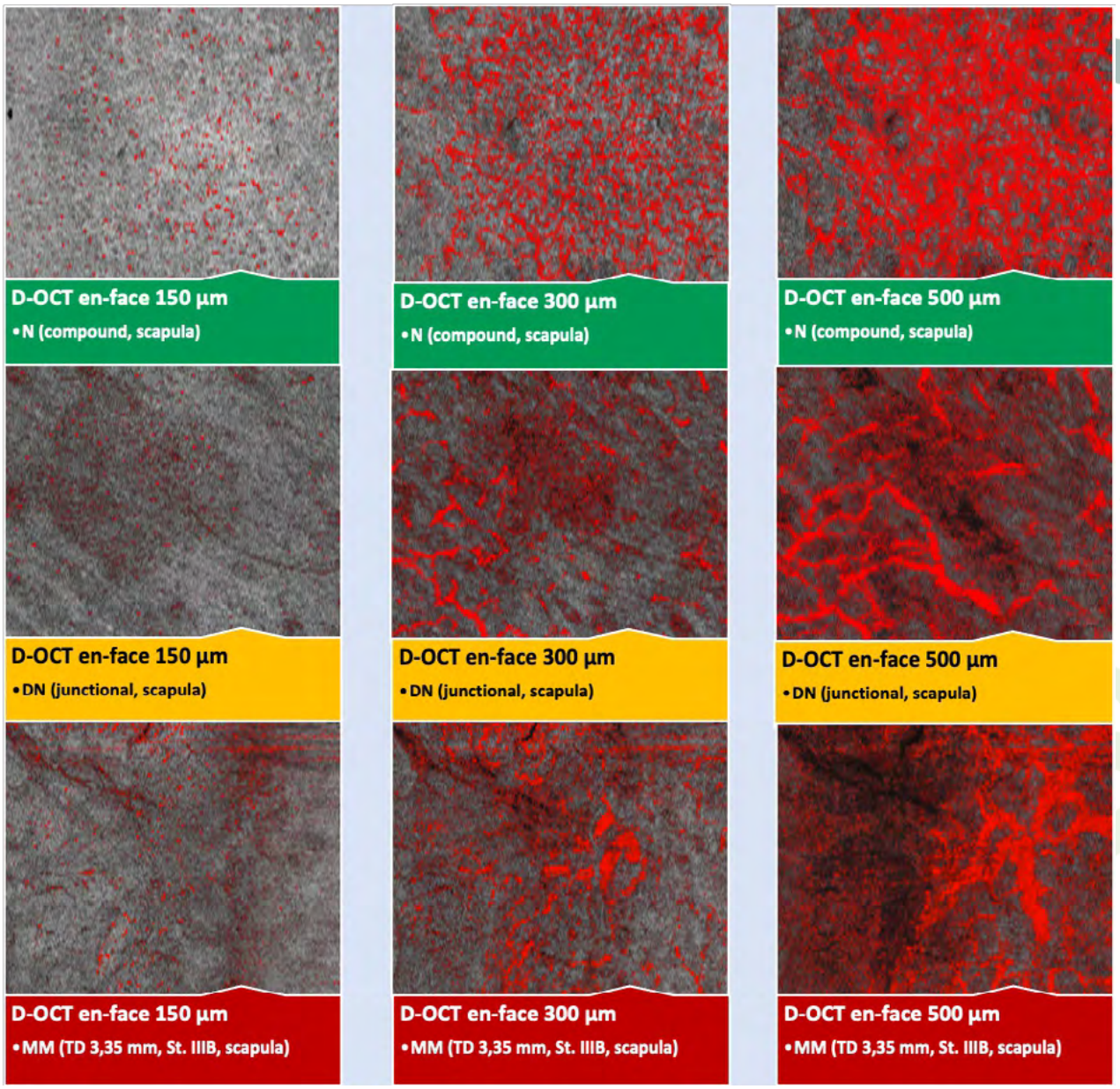
In a prospective, clinical, multicentre study, we evaluated vascular parameters in nevi (n = 167) compared to lesion free adjacent skin (n = 86), dysplastic nevi (n = 23) and melanomas (n = 159). The study hypothesis was the presence of differences in vascularisation in D-OCT scans based on specific parameters. As reference served the diagnostic gold standard of a clinical, dermoscopic and histopathological evaluation and additionally confocal laser microscopy and line-field confocal OCT scans.

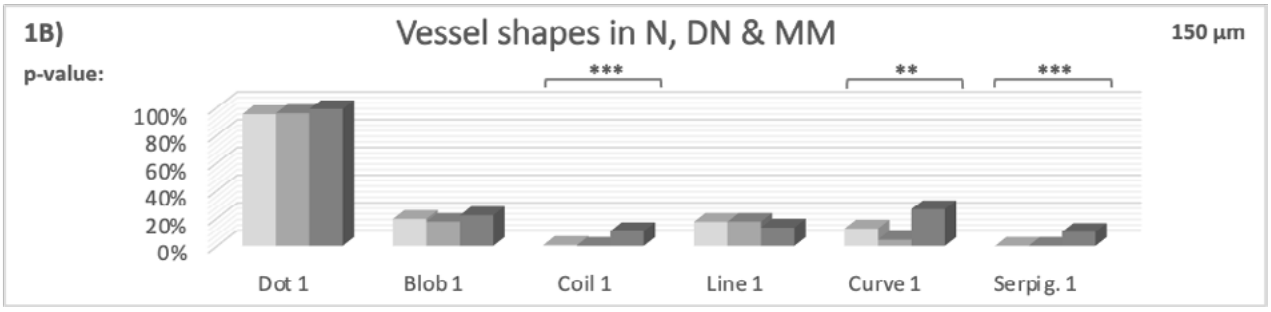
Results

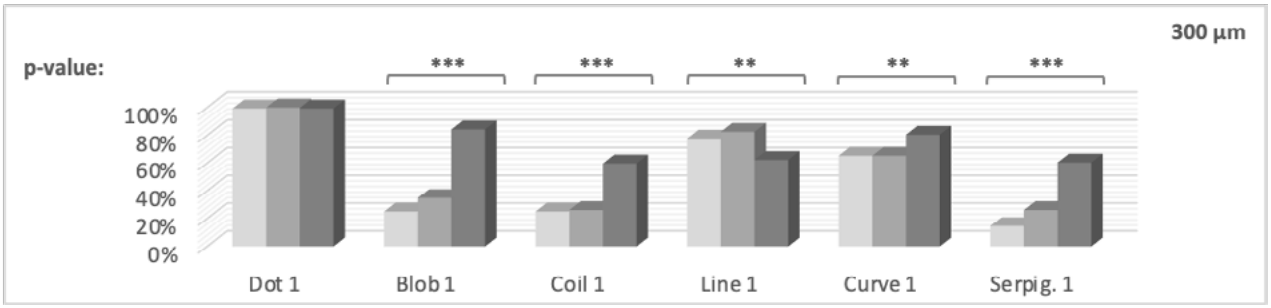
Blobs, coils, curves, and serpiginous vessels were significantly more common in melanomas and lines in nevi and dysplastic nevi (see figure 1A & B). Dots occurred in nearly all scans. Vessel density and diameter were significantly higher and bulging branching at all levels was more frequent in melanomas. Regarding pattern and orientation, no differences were observed. In melanomas, a rather irregular vessel distribution prevailed, while in nevi and dysplastic nevi, a clustered, irregular, or regular distribution appeared. By binary logistic regression, melanomas were correctly identified with a predictive value of 98,7% and nevi with 97,9% (see figure 2).

Discussion

D-OCT has a sufficient penetration depth and resolution for imaging tumour blood vessels. According to chosen vascular parameters, D-OCT in our study with excellent predictive values allowed a differential diagnosis of melanomas from dysplastic nevi and melanomas from nevi with a nearly perfect correlation of D-OCT and histological images. Predictive values for nevi from adjacent skin were acceptable. Further studies are required for confirmation. The introduction of artificial intelligence for scan evaluation is recommended, and the analysis of influencing factors such as participant age and gender and lesion location on vascularisation is advised.


D-OCT en-face 150 µm
•N (compound, scapula)
D-OCT en-face 300 µm
•N (compound, scapula)
D-OCT en-face 500 µm
•N (compound, scapula)
D-OCT en-face 150 µm
•DN (junctional, scapula)
D-OCT en-face 300 µm
•DN (junctional, scapula)
D-OCT en-face 500 µm
•DN (junctional, scapula)
D-OCT en-face 150 µm
•MM (TD 3,35 mm, St. IIIB, scapula)
D-OCT en-face 300 µm
•MM (TD 3,35 mm, St. IIIB, scapula)
D-OCT en-face 500 µm
•MM (TD 3,35 mm, St. IIIB, scapula)


1B)
Vessel shapes in N, DN & MM
150 µm
p-value:
***
**
***
100%
80%
60%
40%
20%
0%
Dot 1
Blob 1
Coil 1
Line 1
Curve 1
Serpig. 1


300 µm
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100%
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Dot 1
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Curve 1
Serpig. 1

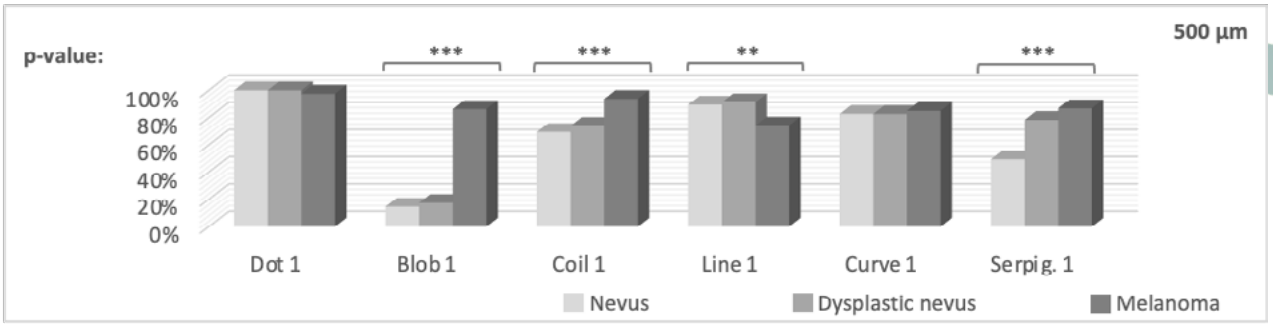

Figure 1) Comparison of vascularisation in horizontal D-OCT sections

Variables in the Equation

			95% confidence interval for odds ratio	
	Significance level	Odds ratio	Lower	Upper
1_blob300(1)	.101	33.356	.507	2196.311
1_blob500(1)	<.001	.001	.000	.049
1_coil300(1)	.548	.536	.070	4.091
1_coil500(1)	.968	1.147	.001	901.972
1_line300(1)	.034	657.512	1.625	266088.038
1_line500(1)	.407	.087	.000	28.012
1_serpig.300(1)	.871	.859	.138	5.338
1_serpig.500(1)	.272	.231	.017	3.157
1_density300(1)	.083			
1_density300(2)	.030	.038	.002	.728
1_density300(3)	.060	.029	.001	1.165
1_density500(1)	.698			
1_density500(2)	.428	18.429	.014	24966.492
1_density500(3)	.489	13.680	.008	22745.014
1_diameter300(2)	1.000			
1_diameter300(2)	.991	.000	.000	.
1_diameter300(3)	.994	.000	.000	.
1_diameter500(2)	.278			
1_diameter500(2)	.148	.070	.002	2.577
1_diameter500(3)	.133	.032	.000	2.847
Constant	.990	2065537967920		

serpig. = serpiginous vessel

Classification Table[a]

		Predicted		
	Observed	Study		Percentage Correct
		Melanoma	Nevus	
Study	Melanoma	155	2	98.7
	Nevus	3	141	97.9
Overall	Percentage			98.3

a. The cut value is .500

A) Nevus: just palpable compound; dysplastic nevus: flat, dysplastic; melanoma: tumour thickness 3,35 mm, stage IIIB, pT3aN1bM0S2. B) Y-axis: scans with parameter (%), x-axis: vessel shapes. P-value above as stars (Fisher-Freeman-Halton Exact Test). n (N = 144, DN = 23, MM = 159).

Figure 2) Binary logistic regression and classification table of vascular parameters in nevi and melanomas

According to presence of blobs, coils, lines, serpiginous vessels, density and diameter at 300 & 500 µm. n (nevi = 144, melanomas = 157).

Abstract N°: 554

Title: The role of Trichoscopy in the diagnosing and follow up of cicatricial alopecia

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Introduction

Cicatricial alopecia encompasses a wide range of clinical manifestations, which share the irreversible destruction of hair follicles and replacement with fibrotic tissue. The patient clinical examination should include a detailed anamnesis, physical exam including scalp trichoscopy.

Aim of the study: To identify trichoscopic features of diagnostic value in different clinical forms of cicatricial alopecia and establish the role of trichoscopy in the early diagnosis of scarring hair loss.

Materials and methods

The study included fifty scarring alopecia patients. For every patient, a physical examination, including trichoscopy of the central and lateral margins of the alopecia area was performed. A skin biopsy was performed for every patient.

Results

Lichen Plano-Pilaris was the commonly found diagnosis in 50% of all cases, followed by decalvans folliculitis (30%) and discoid lupus erythematosus (20%).We discovered that the absence of follicular openings was characteristic of all clinical forms of primary cicatricial alopecia that correlated with literature findings. Thick arborizing blood vessels were found in all cases of discoid lupus erythematosus. The follicular red dots are a feature of active discoid lupus erythematosus as we found in cases of DLE confirmed by biopsy. Peripilar casts and blue-gray dots were characteristics of lichen plano-pilaris cases. Features of decalvans folliculitis include multiple hair shafts that come out from a dilated hair follicle, perifollicular erythema, hyperkeratosis.

Discussion

Early diagnosis of scarring alopecia is quite important for treatment efficacy. Trichoscopy is a practical, non-invasive, easy-to-do examination that helps establish the diagnosis of clinical forms of cicatricial alopecia, orientate for the correct area where to take the biopsy, and valuate the treatment efficacy during the follow up.

Abstract N°: 613

Title: The new diagnostic test of the superficial non-pigmented basal cell carcinoma on the early stage using cryotherapy.

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Introduction&Objective

The diagnosis verification of the superficial non pigmented Basal cell carcinoma in the initial stage is difficult due to its non specific clinical and histological signs but important for treatment and prognosis. The purpose of this study is to propose the new diagnostic test of the BCC.

Materials and methods

Prospective investigation of the new diagnostic test for basal cell carcinoma in initial stage was conducted from 2015 to 2020 with 33 participants with clinical features of superficial non pigmented BCC in the initial stage (erythematous macule or patch). All of them gave informed consent for the examination and treatment procedures. We made dermoscopic photos of all neoplasms, then all patients underwent liquid nitrogen irrigation. The cryo-tip was placed at the distance of 5-10 mm from the skin surface, liquid nitrogen was directed to the center of the neoplasm to be treated 10 times (exposures). In 12-24 hours after the procedure the second dermoscopy was conducted for fixing the dynamic of the lesions. Formation of the translucent/pearl papules in the periphery of the lesions considered as a positive test result. The last step of research was a diagnostic biopsy performed for all participants.

Results

There were 33 patients (19 males and 14 females, middle age was 61,7 years) with clinical features of BCC. The diagnostic biopsy allowed verify the diagnosis of BCC in 18 patients, 9 patients had a squamous cell carcinoma (SCC) and 6 patients had actinic keratosis (AK). Assessment of the tissue changes by dermatoscopy in 12–24 hours after irrigation of the lesion with liquid nitrogen allowed to detect the formation of translucent/pearl papules in the periphery of the lesion in 16/18 patients with BCC. 7/9 patients with SCC had negative result, other 2 patients had a nonspecific result. All patients with AK showed negative result. Thus, the specificity of the test was 88.24%, sensitivity - 88.89%, positive predictive value - 88.89%, negative predictive value - 78.94%. Based on these data, the test can be considered as valid and practically applicable.

Discussion

A possible mechanism for the formation of pearlescent or translucent papules is that the edema of the tissue caused by cryotherapy lifts the tumor (basaloid structures with retraction zones adjacent tightly to the epidermis)

to the skin surface. Due to swelling of the papillary layer, papules gradually form around the periphery of the element. Liquid nitrogen has a specific density of 0.808 g / cm^3 and has a boiling point of 77.4 K (−195.75 ° C). When applied to the skin, necrosis of the epidermis forms and, as a result, swelling of the dermis tissue (the second stage of inflammation – exudation). Papules in the form of a peripheral palisade can be found in advanced stages of BCC since the histological picture is represented by a cluster of tumor-like structures under the epidermis in the form of a pear.

The appearance of pearlescent and translucent papules at the periphery of the lesions characterize the dermoscopic picture of non-pigmented superficial BCC 12-24 hours after cryotherapy.

Figure.1

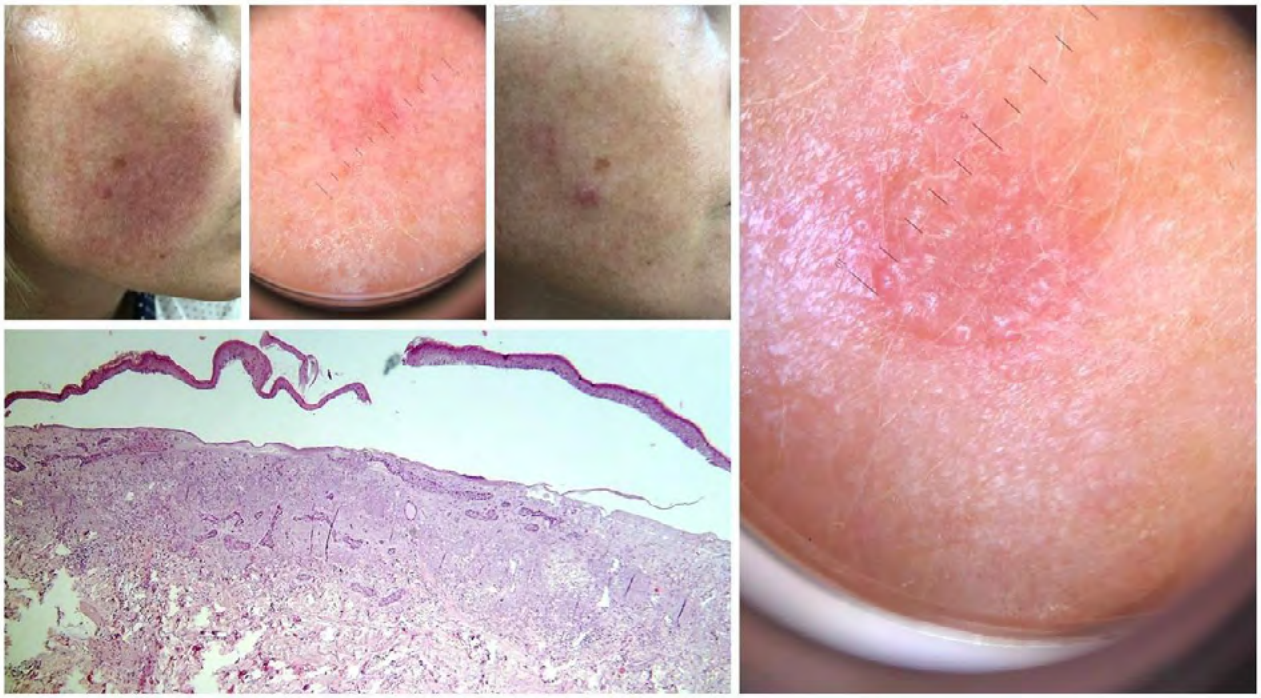
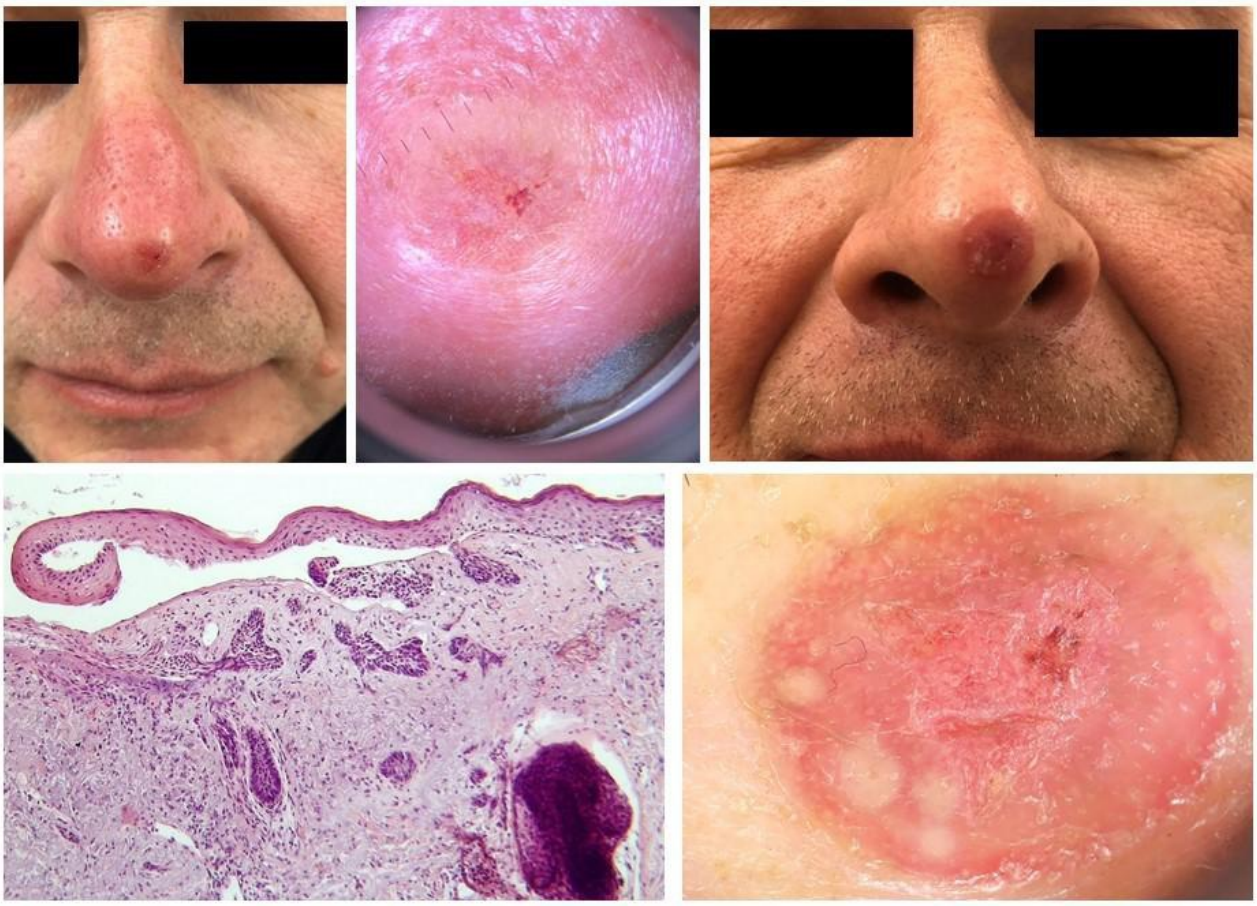


Figure 2.



Abstract N°: 630

Title: Frequency and etiology of fungal infections in patients with and without diabetes mellitus - a modern view of mycological investigations

Gergana Vazheva[1], Liliya Aleksandrova-Zisova[1]

[1] Medical University Of Plovdiv, Medical University Of Plovdiv, Plovdiv, Bulgaria

Introduction

Onychomycosis (OM) is a very frequent nail disorder. Treatment of onychomycosis is expensive and requires a long time. Consequently, a proper and faster diagnosis is necessary. Especially for those patients with diabetes mellitus.

The aim of the study is to compare the frequency and etiology of onychomycosis in patients with and without diabetes mellitus, using four different diagnostic methods – direct microscopy, culture, histology and RT PCR.

Materials and methods

This prospective and comparative study enrolled 102 patients with clinically suggestive symptoms and signs of OM. Patients were divided into two groups – group I – patients with diabetes mellitus (DM) and suspected OM, and group II – patients without diabetes mellitus, but with suspected OM (control group). Each patient underwent a thorough examination and also local examinations of the nails was performed – mycological investigations and molecular detection of fungal DNA by RT PCR.

The collected samples were divided into four portions. The first portion of the specimens was examined microscopically after incubation in 30% KOH. The second portion was cultured on SDA with Chloramphenicol and Cycloheximide. The third portion was used to perform real-time PCR and the forth one was used to perform histology using PAS stain technique.

Results

102 samples were included in this study. Of them, 64 had negative direct KOH and 34 had positive direct KOH. In the group of negative KOH samples, 48/64 had a positive culture: 12 dermatophytes, 32 moulds, 19 yeasts. 22/64 had a positive RT PCR result (11 T. rubrum/soud., and 9 Tr. interdigitale, 2 C. alb).

In the group of positive KOH samples, 34/38 had a positive culture: 21 dermatophytes, 6 yeasts, 12 moulds. 10 of these were mixed infections. 34/38 had a positive RT PCR result (26 T. rubrum/soud., 10 T. interdigitale, 1 C. alb).

Histology was perfomed on only 77 samples. In the group of negative KOH samples with histology investigation, 11/50 had a positive histology. Whereas, in the group of positive KOH samples with histology investigation, 21/23 had a positive histology.

Overall, 56 out of 102 samples had a positive RT PCR result (54,90%).

In the group of diabetic patients 31 out of 51 patients (60,78%) had a positive RT PCR result: 20 T. rubrum/soud., 10 T. interdigitale, and 1 C. alb. 1 mixed infection was found. In the group of non-diabetic patients: 27/51 (52,94%) patients had a positive RT PCR result: 16 T. rubrum/soud., 9 T. interdigitale, and 2 C. alb. 2 mixed infections were found.

Discussion

In this study, we evaluate the introduction of a RT PCR for dermatophyte detection in nail samples. Overall, RT PCR allowed the etiologic diagnosis of dermatophyte-caused OM in 54,90% of cases (56/102), while culture only accomplished 32,35% (33/102) of diagnosis.

In addition to the increase of dermatophyte detection, it is of great importance the decrease of time of response. The average time to get a result is 3-4 weeks for conventional culture and it decreases to 3-4 hours when RT PCR is used. The less time-consuming techniques are very valuable for patients with concomitant diseases such as DM where it is important to start the treatment as soon as possible to prevent further severe complications.

Abstract N°: 659

Title: Ultrasound of ichthyosis patients' skin in typical atopic dermatitis areas

Oksana Makeenko[1], Arina Eremina[1], Irina Sergeeva[2]

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Introduction

A combination associated with a mutation in the filaggrin gene (FLG) diseases – ichthyosis and atopic dermatitis (AD) found in clinic. Application of ultrasonic skin scanning for dynamic observation of patients dictates the importance of studying the parameters of the skin by this method.

The aim of the study was to define ultrasonic specifications of the epidermis in patients with ichthyosis and a mutation in the FLG gene (2282del4) on skin areas typical of AD foci.

Materials and methods

By the simple sequential method sampling was 7 people were selected homozygotes by mutation in the FLG gene 2282del4, 7 heterozygotes and 4 patient without mutations. Ultrasonic scanning carried out sensor frequency 75 MHz, penetration depth 4 mm, the thickness (μm) and echo density (cu) of the epidermis were assessed in elbow, popliteal folds and cheeks. Each patient had measurements at every checkpoint.

Results

The thickness of the epidermis of the elbow in the skin homozygous patients was 86 [84; 103] μm, heterozygotes – 90 [77; 96] μm, without mutation – 107 [86; 127] μm, popliteal region – 86 [70; 113], 98 [82; 98], 109 [90; 133] μm, respectively, cheeks – 82 [753; 92], 74 [70; 90], 100 [73; 117] μm, respectively. Echo density of the epidermis of the ulnar fold in skin of homozygous patients was 141 [108; 151] μm, heterozygotes – 108 [963; 135] μm, without mutation – 91 [73; 19] cu, popliteal region – 128 [116; 157], 146 [107; 170], 112 [91; 131] cu respectively, cheeks – 107 [100; 152], 85 [80; 146], 105 [62; 116] cu respectively.

Discussion

Thickness and echo density epidermis in patients with ichthyosis (homozygotes for a mutation in FLG 2282del4 gene) on the skin of lesions typical for AD, differ from the skin parameters of patients with ichthyosis without mutation.

Abstract N°: 918

Title: In vivo reflectance confocal microscopy as a key method in diagnosing penile intraepithelial neoplasia

Madalina Laura Banciu[1], Ana Maria Malciu[2], Elena Codruta Dobrica[2], Cristina Vajaitu[2], Mihai Lupu[3], Vlad Mihai Voiculescu[4]

[1] Emergency University Hospital, elias, Bucharest, [2] University Emergency Hospital, elias, Bucharest, [3] University Of Medicine And Pharmacy, carol Davila, Bucharest, [4] University Emergency Hospital, elias, carol Davila, University Of Medicine And Pharmacy

Introduction

Erythroplasia of Queyrat (EQ) represents a subtype of penile intraepithelial neoplasia, an "in situ" variant of squamous cell carcinoma that arises on the mucosa of the glans penis or prepuce of uncircumcised men. EQ's clinical and dermatoscopic presentation is equivocal, and it can often mimic other benign dermatoses such as lichen planus, psoriasis, and Zoon balanitis. Reflectance confocal microscopy (RCM) is an in vivo, non-invasive, imaging tool, that can be used in clinical practice to diagnose pigmented and pink lesions, with a high degree of sensitivity and specificity. RCM can be used to avoid unnecessary surgical interventions especially those located in sensitive areas such as genitalia, and due to the thin cornified layer at this level, various lesions can be easily diagnosed.

Materials and methods

Results

A 50-year-old male presented in the clinic with a single red lesion that appeared on the mucosa of the glans penis about six months earlier and slowly enlarging. On clinical examination, a shiny, velvety, erythematous plaque was observed. The lesion was slightly raised, sharply demarcated, evolving despite the topical anti-inflammatory therapies followed. Polarized light dermoscopy showed clustered glomerular vessels (typical of EQ) along with linear vessels due to associated balanitis. Due to the lack of characteristic clinical aspects, a reflectance confocal microscopy was performed, which showed atypical honeycomb pattern/disarranged epidermal pattern, round nucleated cells (atypical cells), small bright cells, round papillary vessels, peculiarities that established the diagnosis of erythroplasia of Queyrat. Also, the increased density of dermal vermicular vessels suggests the coexistence of balanitis.

Discussion

Early diagnosis and treatment of erythroplasia of Queyrat are necessary to prevent progression to invasive squamous cell carcinoma. It may be difficult to clinically distinguish between malignant and inflammatory lesions that appear in the genital area. Although further studies are needed to validate the sensitivity and specificity of this method in this clinical diagnosis, RCM used as an additional tool, can reveal the diagnosis and guide the biopsy, reducing the number of needed biopsies in sensitive areas.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
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12 – 14 MAY 2022

Abstract N°: 22

Title: Patient perceived outcomes of importance following a full mole/skin consultation in a private clinic

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Introduction

Despite a positive experience with a service or product, patients can be dissatisfied if the experience did not meet or exceed their original expectations. Satisfaction may be achieved if the service outperformed their expectation regardless if it met a minimal standard of clinical care. Individuals may lower their expectations of a service to avoid dissatisfaction and some services may intentionally or unintentionally project that service quality expectation in order to avoid excessive patient criticism. Customer and patient satisfaction are likely to be different concepts and it may be difficult to apply consumer standards to a healthcare setting, even if it is a fee for service. Most patient satisfaction services have reviewed the following measurable indicators; clinical atmosphere, treatment process, care outcome, cost, accessibility, appearance or behaviour of staff, waiting time, technical competence or ability, perceived professionalism and personality of the healthcare giver. Cultural, behavioural and socioeconomic differences effect patient satisfaction and the most influential factors that impact on patient satisfaction remain unknown and unvalidated. Patient reported outcomes do act as a counterpoint to patient criticism and both are important to help update and review aspects of service delivery.

Materials and methods

A snapshot of 50 unselected patients undergoing a fee for service mole/full skin check was undertaken in our clinic. Following patient booking all patients were sent a sent a revised and detailed information letter about the clinic appointment that was in part an opportunity to define the patient's expectations of the service and anticipated clinical interaction. Following the clinical appointment, the patient was provided the British Association of Dermatologists *"A Guide to checking your skin"* leaflet. At the time of paying, the patient was asked to complete the survey and answer six questions as ideal, acceptable or unacceptable.

Results

The following data was collated: the standard of hygiene and cleanliness of the clinc (100% ideal); the attitude of the clinical team (100% ideal); the competency of the clinical team (100% ideal); the ability of the clinical team to explain things to me (100% ideal); the level of trust I feel for the clinical team (100% ideal); and the value for money given by my consultation (92% ideal; 8% acceptable). There were no negative or critical additional open comments.

Discussion

Full skin checks with dermoscopy takes on average three minutes and patients may find the experience embarrassing or intimidating. Forewarning the patient helps manage expectations and improves patient satisfaction. Open questions are useful in collecting both patient comments and criticisms that can help the clinic evolve. This snapshot may or may not reflect a longitudinal service assessment outcome.

Abstract N°: 169

Title: Digital exposome.

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Introduction

Social media are taking more and more place in our daily life. Stars and influencers expose an image of a perfect life, a perfect body and a perfect skin.

Although the majority of the photos do not reflect the truth, the psychological impact is not negligible. The lack of self-esteem, eating and sleeping disorders can be the consequences. All these factors have an important impact on the skin and thus constitute the 'Digital Exposome'.

The objective of our study is to assess the influence of the 'Digital exposome' in Moroccan Internet users.

Materials and methods

This is a descriptive cross-sectional study conducted in March 2021, using an anonymous survey shared on social networks.

The survey was composed of 12 questions about the frequency of use of social media, the interest in star's / influencer's profiles, the feeling towards this kind of profiles, eating and sleeping disorders as well as self-medication following recommendations on internet.

Results

One hundred and eighty-four people responded to the questionnaire. There was a clear female predominance with a female/male sex ratio of 3.68. The average age was 27 years.

The vast majority of participants (96.7%) consulted social media several times a day. Almost 90% of the participants regularly follow influencers on different social media.

Sixty percent of participants experience a lack of self-confidence, stress and body dissatisfaction. Half of the participants have already compared themselves to these influencers, and affirm that they want to look like them.

Over a third of the participants have eating disorders, and 54.9% have sleep disorders. More than half of the participants admit having used Instagram/Snapchat filters to mask their skin problems.

Finally, 38.9% declare that they have taken a medication (oral or topical) following influencers' advice without seeking medical advice.

Discussion

Currently, the trend of idealization reigns the virtual world. Many Internet users are rushing to follow the wave.

Filters and photo editing are increasingly adopted by young internet users, some even undertake cosmetic procedures to look like their favourite social media star. Even worse, consumers of this kind of virtual content tend to blindly follow unreasoned advices from influencers. Stress and body dissatisfaction directly and indirectly affect psychological and physical health. The skin, being the mirror of the body, is certainly not spared.

The impact of social media on psychological health has been the subject of several studies. An Australian study has shown that regular use of Facebook by young women has a negative impact on mood and contributes to the development of feelings of body dissatisfaction.

More specifically, as part of the direct effects of the digital exposome, a study evaluated the effect of social networks on acne, and demonstrated that the use of virtual platforms complicates the management of acne.

The effect of social media on eating habits was studied in a group of female university students and the result confirmed a significant association between social media adherence and eating disorders.

Conclusion:

Social media represent an exposome that affects the skin in direct and indirect ways. The influence of digital exposome is still underestimated, especially among young Internet users. Although the virtual world is attractive and seductive, it must be handled with caution to avoid its disadvantages.

Abstract N°: 209

Title: Sun exposure and photoprotection: Parents' habits , Knowledge and attitudes toward children

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Introduction

Cumulative sun exposure and sunburn in childhood are the major causes of most skin[1] cancers. Indeed, 50-80% of cumulative exposure occurs during early childhood. This exposure of children can be voluntary or involuntary, such as during outdoor leisure activities. In this context, it appeared absolutely necessary to develop strategies to control and manage children[2]'s exposure to the sun.

Materials and methods

This study sought to describe the photoprotection and photoexposure habits and knowledge of parents or grandparents towards the children they look after during the summer.

As grandparents play a major role in the care of small children, the survey was conducted via the Internet among national samples of parents of children aged 12 or under or grandparents who care for their grandchildren for at least 2 weeks during the summer holidays. To take into account the summer period, the survey was conducted from the end of August in the 5 countries of the Northern Hemisphere: France, Germany, Spain, Italy and the United States.

Results

The overall population is 6190 individuals (5104 parents and 1086 grandparents). If 98.1% of the children were exposed to the sun during the summer of 2021, 74.5% acknowledged that it was between 11 am and 5 pm. The exposure was gradual for 71% of them and for more than two hours a day for 38%. Thirty-one percent of the children were only protected at the time of exposure, and 99.7% claimed to use a means of protection: 95% used sun cream, 76% covered their heads, 63.7% protected their eyes, and 55% used covering clothing. The use of a sunshade is favored by 63.7%. Regarding photoprotection, 86.8% said they used specific products for children. The use of photoprotection is motivated by the desire to avoid sunburn or by the risk of skin cancer for 80.6 and 55.5%, respectively.

A total of 29.2% were motivated by the prevention of skin ageing, and 39.5% expressed a desire for prolonged sun exposure. Sixty-four percent of parents or grandparents consider that in their time, sun protection was not a concern or not at all. A total of 31.1% of the children had at least one sunburn during the summer, and the average number of sunburns was 1.93±1.58 [median to 2]. Of these, 43% reported that the skin had peeled.

According to parents, 70.8% of children understood the importance of applying sun protection.

Discussion

Despite the prevention, information and education messages that have been intensified for over 30 years, the battle has not been won. Two-thirds of parents or grandparents admit to exposing their children to the sun between 11 am and 5 pm, and 31% of children are only protected when they are exposed to the sun. There is a need to continue with prevention messages and information dissemination.

1. Stern RS, Weinstein MC, Baker SG. Risk reduction for nonmelanoma skin cancer with childhood sunscreen use. Arch Dermatol 1986; 122: 537-45↩
2. Robinson JK, Rigel DS, Amonette RA: Summertime sun protection used by adults for their children. J Am Acad Dermatol 2000; 42: 746-753↩

Abstract N°: 216

Title: Attitudes and knowledge about the sun and photoprotection

Marketa Saint Aroman[1], Charles Taieb[2], Gaelle Le Fur[3], Adrien Marquiè[4], Catherine Baissac[5], Ariadna Ortiz[6]

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Introduction

Solar ultraviolet (UV) radiation is the main preventable factor in skin cancer, the incidence of which is increasing worldwide1,2 To prevent UV skin damage, the World Health Organisation (WHO)3 recommends, among other things, following photoprotection practices such as using sunscreen and limiting sun exposure during the hours of greatest risk.

Materials and methods

To assess attitudes and knowledge about the sun and photoprotection in a population of adults with authority over children or grandchildren.

We interviewed two generations (parents and grandparents) to assess their knowledge and habits regarding sun exposure.

Results

The overall population is 6190 individuals (5104 parents and 1086 grandparents).

A total of 84.9% declared having been exposed to the sun during the past summer, and among them, 81% declared having been exposed to the sun during the hottest hours of the day, between 11 am and 5 pm. Photoprotection products are favoured by a very large majority of individuals 88 as a means of protection against the sun's rays. To choose their photoprotection product, 51% of users seek advice from a health professional [31% from a doctor, 28% from a pharmacist]. During intense sun exposure, with regard to the reapplication of sunscreen, approximately one-third of participants (32.5%) reported "do not reapply", and only one of six (16.1%) indicated "every 1 or 2 h". Fifty-seven percent said they used the product left over from the previous year. The fact that sunscreen products with a high sun protection factor protect against sunburn, reduce the risk of skin cancer and prevent skin ageing is known and accepted by 89, 82 and 76% of adults, respectively. Regarding UVA and UVB, while 72% know that UVA penetrates deep and accelerates skin ageing, only 53% know that UVB causes sunburn. Only 31% know that chemical filters absorb ultraviolet radiation. Protection factors are not perfectly mastered: less than one adult in three knows that a sun protection product with a protection factor of 30 does not offer twice as much protection against premature ageing as a product with a protection factor of 15. Thirty-five percent know that tanning will not be slower if the photoprotection product with a high protection factor is used, 21% think that clouds protect from the sun (8% say they do not know) and 12% think that once you have a tan, there is no reason to be careful.

Sixty-four percent confided that they felt that their parents had protected them little or not at all from the sun. The figure is 60.7% for parents and 79.7% for grandparents! Fifty-two percent of parents feel that they are more vigilant with their child than their parent was with them.

Discussion

For more than 30 years, sun prevention campaigns have been carried out every year by the health authorities, and the same messages have been repeated repeatedly: "no exposure to the sun between 11 am and 5 pm", "application every 2 hours"... but we note that many people do not respect them. More education is undoubtedly necessary in view of the level of knowledge.

Health professionals and pharmacists are on the front line and must undoubtedly be mobilised, as they have the trust of the population to ensure that optimal prevention takes account of these results.

Abstract N°: 220

Title: Sun cream and behavior of children under 12 years of age: International Survey

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Introduction

Cumulative sun exposure and sunburn during childhood are the main causes of most skin cancers. Indeed, 50-80% of cumulative exposure occurs during early childhood. Any information that would improve adherence to the WHO recommendation using sunscreen and limiting sun exposure during the hours of greatest risk]

Materials and methods

To know and describe the behaviour of children in relation to the use of sunscreen

As grandparents play a major role in the care of small children, the survey was conducted via the Internet among national samples of parents of children aged 12 or under or grandparents who care for their grandchildren for at least 2 weeks during the summer holidays. To take into account the summer period, the survey was conducted from the end of August in the 5 countries of the Northern Hemisphere: France, Germany, Spain, Italy and the United States.

Results

The behaviour of 6,190 children was studied; 92% were exposed to the sun in some way, and 74% were exposed between 11 and 17 o'clock. Thirty-two percent were protected only during intense sun exposure.

Of them, 99.7% used at least one means of protection, 76% were protected from the sun by a hat or cap, 63.7% were protected by sunglasses, and 94.6% were protected by sun cream. In 86.8%, the product was a special child product. Only 17.9% received an application every 2 hours on sunny days and only 10% on days when the sun was hidden by clouds.

In 47% of cases, the child expressed the wish to apply sun cream alone [49% for children over 6 years old]. The trend is observed in all countries [41% in France or Italy, 45.6% in Germany, 51.6% in Spain and 54% in the USA].

In 70% of cases, they understood the importance of applying sun protection [from 63% in Italy to 75% in France].

56% thought the product smelled good, 41% thought it was pleasant, 9% thought it smelled bad and 8% thought it was itchy.

Discussion

For more than 30 years, health authorities have been conducting annual sun prevention campaigns, but we note that many do not comply with them.

The fact that one out of two children expresses the wish to apply the cream and that 2/3 seem to have understood

the importance of this gesture offers the possibility to have hope that it may be easier to convince the new generation. Future public health programs should take this into account.

Abstract N°: 350

Title: The Burden Of Skin Diseases [BOSD] in Europe

Richard Marie-Aleth[1], Carle Paul[2], Tamar Nijsten[3], Paolo Gisondi[4], Carmen Maria Salavastru[5], Charles Taieb[6], Myrto-Georgia Trakatelli[7], Lluís Puig[8], Alexander Stratigos[9]

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Introduction

Currently, skin diseases are not considered as a public health priority. However, their impact on patients is twofold: (1) they may be detrimental in terms of quality of life and disability in the broadest sense with daily life becoming more and more complicated in case they become a chronic condition; (2) they may be psychologically devastating due to the stigmatization.

Despite a lack of recognition and understanding, dermatologists-venereologists play an

Materials and methods

The EADV conducted an epidemiological study in 27 european countries to identify and compare the prevalence of the main skin diseases, dermatological needs, health care pathways and treatment access. The limitations of dermatologists-venereologists regarding treatment due to the broad range of skin conditions, the discrepancies in access to treatment, and the general public perception of the role of dermatologists were also assessed.

The results of this pan-european study would serve as an important source of targeted advocacy interventions by the EADV (such as emphasizing the importance of skin cancers in the Europe's Beating Cancer Plan), helping to create awareness and to inform the general public, the media, the stakeholders and decision-makers about skin diseases as well as to produce material for scientific publications.

Adult individuals of each country surveyed (through a panel representative of the general population (GP) gender according to age, geographical location, and social category) filled in a standardized declarative questionnaire, including validated questionnaires about quality of life (QIL, EQ5D). Questionnaires were translated in each language of each participating country.

Results

Between 2020 and 2021, almost 45,000 adults were interviewed using a digital survey in 27 countries of the European Union (24 EU countries), plus Norway, Switzerland, and the UK henceforth referred to with the acronym NEUKS (Norway, EU24, UK and SW). Five major outcomes were analyzed and compared among European countries:

1. To describe the prevalence of skin diseases

2. To identify skin disease burden and associated stigmatization (social, familial, psychosocial, and economic impact on daily life)
3. To assess the specific health pathways and treatment access in case of a skin condition
4. To evaluate the public and patients' need for skin care
5. To confirm the leading role of dermatologists-venereologists in the management of skin diseases.

Discussion

This large innovative project will enable each EADV member state to obtain the necessary arguments to allow Dermatology-Venereology to claim its appropriate place within public health systems.

Abstract N°: 358

Title: The Burden Of Skin Diseases [BOSD] in Europe : preliminary results about the prevalence of the main skin diseases in Europe.

Richard Marie-Aleth[1], Carle Paul[2], Tamar Nijsten[3], Paolo Gisondi[4], Carmen Maria Salavastru[5], Charles Taieb[6], Myrto-Georgia Trakatelli[7], Lluís Puig[8], Alexander Stratigos[9]

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Introduction

The EADV conducted an epidemiological study in 27 European countries, to identify and compare the prevalence, dermatological needs, healthcare pathways and treatment access about the main skin diseases.

The assessment of the prevalence of diseases is of primary importance in planning health-care policies on prevention and management. No data on the prevalence of skin diseases across European countries are available.

Materials and methods

A digital survey was conducted to question adults of each country surveyed (through a panel representative of the general population (GP) according to age, gender, geographical location, and social category). Each surveyed individual used a validated and standardized questionnaire, translated in each language of the surveyed country in a matter of declarative data.

We report here the first results about the prevalence of main skin diseases in the general population as well as in patients who sought a dermatological advice during the past 12 months. Currently, 44,689 individuals were surveyed across the 27 countries studied (24 belonging to the European Union plus United Kingdom (UK), Switzerland (SW) and Norway (NO), henceforth referred to with the acronym NEUKS (Norway, EU24, UK and SW).

Results

A total of 44,689 participants from 27 countries responded to the questionnaire, 21,887 (48.98%) men and 22,802 (51.02%) women. The proportion of participants who reported having suffered from at least one dermatological condition or disease during the previous 12 months from the survey was 43.35% [95% CI 42.89%, 43.81%)]. The extrapolation to the total population of the 27 countries included in the study resulted in a projection of 185,103,774 individuals being affected by at least one dermatological condition or disease.

Accordingly, we can estimate that more 94 million Europeans complain of uncomfortable skin sensations like itch, burning, or dryness. The 10 most frequent conditions were fungal skin infections (8.9%), acne (5.4%), and atopic dermatitis or eczema (5.5%),alopecia (5.1%), psoriasis (3.9%), sexually transmitted diseases (2.8%), rosacea (2.0%), non-melanoma skin cancers (1.1%), chronic urticaria (1.0%), vitiligo (0.8%), hidradenitis suppurativa (0.6%) and

melanoma skin cancers (0.6%). Alopecia, acne, eczema and rosacea were more common in women, whereas men were more likely to suffer from psoriasis and sexually transmitted infections.

Discussion

The prevalence of skin diseases, their impact on patients' quality of life, and their economic burden is of primary importance in planning health care policies.

In this survey, we observed that 43.35% of the NEUKS adult population reported having had at least one dermatological problem or disease in the past 12 months.

With the results of this large European study survey, we expect to raise awareness about the importance of skin diseases. To meet patient needs in Europe, it is important to ensure timely and easy access to specialized dermatological care. Skin diseases should be regarded as a real public health problem and deserve greater consideration by political stakeholders and public health care authorities.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 422

Title: Inherited Epidermolysis Bullosa : A significant out-of-pocket expense

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Introduction

Inherited epidermolysis bullosa (EB) is a heterogeneous group of genodermatoses characterized by localized or generalized skin and/or mucosal fragility. In France, the annual incidence is estimated at 100 new cases per year. The purpose of this study was to evaluate the family' out-of-pocket expenditures for EB patients in France.

Materials and methods

All medical and nonmedical resources likely to be consumed were listed during several meetings with the patients' association and medical experts in health economics. The main items identified were transport and accommodation, access to a psychologist, home improvements, alternative and complementary medicine, health care products and the use of specific clothing. Thus, a digital questionnaire was constructed and distributed by the patient association DEBRA France.

To complete the out-of-pocket' evaluation, the validated EB-BoD [Epidermolysis Bullosa Burden of Disease] questionnaire (score from 0 to 100) was used to assess the burden of families of children with EB.

Results

Between October and November 2021, 77 parents answered the questionnaire. The responder was the child's mother in 77% (n=59) of cases. Parents represented 40 girls and 37 boys with a mean age of 7.5 years and with different EB types and disease severity. All parents (100 %) reported out-of-pocket expenses. The mean annual out-of-pocket cost was 4129€. ± 4321€. Nearly 9 out of 10 parents declared an out-of-pocket expense related to transport. Approximately 8 out of 10 parents reported an out-of-pocket related to the purchase of cleansing products, and the purchase of moisturizing creams or emollients. One out of two responders declared out-of-pocket expenses related to the purchase of alternative and complementary medicines. 48% of responders reported making specific adjustments to their home to accommodate their child's EB. Linear regression demonstrated that for each one-point increase in the EB-BoD score, out-of-pocket expense increases by 91.1 euros (35.1 - 147) p=0.002. This means that the out-of-pocket expense increases by 910 euros when the EB-BoD score increases by 10 points. Out-of-pocket cost increases considerably with the age of the child: taking children under 3 years of age as a reference, children aged of 15 years and older have a significant higher out-of-pocket cost (Beta coefficient 8416 (4306 - 12525) p=0.001).

Discussion

These results demonstrate the high out-of-pocket expenses associated with epidermolysis bullosa in France. It is important to put these numbers in perspective with the out-of-pocket expenses for the general population in France, which is on average 213€. Therefore, the out-of-pocket of EB families are 20 times higher compared with the French population.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 463

Title: Exposure to ultraviolet radiation and sun safety behavior, for adults and children: a study conducted on a predominantly feminine population

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Introduction

Exposure to ultraviolet radiation (UVR) represents the most important environmental risk factor implicated in the pathogenesis of cutaneous cancer. It is estimated that approximately 2/3 of cutaneous melanomas are caused by excessive sun exposure. Epidemiological studies have shown that intense UVR exposure, along with sunburn form a major determinant factor for melanoma. Being a largely controllable risk factor, it is important to raise awareness on the risks associated with excessive exposure to UVR and on the sun safety behavior for children and adults.

Defining the factors which have an impact on the protective behavior and finding the risk factors associated with excessive sun exposure, in the studied population, were the main objectives of the present study.

Materials and methods

This study was conducted between 20th of April and 30th of May, 2021, on a predominantly feminine population. A total of 540 participants completed anonymously and voluntarily an online questionnaire: the Core Skin cancer prevention items (from the American Medical Association) and socio-demographic questions. Participants under the age of 18 and participants who reported a personal medical history of cutaneous cancer were excluded from the study. The collected data was statistically analyzed using SPSS Statistics.

Results

A number of 536 participants was included in the study: 529 women and 7 men, with the mean age of 29 years old. A number of 170 of the participants reported to have no child at the moment of completing the questionnaire and 366 of the participants reported to have children (1, 2 and 3, respectively).

The calculated mean UVR exposure time, in the time interval considered to have maximal UVR intensity (10-16), in the summer months, was similar in the analyzed groups: 12,5 hours/week for adults and 11,8 hours/week for children.

The results indicated a greater mean UVR exposure time for the adults living in rural areas, compared to those living in urban areas. The mean UVR exposure time was also greater for those adults who reported to have had suffered from sunburns in the last 12 months, compared to the adults who reported to have had

zero sunburns in the previous year (14,3 hours/week vs 12 hours/week). The mean UVR exposure time was also greater for the children whose parents had a medium educational status, compared to the children whose parents had superior educational status (15,5 hours/week vs 11,5 hours/week).

The analyzed sun safety behavior included: wearing a hat, wearing sunglasses and protective clothing and using a sunscreen. It was demonstrated that the participants who used to have an annual dermatological check-up adopted more sun safety behaviors. The level of adopted protective measures was also greater for children, compared to adults, regardless their environment or the educational level of their parents.

All the results mentioned above were statistically valid.

All the participants had free access to sun safety written and video materials after finishing the questionnaire.

Discussion

The current study illustrates how a predominantly feminine, young population understands the risks associated with excessive sun exposure and which protective measures they adopt, both for themselves and for their children. Being the first study assessing this type of data, in our country, we can use the results to have a clear picture on what level of knowledge exists in the population, on this particular topic and adapt the public health strategies in this direction.

Abstract N°: 526

Title: Epidemiology of skin cancer during 2-years period 2019-2021 in outpatient Clinic in Tirana

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Introduction

Skin cancer is the most common burdensome types of cancers. Melanoma and keratinocyte skin cancer (KSC) are the most common types of cancer in White-skinned populations and the second most common in Albania. Cutaneous melanoma is rapidly increasing in White populations, with an estimated annual increase of around 3-7% over the past decades.

Materials and methods

The purpose of the study is to determine the epidemiological data of patient with skin cancer, diagnosed in outpatient clinic in Albania during May 2019 - May 2021 before and during pandemic time.

In this 2 year retrospective study are collected data from the consults register at the outpatient clinic in Tirana. In this study is estimated the correlation between dermoscopy and histopathology before and during pandemic.

Results

In total 2734 consultations were conducted during the period May 2019 - May 2021.The number of cases diagnosed with skin cancers is 116 or 4,2% of all visits.

The most common cancer is BCC, 79,3 %, only 3 cases (2,6%) are melanomas.

Males are more affected than women. The most affected age is 65-74 years with 54%. There is a correlation between histopathological and dermoscopic diagnosis about 78%. During May -December 2019 we count 51 cases of skin cancer, during 2020 there are 39 cases and 26 cases in January - May 2021.

Discussion

The most common cancer is BCC and Dermoscopy has helped a lot in the early diagnosis of skin cancers. There is a decrease in cases during the pandemic, which may come as a result of restrictions and fear of going to medical facilities. Important fact is that all cases have been treated successfully and people awareness for this type of carcinomas is improving during the last years.

Abstract N°: 653

Title: The prevalence of psoriasis in the Republic of Uzbekistan in 2010-2020: a nationwide population -based study

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Introduction

Psoriasis is a chronic, immune mediated inflammatory skin disease, consisting of red, scaly plaques occurring most commonly on the elbows, knees, scalp, and lower back, but any skin surface can be involved. The condition greatly affects people's quality of life to the extent that it could be life ruining and stigmatising. Psoriasis can occur at any age, although most patients present with the condition before 35 years old. In 2014 the World Health Organization recognised psoriasis as a serious non-communicable disease and the accompanying WHO report (2016) emphasised the need to better understand the global burden of the disease

Materials and methods

We studied the data of the population register of psoriasis created on the basis of the Republican Dermatological Clinical Hospital (RDCH), Tashkent city, as well as the Republican Center for Dermatology of the Republic of Uzbekistan. Psoriasis data were studied in accordance with ICD-10: L400, Psoriasis vulgaris (billable), L401, Generalized pustular psoriasis (billable), L402, Acrodermatitis continua (billable), L403, Pustulosis palmaris et plantaris (billable), L404, Guttate psoriasis (billable), L408, Other psoriasis (billable). Statistical data on the population were provided by the State Committee of the Republic of Uzbekistan on Statistics. We calculated the annual prevalence of psoriasis in men and women in various age groups from 2010 to 2020 and used Poisson regression to test for trends using the Wald chi-square statistic.

Results

The prevalence of psoriasis among the general population of the Republic of Uzbekistan from 2010 to 2020 increased from 16.6 to 18.3 per 100,000 population. According to the trend, the prevalence of psoriasis has increased significantly in women than in men (18.1% and 9.7%, respectively). Among the age groups, the most pronounced growth was observed in the group of 15-29 years. According to the trend in this group, the prevalence (per 100,000 population) significantly increased both among women from 27.5 to 38.0 ($p < 0.05$) and among men from 29.96 to 37.6 ($p < 0.05$). Among other groups, a significant pronounced increase according to the trend was observed in the group of men 65 and older (8 times).

Discussion

Thus, during the study period, the prevalence of psoriasis in Uzbekistan has increased. In this regard, it is necessary to study the identification of risk factors, to plan the expansion of medical care to the population, the supply of genetically engineered biological drugs(GEBDs), the provision of the population with highly qualified specialists.

Abstract N°: 818

Title: Use of cosmetic products in dermatology: Moroccan survey

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Introduction

The prescription of cosmetic products has increased significantly in recent years. The objective of this study is to evaluate the use of these products among Moroccan dermatologists.

Materials and methods

We conducted a cross-sectional study using an online questionnaire for dermatology residents and dermatologists.

Results

Eighty-six people responded to our questionnaire, the average age was 26 years and the sex ratio M/F was 0.01. Our sample was composed of 92% residents and 8% private practitioners. Slightly more than half of our population (55%) prescribed cosmetic products more than 10 times per week and 42% prescribed between 2 and 10 times per week. The products frequently prescribed were sunscreens, anti-acne products, emollients, depigmenting agents, and cleansers. 80% of the respondents prescribed cosmetic products at the request of the patients. Adverse reactions were rarely noted with a frequency of less than once a week. Contact eczema was the most common reaction.

Discussion

The cosmetic industry has evolved a lot in the last few years and represents a real therapeutic component for dermatologists [1]. Alone, or in association with a pharmacological treatment, cosmetic products are regularly used for photoprotection, the fight against dry skin, the prevention of skin aging, inflammatory dermatoses such as acne, rosacea, atopic dermatitis, psoriasis and seborrheic dermatitis [2]. However, these products can be responsible for a variety of adverse effects. A study looking at the frequency of cosmetic-related dermatitis showed that contact dermatitis was the most common reaction and that most patients did not use these products properly.

Conclusion

Our study shows that cosmetic products are an integral part of the Moroccan dermatologist's therapeutic arsenal.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
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12 – 14 MAY 2022

Abstract N°: 902

Title: False beliefs in dermatology

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Introduction

Social and/or medical misconceptions are common in medicine. The field of dermatology is rich in false beliefs. The aim of our study is to identify some of these misconceptions that are sometimes difficult to combat to correct them.

Materials and methods

This is a descriptive cross-sectional study carried out in May 2021 on the medical staff of the University Hospital of Oujda. We used a questionnaire written in French and comprising 80 questions designed by the Google forms platform and distributed through social networks on different groups.

Results

Our sample consisted of 106 individuals with a sex ratio of 0.20. The average age was 27 years. Regarding skin hygiene, 80% of the respondents thought that oily skin does not need to be moisturized and 40% believed that water aggravates infected skin lesions. In the infectious pathologies section, 27 physicians believe that warts are not contagious and 16 believe that fungal infections are not contagious. Genital herpes is not a sexually transmitted infection according to 12 physicians and 15% think that herpes cannot heal spontaneously. For inflammatory pathologies, 15 doctors answered that acne only affects teenagers, 18 think it can be treated with aureomycin and 35 believe that it prohibits make-up. Psoriasis is contagious according to 5 doctors and does not affect children according to 20 of them. Regarding sun protection and skin cancers, 55% of our sample believe that there is a risk of malignant transformation if a physician manipulates a previously benign lesion by biopsy or excision, and 18 physicians responded that there is no need to apply sunscreen when it is cloudy.

Discussion

Misconceptions in dermatology affect patient management and can lead to delayed diagnosis. Some beliefs are passed on from generation to generation and are sometimes even endorsed by the medical world. For example, the use of a moisturizing cream is essential for all skin types, keeping it protected and moisturized without making it oilier. For wounds, local treatment should include washing to prevent locoregional infections. Cleaning with water and mild soap is therefore recommended. A study, conducted in France, raised the importance of misconceptions regarding genital herpes and showed an alarming lack of knowledge. Regarding acne, it is a common dermatosis that affects a wide range of ages; however, it occurs more during adolescence. Makeup can meet the daily needs of acne patients and provide a quick fix to improve their appearance and quality of life. Colored creams and concealers should be oil-free, non-comedogenic, set with powder and easier to remove than heavy bases. As for psoriasis, it is a non-communicable disease with a high burden and impact on patients' quality of life. A study has shown very insufficient knowledge about psoriasis among Italians. For more than 40 years, the solar message in France has been false, incomplete, and too timid. Only intensive and early campaigns in the

younger generations should allow a decrease of skin cancers in the future years.

Abstract N°: 38

Title: A rare case of segmental neurofibromatosis after a breast cancer radiotherapy

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Introduction

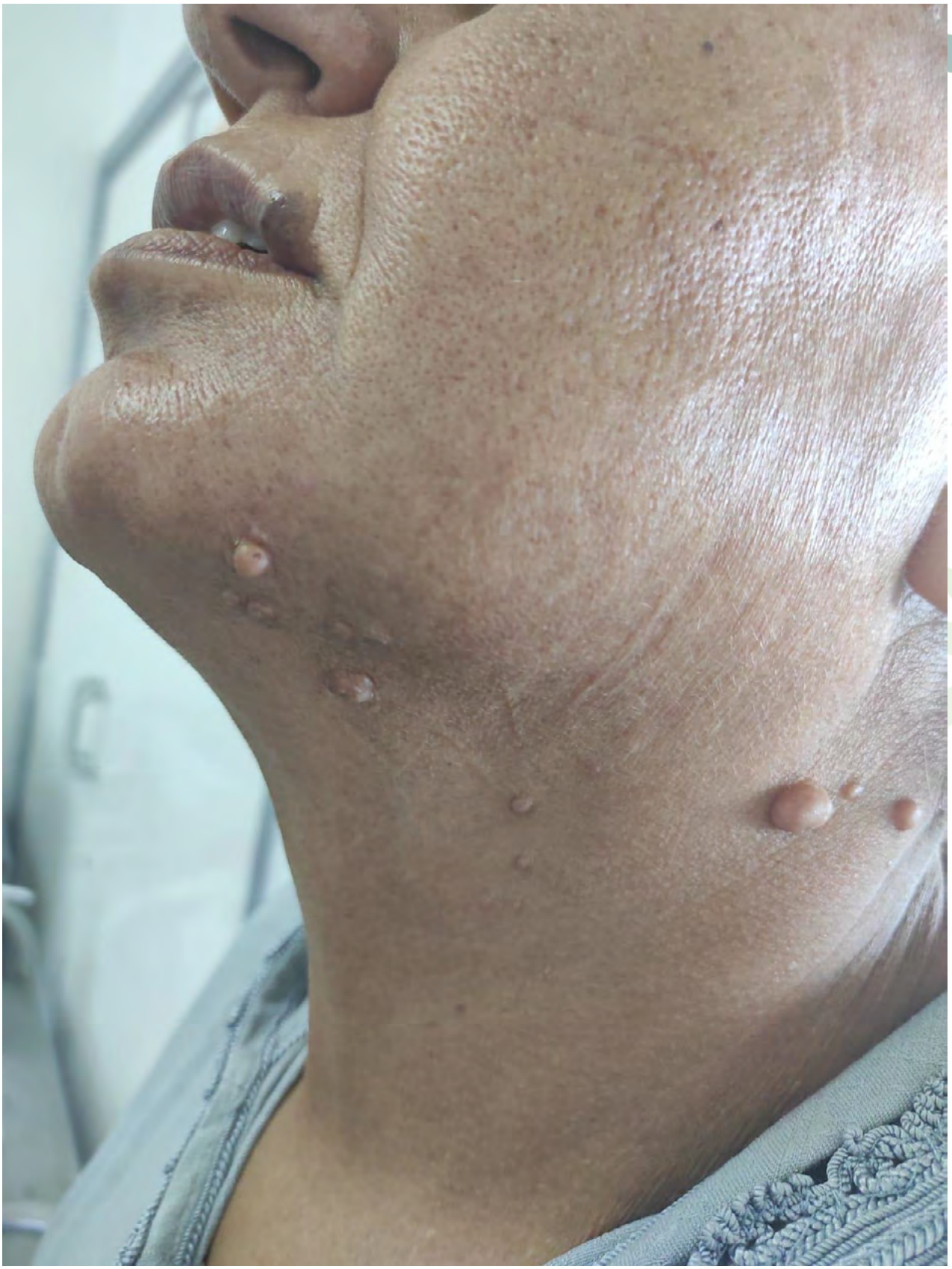
Neurofibromatosis is a frequent genodermatosis that affects approximately 1 in 3000 persons [1]. Segmental neurofibromatosis also known as NF type V is a rare form of the disease in which neurofibromatosis and café-au-lait macules are organized to one region of the body. We present a first case of a segmental NF that appeared 2 years after a radiotherapy for breast cancer.

Case report

A 51-year-old Caucasian Moroccan woman born from a consanguinous marriage with a history of mastectomy for breast cancer treated with chemotherapy and radiotherapy. She presented 4 –years ago multiple painless skin-colored, dome-shaped, soft to firm nodules located in a segmental pattern along the path of the mandibular nerve (figure 1). No Café-au-lait spots, axillary freckling and Lisch nodules were found and the neurological examination was normal. A skin biopsy of a nodule was performed; the histopathological examination revealed small spindled cells with "s-shaped" nuclei, vessels and small nerve fibers. The biological and radiological assessment didn't find any systemic involvment. The history, the clinical arragement of the lesions and the histopathologic finding were consistent with the diagnosis of segmental neurofibromatosis type 5.

Discussion

Neurofibromatosis type 1 (NF1) is the most frequent genodermatosis characterized by its clinical criteria (presence of neurofibromas, café au lait macules, crowe's sign, neurologic and ophtalmic symptoms).The segmental type (SF V) is a mosaic zostiform-localized neurofibromatosis in one body segment; the lesions follow the lines of Blaschko and are usually unilateral (approximately 6% of cases are bilateral) and occupy single dermatome [2].The diagnosis is made clinically based on the Crowe criteria: (1) unilateral neurofibromas limited to one or adjacent nerve roots, (2) cafe-au-lait spots either absent or limited to the involved region, and (3) a cause presumed to be due to a somatic mutation with a resultant absence or marked reduction in genetic transmission [3]. Female patients with neurofibromatosis are considered as high risk patients for secondary cancers especially breast cancer that's why the screening is mandatory for 40 years old patients. However, there's a therapeutic dillema concerning the management of tumors with radiotherapy in this group of patient: in one hand, the radiotherapy can be used to treat the neurofibromas, on the other hand it can induce an immunosuppression which can lead to a malignant transformation of some tumors such as low-grade gliomas and plexiform neurofibromas [4]. In our case the SF appeared two years after the radiotherapy sessions, there was no malignant transformation of the neurofibromas, we decide to excise the neurofibromas for aesthetic reasons with a close monitoring.



Abstract N°: 138

Title: Epidermolysis bullosa pruriginosa with extensive torso involvement treated by upadacitinib

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Introduction

Dystrophic epidermolysis bullosa (DEB) is a rare inherited bullous disorder characterized by fragile and easily blistering skin in response to minor trauma. It is caused by mutations of the type VII collagen gene, *COL7A1*. Epidermolysis bullosa pruriginosa (EBP) is a rare variant of DEB featured by marked pruritus, pretibial prurigo-like lesions, and albopapuloid lesions.

Materials and methods

A 38-year-old woman presented with generalized erythematous papuloplaques with erosion, some bullae, and extensive scarring. The skin lesions were distributed on whole body, especially on the trunk, and scars were predominantly located on the back. She complained of repetitive bullous formation and severe itching from childhood. She had been treated with oral cyclosporin and corticosteroids for several years at a local clinic, but the lesions had frequently relapsed at low doses of immunosuppressive drugs. Antihistamine monotherapy did not show sufficient effect in relieving symptoms. Her mother and younger sister showed similar lesions. On laboratory findings, mild leukocytosis (12,400/mm^3) and elevated total immunoglobulin E level (683.0 IU/mL) were observed.

Results

Histological examination of a skin biopsy showed subepidermal blister with some lymphocytes and eosinophils. Immunofluorescence studies were negative. On electron microscopic findings, the cleavage was located at the level of sublamina densa, consistent with DEB. Genetic analysis using next generation sequencing (NGS) revealed a heterozygous variation c.6823G>C (p.Gly2275Arg) in *COL7A1*, which was a novel mutation, not reported before. On the basis of clinicopathologic findings, she was diagnosed as EBP. After administration of oral upadacitinib 15mg/day for 3 months, the patient reported significant relief in pruritus and decrease of new lesions.

Discussion

EBP is a rare, extremely itchy subtype of DEB with characteristic features like pretibial nodular and albopapuloid lesions. Previous case reports showed that the skin lesions in EBP were mainly on lower extremities. Our case had unique features of recalcitrant blisters and scars mainly on trunk rather than extremities. The aims of EBP treatment are focused on controlling new lesions and relieving pruritus, but no universally successful treatment has been established. To date, there have been two reported cases of EBP which showed good treatment response of Janus kinase (JAK) inhibitors, baricitinib and tofacitinib respectively. JAK inhibitors play a therapeutic role by inhibiting the JAK-STAT pathway and related cytokines, leading to alleviating itching. We treated the patient with upadacitinib, a JAK1-selective inhibitor, and she reported much improvement of the symptoms. We report a rare case of EBP with trunk dominant skin lesions treated with upadacitinib.

Abstract N°: 266

Title: Birt-Hogg-Dubé syndrome with colon carcinoma

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Introduction

Materials and methods

Results

Birt-Hogg-Dubé syndrome with colon carcinoma

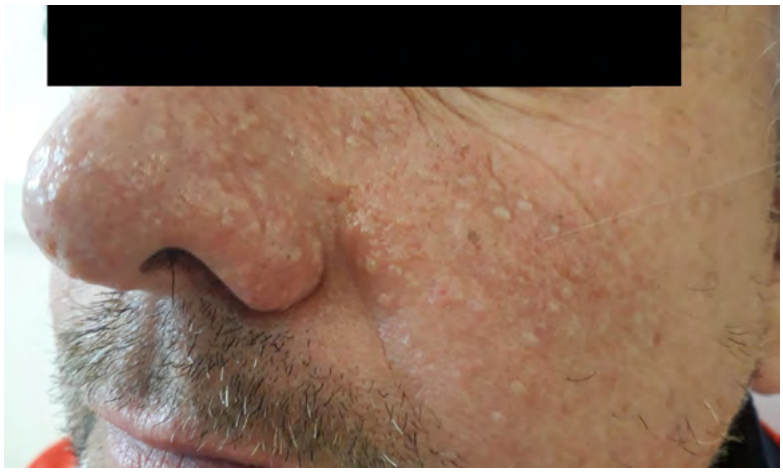
Birt-Hogg-Dubé syndrome (BHD) is a rare autosomal dominant syndrome characterized by the following three symptoms: benign skin lesions, multiple lung cysts with spontaneous pneumothoraces, and higher risk of benign and malignant kidney and other organ tumors. Causative mutation of the tumor suppressor gene FLCN, located on chromosome 17, results in impairment of the protein folliculin, which plays a role in signaling pathways. Around 200 families worldwide are affected, but the syndrome may be significantly underdiagnosed due to the symptoms treated by different specialists. Skin lesions and pulmonary cysts formation begins in young adulthood with a not-negligible risk of spontaneous pneumothorax. Later on, around 50 years of age, slowly growing benign or malignant kidney tumors may appear. Association with various organ tumors, including colorectal carcinoma, remains controversial. The skin lesions, histologically fibrofolliculomas, represent multiple benign, small, flesh colored, or white smooth papules located on the face, neck and upper trunk. Taking into consideration the risk of recurrence or scarring, laser ablation, excision or other methods may be tried for cosmetically disturbing lesions.

The authors report a 50-year-old male with a history of repeated bilateral spontaneous pneumothoraces in the past 15 years caused by numerous pulmonary cysts of various size. The patient consulted a dermatologist because of multiple naevi and bothersome face and neck lesions.

Regarding the patient's history and skin papules, BHD syndrome was suspected. Skin biopsies from the nose, face and neck revealed fibrofolliculomas and skin tags, which prompted genetic consultation. Abdominal ultrasonography, magnetic resonance imaging and computed tomography scans confirmed bilateral renal cysts with no suspicion of neoplastic process. Pathogenic variant c.1285dup (p.His429Profs*27) of the FLCN gene was confirmed. This variant had been previously reported in patients with colorectal tumors. Subsequently, a coloscopic examination was performed and a suspect area in the hepatic flexure was endoscopically removed. The histopathological report described tubular adenoma with high grade dysplasia progressing into well-differentiated adenocarcinoma, completely removed. After a one-year follow-up, the patient had no signs of recurrence during a coloscopy and no progression in renal imaging methods. The syndrome was also confirmed in his otherwise healthy daughter. Both remain in follow-up status with dermatologists, pneumologists, nephrologists and gastroenterologists.

Clinical, dermoscopic and histopathological images of skin lesions, X-rays of pneumothorax, CT scans of lung and renal cysts and coloscopic photographs are presented.

Discussion



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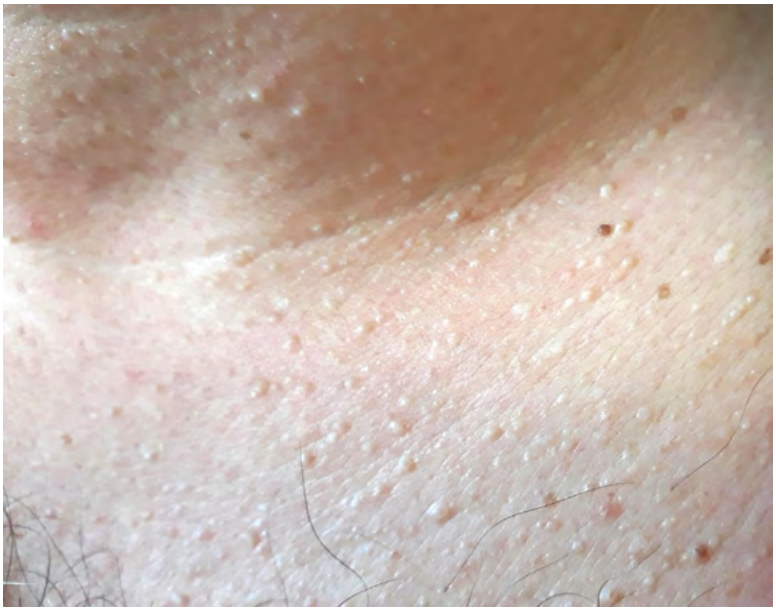

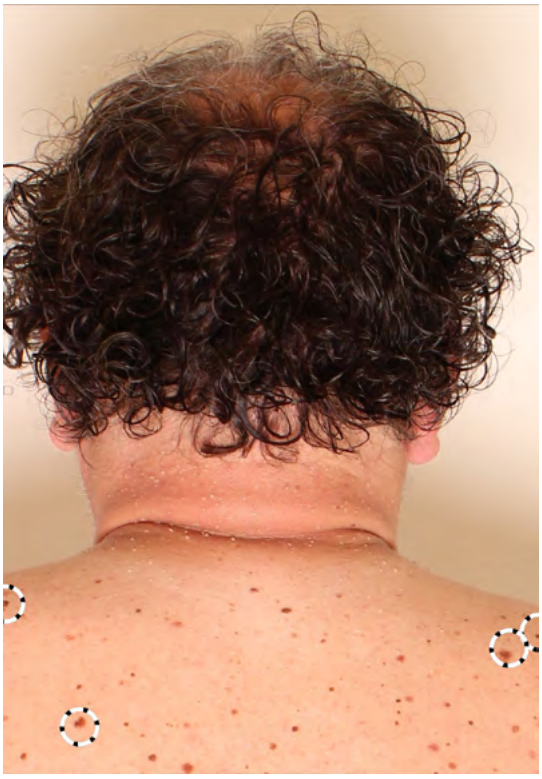

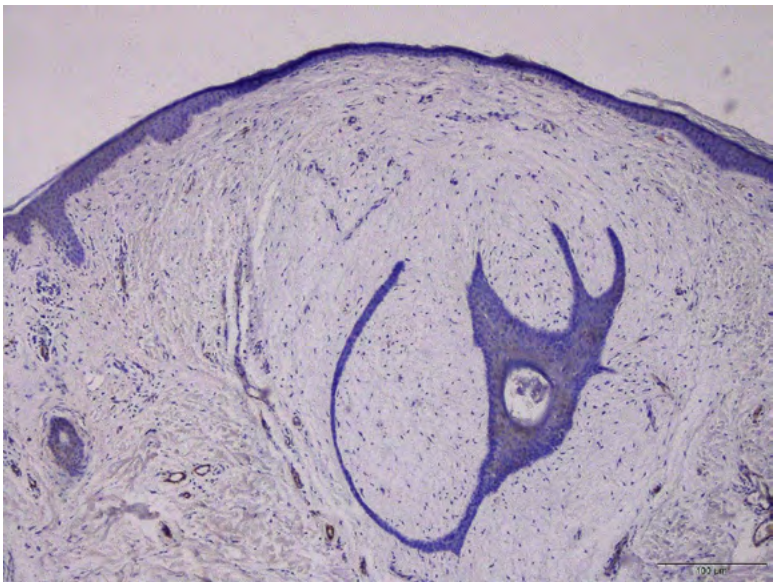

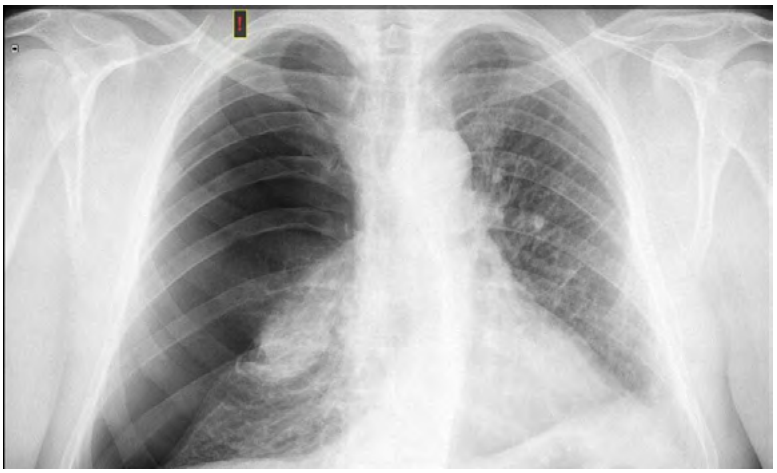

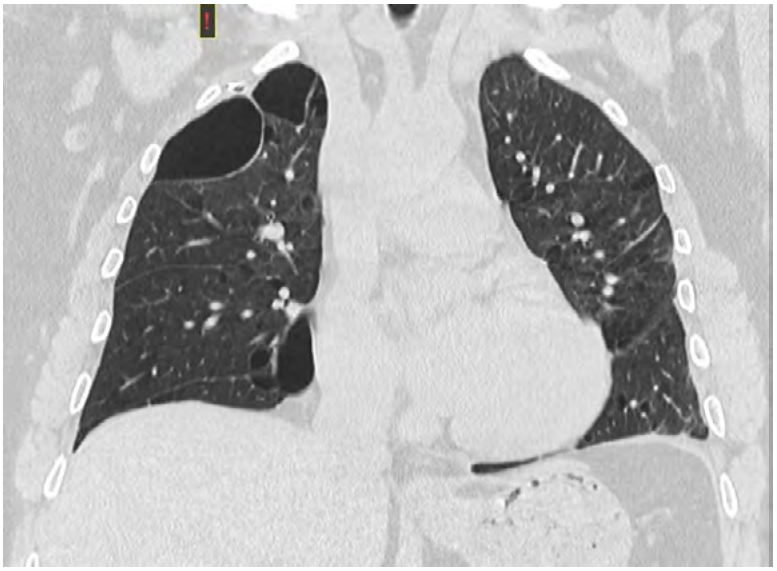

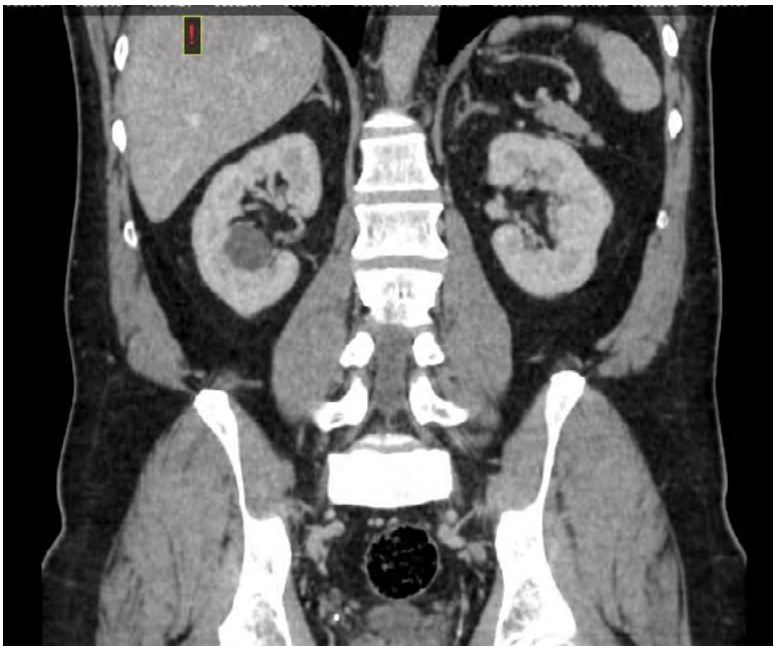

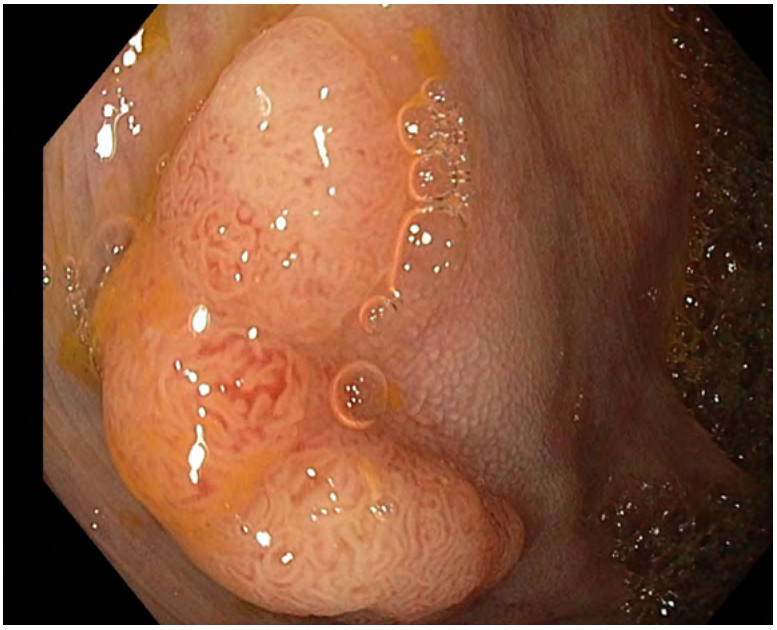

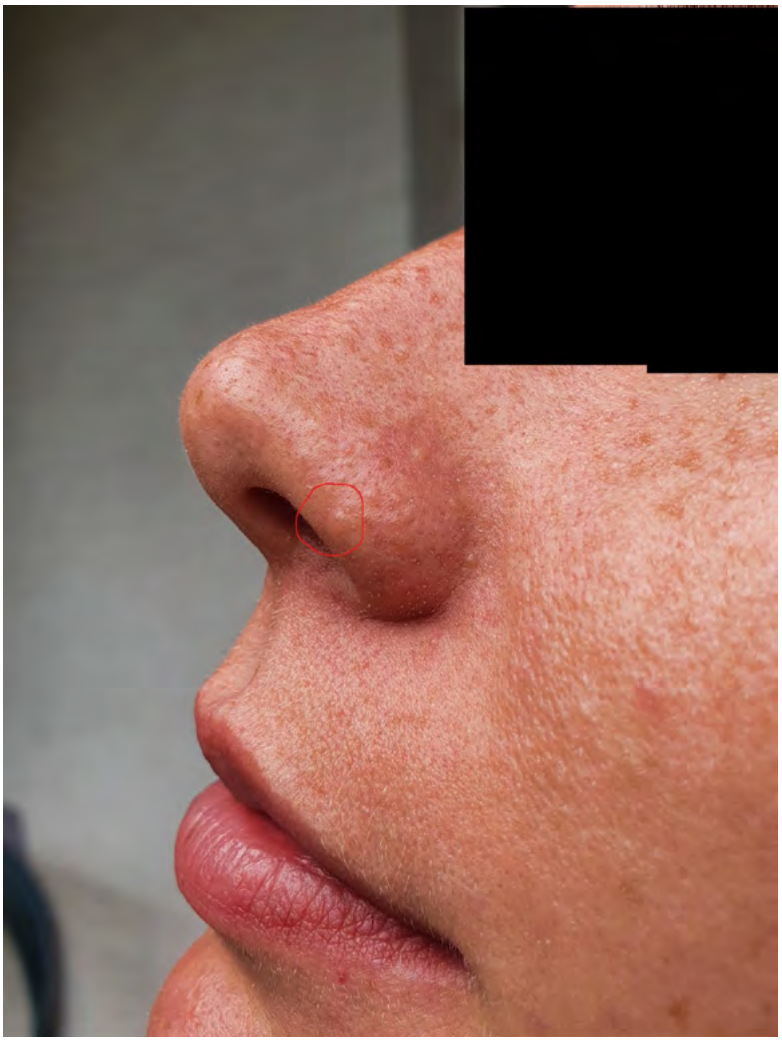

Abstract N°: 312

Title: Human living skin equivalent transplantation in the treatment of junctional epidermolysis bullosa

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Introduction

Junctional epidermolysis bullosa (JEB) is phenotypically and genetically heterogeneous type of inherited epidermolysis bullosa. JEB is caused by mutations in the LAMA3, LAMB3, LAMC2 COL17A1 genes encoding laminin 332 and type XVII collagen respectively. JEB patients are oftentimes presented with generalized blistering of skin and mucous membranes, atrophic scarring and non-healing wounds. The objective of the study was to assess the effects of human living skin equivalent transplantation in a junctional epidermolysis bullosa patient with chronic wounds.

Materials and methods

A non-infected chronic wound (> 1 month old) was selected for human living skin equivalent (HLSE) transplantation. HLSE contains 100 000/cm3 allogeneic dermal fibroblasts encapsulated in collagen gel which has a three-dimensional structure, and 100 000/cm2 allogeneic keratinocytes covering its surface. After cleaning the wound with saline solution HLSE was transplanted onto a non-healing wound in size 3,5x1,5 cm in the left gluteal region in a patient with JEB. The skin biopsy specimens were taken from the patient at baseline and at 2 weeks after transplantation to confirm the clinical diagnosis and to assess the treatment effect by immunofluorescence mapping (IFM). The results showed irregular staining of the antibodies to β3 chain of laminin 332 and collagen XVII at the dermal-epidermal junction. The clinical diagnose was confirmed.

Results

At day 4 after transplantation the primary wound size reduced to 3x0,5 cm. The results of the IFM showed the increase of collagen XVII expression. At day 14 93,3% reduction of the wound surface was achieved. Neither systemic nor local adverse reactions were registered during 2 weeks after transplantation.

Discussion

The derived data demonstrate that human skin equivalent transplantation could be a potential therapeutic approach for JEB patients with non-healing wounds.

Abstract N°: 392

Title: Follow-up of tuberous sclerosis can reveal wonders

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Introduction

Tuberous sclerosis is an autosomal dominant genetic disease characterized by an abnormality in the tumor suppressor genes TSC1 and/or TSC2 located on chromosomes 9 and 16, which leads to the development of hamartomas, which are benign tumors in various organs such as the skin, kidneys, lungs or central nervous system, due to inhibition of the mTOR pathway.

Materials and methods

This is a case report about the follow-up of a patient suffering from tuberous sclerosis

Results

Miss N.T., 17 years old, followed for tuberous sclerosis for 10 years and lost from sight, comes in consultation for peri-ungual tumors at the level of the toenails, causing pain while wearing closed shoes. On clinical examination, there are firm pinkish oblong tumors, one 2cm/1cm and the other not exceeding 0.5cm in diameter. They are Koenen's tumors developing at the periphery of the nails of the first 2 right toes. The rest of the examination revealed facial angiofibromas, a fibrous cephalic plaque, a Shagreen patch on the back, and ash-leaf white macules consistent with her pathology; gingival fibromas were also found. The physical examination of the other systems came back normal, the patient has no intellectual deficiency. There are no similar cases in the family.

The patient was lost to follow-up, so we hospitalized her to look for internal manifestations of her disease.

The cardiac examination and the EKG were normal and did not motivate the search for cardiac rhabdomyomas

The blood pressure and the biological examination of the renal function were normal

A thoracoabdominal CT scan was performed and revealed multiple bilateral renal angiomyolipomas and bilateral pulmonary micronodules suggestive of multifocal micronodular pneumocytic hyperplasia

Brain MRI revealed cortical tubers, subependymal nodules and a right subependymal giant cell astrocytoma

The EEG was also normal

Ophthalmic examination revealed asymptomatic retinal hamartomas

Discussion

In principle, all patients with tuberous sclerosis should receive information and education sessions in order to adhere to the follow-up of their disease.

A dermatological examination should be done every year and an oral examination every 6 months

According to some authors, a neurocognitive evaluation should be done once a year at key ages, a brain MRI

should be done every 1 to 3 years for patients under 25. Those with giant cell astrocytoma should have lifelong follow-up

Blood pressure measurement and renal function assessment should be done once a year, renal tumor detection should be done by abdominal CT or MRI every 1 to 3 years

EKG should be done every 3 to 5 years in asymptomatic patients.

Chest CT should be done every 5 to 10 years in the absence of lymphangioleiomyomatosis, or every 2 to 3 years in its presence with assessment of pulmonary function every year.

If lesions are detected on initial ophthalmologic examination, an annual clinical ophthalmologic examination should be performed

Patients of childbearing age should receive genetic counseling

The diagnosis of abnormalities during the follow-up of tuberous sclerosis allows for early management, including the introduction of inhibitors of the m-TOR pathway, such as rapamycin or everolimus, and can reduce the size of angiomyolipomas and giant cell astrocytomas.

Other therapies are possible, including embolization of angiomyolipomas to reduce the risk of hemorrhage which can sometimes be fatal, or surgical removal of operable giant cell astrocytomas

Abstract N°: 559

Title: Urine-Derived Stem Cells in the Treatment of Skin Fibrosis of Mice with Recessive Dystrophic Epidermolysis Bullosa

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Introduction

Severe recessive dystrophic epidermolysis bullosa (RDEB) can develop squamous-cell carcinoma due to recurrent blisters, erosions and fibrosis of skin lesions. This study intends to investigate effects of human urine-derived stem cells (USCs) on skin fibrosis, inflammation and macrophage subtypes related cytokines in vitro and in vivo of RDEB mice.

Materials and methods

Human USCs were isolated and cultured. Acellular dermis matrix (ADM) from RDEB mice was prepared with repeated freezing-thawing and using decellularization reagents Triton X-100/NH_4OH. Fibroblasts from newborn RDEB mice skin were isolated and cultured to prepare an fibroblast-ADM composite model. Cell lysates were prepared after co-culture of USCs with the fibroblast-ADM composite model, the TGF-β1-stimulated fibroblast-ADM composite model, and RAW264.7, respectively, and q-PCR was performed. Each newborn RDEB mouse was systematically injected with USCs. The survival status of the mice was observed, the forepaws of mice were sampled for immunofluorescence staining of type I collagen and CD206 after one week of treatment, and the skin was sampled for q-PCR.

Results

USCs expressed CD29, CD73, CD44, CD105 and HLA-ABC, but did not express CD34, CD45 and HLA-DR. USCs induced by osteogenesis, adipogenesis and chondrogenesis were positive for alizarin red, oil red O and alcian blue staining. Nearly no residual nuclei or cell debris were observed of ADM. Masson's trichrome staining showed that the conformation of ADM fibers was basically homogenous. Quantification of residual DNA suggested that the mean DNA amount in the ADM was <50 ng/mg. Scanning electron microscopy, live/dead cell staining and CCK8 showed the fibroblast-ADM composite grew well. After co-culture of fibroblast-ADM composite model with USCs, expression of IL-6, TNF-α, MMP-9, MMP-13 and TGF-β1 from fibroblasts significantly decreased, and expression of IL-10, VEGF and TGF-β3 significantly increased. In the TGF-β1-stimulated fibroblast-ADM composite model after co-culture with USCs, expression of IL-6, TNF-α, MMP-9, MMP-13 and TGF-β1 significantly decreased, and VEGF expression significantly increased. After co-culture LPS-stimulated RAW264.7 with USCs, q-PCR revealed that expression of Arg-1, CD206 and IL-10 from RAW264.7 increased, and expression of CD86, iNOS and TNF-α decreased. Compared with the control group, CD206 staining-positive macrophages in the forepaw increased, and type I collagen decreased; The q-PCR results also suggested that IL-6, MMP-2, MMP-13, TGF-β1, and IFN-γ levels were significantly lower in the skin of RDEB mice treated with USCs.

Discussion

USCs can inhibit fibrosis and inflammation in RDEB mice in vitro and in vivo, and can modulate macrophage polarization therefore inducing anti-inflammatory effect.

Abstract N°: 668

Title: Mal de Meleda: A report of three cases

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Introduction

Mal de Meleda (keratoderma palmoplantaris transgrediens) is a rare autosomal recessive genodermatosis characterized by transgradient palmoplantar keratoderma, frequently associated with severe aesthetic and psychological impact.

Materials and methods

We report three cases of mal de Meleda and we discuss the clinical features, genetic background, and the possibilities of management.

Results

A 33-year-old woman was referred to our dermatology department for palmoplantar keratoderma evolving since the age of 3 months. On examination, we found a diffuse bilateral thickened hyperkeratosis on palms and soles with peripheral erythema and sharp demarcation of lesions. The transgrediens progression of hyperkeratosis to the dorsal surface was a good marker for the diagnosis of Mal de Meleda. Hyperkeratotic lesions were found on the legs. Our patient was breastfeeding, which contraindicated the treatment with acitretin. Further, she developed hyperhidrosis and fungal infection during her follow up. The second patient was a 40-year-old man, presenting with a painful and malodorous keratoderma with orange-red coloration. The thickening and sharp demarcation on palms and soles were accompanied by fissuring, contractures of the fingers and nail abnormalities. Hyperkeratotic plaques extended to the dorsal surface of the hands and feet (transgrediens pattern). He was managed with actitretin 10 mg/ day. Our third case was a 67-year-old women presenting palmoplantar keratoderma since early childhood. Clinical features were highly suggestive of Mal de Meleda disease with the orange-yellowish coloration and the striking trangredient aspect. Similarly to case 1, erythematosquamous lesions were also found on the trunk. She was managed with topical keratolytics. Parental consanguinity and family history of Mal de Meleda were found in our three patients, as well as the psychological burden and social problems.

Discussion

Mal de Meleda is caused by a mutation in the SLURP-1 gene. This latter encodes for a protein which is involved in the inflammatory response as well as keratinocyte apoptosis regulation. The disease had its onset in early infancy like in our patients, and followed a progressive course, with extension of the keratoderma to the dorsum of both hands and feet. The disease may affect other areas of the body, like in patients 1 and 3. Skin biopsy was not performed in our cases and is not mandatory for the diagnosis because of nonspecific findings. It shows hyperkeratosis, marked acanthosis and perivascular lymphohistocytic infiltrate. Genetic study should be performed in order to provide the necessary counselling. Treatment strategy is not well-defined, since therapies are only symptomatic but not curative. It is based on oral acitretin with topical keratolytic agents. We highlight

through these cases, the disfiguring effects of the disease on young adults that can severely impact function. The higher risk of developing skin malignancies, particularly melanoma, necessitates a close follow-up of these patients.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
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12 – 14 MAY 2022

Abstract N°: 748

Title: Atopic eczema and phenylketonuria : role of diet

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Introduction

Phenylketonuria is an autosomal recessive disease with an estimated incidence of one in 12,000 births in France. It is caused by a deficiency in phenylalanine hydroxylase, an enzyme that catalyses the conversion of phenylalanine into tyrosine. We illustrate through this observation the atopic manifestations linked to this genodermatosis.

Results

A 42 year old woman, diagnosed with phenylketonuria at the age of 9, on a diet with no good compliance, with a similar case in her siblings. She consulted for pruritus without dermatological lesions that had been evolving for years. The clinical examination revealed diffuse cutaneous xerosis, greyish-blond hair, scratching lesions and excoriated papular lesions on the extensor regions of the limbs. The biological assessment did not reveal any hypereosinophilia, and the IgE level was high at 500 KUI/l. The skin biopsy showed a hyperkeratinising epidermal hyperplasia. The diagnosis of lichenified atopic eczema was made and symptomatic treatment was initiated with a low phenylalanine diet. Symptomatology was well controlled after 3 months.

Discussion

The skin manifestations are indicative of classic type I phenylketonuria due to phenylalanine hydroxylase enzyme deficiency. They are characterised by blond hair , blue eyes and skin depigmentation due to excess phenylalanine, a competitor of tyrosine in the process of of melanogenesis. Eczema is one of the most common manifestations in phenylketonuria (25% of cases). The pathogenesis of eczema in patients with phenylketonuria is unclear but it seems that control of hyperphenylalaninemia by phenylalanine restriction allows remission which remains compatible in our patient.Other rarer skin disorders have been described such as a cutaneous scleroderma syndrome (morphea and Pasini-Piérini atrophoderma). If dietary treatment prevents mental retardation and allows normal growth and development throughout childhood, it also prevents atopic manifestations.

Abstract N°: 754

Title: Piebaldism : a new case report of this genodermatosis

Maryem Rimaoui[1], Hali Fouzia, Chiheb Soumiya

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Introduction

Piebaldism is an autosomal dominant disease.It manifests clinically as symmetrical circumscribed leukoderma, poliosis with a characteristic forehead wick. Although it is a benign dermatosis, it has a major impact on the quality of life and its treatment remains difficult. We report the observation of an infant with piebaldism.

Results

A 1-year-old boy born to consanguineous parents, he had achromic lesions since birth with a regular course. The clinical examination showed : confluent symmetrical achromic macules on the trunk and the upper and lower limbs . On the face, we objectify a triangular achromic macule on the forehead, poliosis of the eyebrows and a white forehead wick.There is no coffee-with-milk colored spots. Ocular, auditory and cardiovascular examinations were normal. a skin biopsy was not performed on the lesions.The diagnosis of piebaldism was made. Photoprotection was recommended

Discussion

Piebaldism is a direct consequence of the lack of migration and differentiation of neural crest derived melanoblasts during embryogenesis. Clinically, piébaldism is characterised by congenital well-circumscribed achromic spots affecting the skin of the face, trunk and extremities in a symmetrical distribution. A white triangular streak is characteristic. Waardenburg's syndrome is the main differential diagnosis of piebaldism, the clinical presentation is very similar. However, it is accompanied by sensorineural deafness, heterochromia of the iris, enlargement of the nasal bridge and lateral displacement of the internal canthi of both eyes. Due to the absence of the photoprotective effects of epidermal melanin, the management of patients with piebaldism is based firstly on photoprotection. Other alternatives with relative effects have been described such as: dermabrasion associated with skin grafting and autologous melanocyte grafting.

EADV SYMPOSIUM 2022
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12 – 14 MAY 2022

Abstract N°: 761

Title: Ophtalmologic anomalies in patients with hereditary ichthyosis

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Introduction

Hereditary ichthyoses (HI) are a heterogeneous group of rare diseases characterized by disorders of epidermal differentiation [1]. These dermatoses are often accompanied by ophthalmologic disorders.

The aim of our study is to evaluate ophthalmological abnormalities in patients with HI.

Materials and methods

Retrospective study including all patients followed for HI at the dermatology department of the university hospital Mohammed VI of Oujda from January 2016 until June 2021. All patients had an ophthalmological examination.

Results

We collected 13 patients: 10 females and 3 males; mean age 16.3 years with extremes of age 7 months and 36 years.

Nine patients had ichthyosis vulgaris, three patients had lamellar ichthyosis and one patient had keratitis ichthyosis deafness syndrome (KID).

We observed the following ophthalmological abnormalities: dry eye 38%, conjunctivitis 24%, ectropion 23%, keratitis 15%.

Discussion

Ophthalmologic complications during HI are multiple and depend essentially on the form of HI [2]. In a French study that evaluated the prevalence of ophthalmologic abnormalities in patients followed for HI, keratitis and dry eye syndrome were the most frequently found manifestations [3]. 3 Our study also found a predominance of dry eye followed by conjunctivitis.

Conclusion

Our study supports the importance of ophthalmologic follow-up in patients with HI to detect minor damage and thus prevent irreversible complications.

Abstract N°: 802

Title: Apremilast for the treatment of Darier disease. A case report.

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Introduction

Darier disease is an autosomal dominant genodermatosis with exacerbations and remissions. Causative mutations are based in the gene ATP2A2 which encodes the Sarco/Endoplasmic Reticulum Ca^{2+}-ATPase 2 (SERCA2), a calcium-ATPase pump, resulting in reduced concentrations of calcium in the endoplasmic reticulum (ER). The calcium (Ca^{2+}) depletion leads to ER stress, impaired processing of junctional proteins and disruption of desmosome assembly. Ultimately, there is loss of cell to cell adhesion (acantholysis), abnormal differentiation and proliferation of keratinocytes (dyskeratosis). Although Darier disease is not a primarily inflammatory dermatosis, inflammation may occur due to localized infections. Clinically presents with red to brown hyperkeratotic papules in a seborrheic distribution, nail changes and mucosal lesions. Currently, there is no gold standard therapy. Proposed approaches include retinoids, cyclosporin, antibiotics, lasers, dermabrasion and surgical excision. Herein, we aim to evaluate the efficacy of apremilast. We report satisfactory results with apremilast in a case of Darier disease.

Materials and methods

A 63-year old lady presented to our clinic with brownish erythematous keratotic papules over the neck, trunk and extremities. The lesions were coalescing to crusted pruritic plaques and her finger nails presented longitudinal red bands, nail ridges and V-shaped splitting. The patient reported a chronic course of her condition over 35 years with frequent flares. To date, she was treated with topical corticosteroids, topical calcineurin inhibitors, botulinum toxin injections and oral acitretin without good control of her disease. Due to recent exacerbation of her condition and no response to acitretin 25mg daily, apremilast was initiated and acitretin was reduced to 10mg daily.

Results

Histopathology revealed hyperkeratosis, acantholysis and dyskeratotic cells with "corp ronds" in the stratum spinosum and "grains" in the stratum corneum, compatible with Darier disease. The patient is currently undergoing the third month of treatment with significant clearance of her skin lesions. No complications occurred. Therefore, apremilast was continued and acitretin was stopped.

Discussion

Treatment of Darier disease is notoriously challenging. As the pathophysiology of the disease becomes more understood, newer agents will be explored. Apremilast acts on phosphodiesterase 4 (PDE4) inhibition and elevates

cyclic adenosine monophosphate (cAMP). In turn, cAMP downregulates proinflammatory and increases anti-inflammatory cytokines. Of note, PDGE4 predominantly controls inflammatory cells but is also present in keratinocytes. Both Ca^{2+} and cAMP are essential intracellular second messengers. An intriguing mechanism of interplay between the signaling pathways of these two messengers might play a role in physiological processes. In the context of Darier disease, we postulate that apremilast may have a role in controlling inflammation and potentially regulate calcium homeostasis via interaction with cAMP. In our case, we found good results with apremilast which has a good safety profile. Hypothetically, may have a synergistic effect on inflammation, calcium homeostasis, keratinocyte differentiation and proliferation. The molecular mechanism remains to be explored. Further studies are required to confirm the efficacy of apremilast in Darier disease.

Abstract N°: 808

Title: ASSOCIATION OF LOW GRADE GLIOMA AND XERODERMA PIGMENTOSUM : CASE REPORT

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Results

Xeroderma pigmentosum (XP) is a rare genophotodermatosis due to an autosomal recessive disorders, characterized by an extreme sensitivity to sunlight and ultraviolet radiation.

The incidence of cerebral tumors in this condition is exceptionally reported.

We report a case of a low-grade glioma associated with xeroderma pigmentosum.

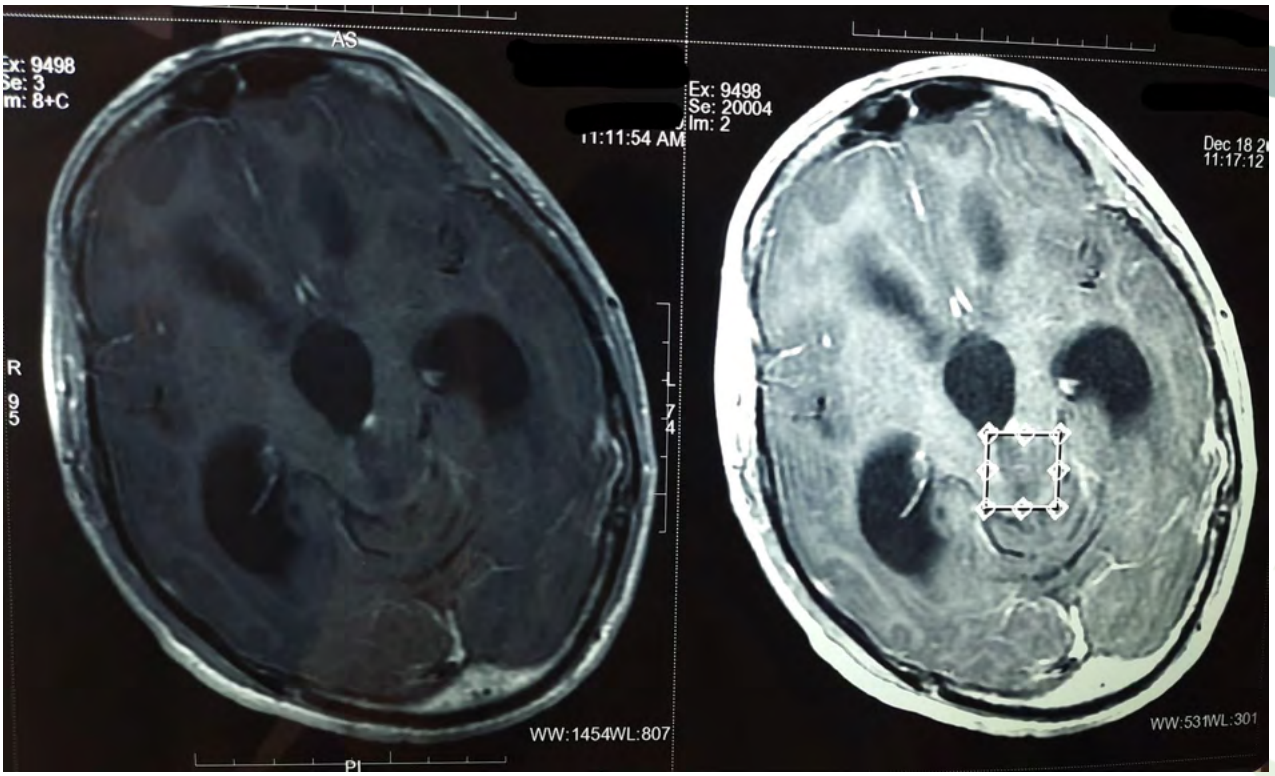
This report describes the case of a 29-year-old man, who had been a known case of XP since his childhood, with history of basal cell carcinomas of the face operated on several times. He was admitted to the hospital for an intracranial hypertension associated with a vertiginous syndrome for which the patient had benefited from a cerebral MRI showing a lesional process of the mesencephalon and the tectal lamina evoking a low-grade glioma with the presence of a major triventricular hydrocephalus. The patient was urgently transferred to neurosurgery department for a ventriculocystostomy with a good evolution.

Low-grade glioma is a tumor developed at the expense of glial cells; The majority of patients present with seizures, intracranial hypertension and focal neurological signs. CT and MRI with magnetic resonance spectrometry are used to detect these brain tumors. A biopsy may be performed, depending on the location of the glioma.

The treatment depends on the size and location of the tumor. It usually consists of surgical tumour removal followed by regular clinical and imaging check-ups. By far not all patients with low-grade gliomas need chemotherapy or radiotherapy.

The development of a primary brain tumor is an unusual complication of xeroderma pigmentosum. Cases of trigeminal schwannomas and one case of high grade glioma are reported.

The particularity of our case is the association of a low-grade glioma and xeroderma pigmentosum.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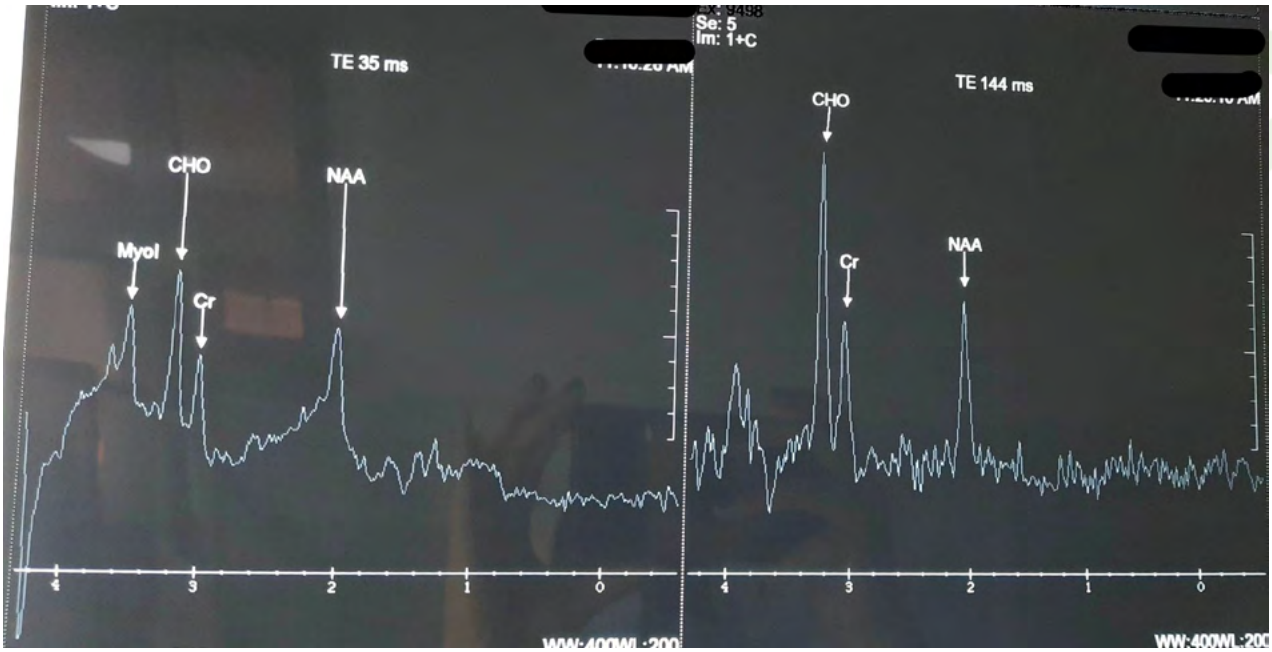
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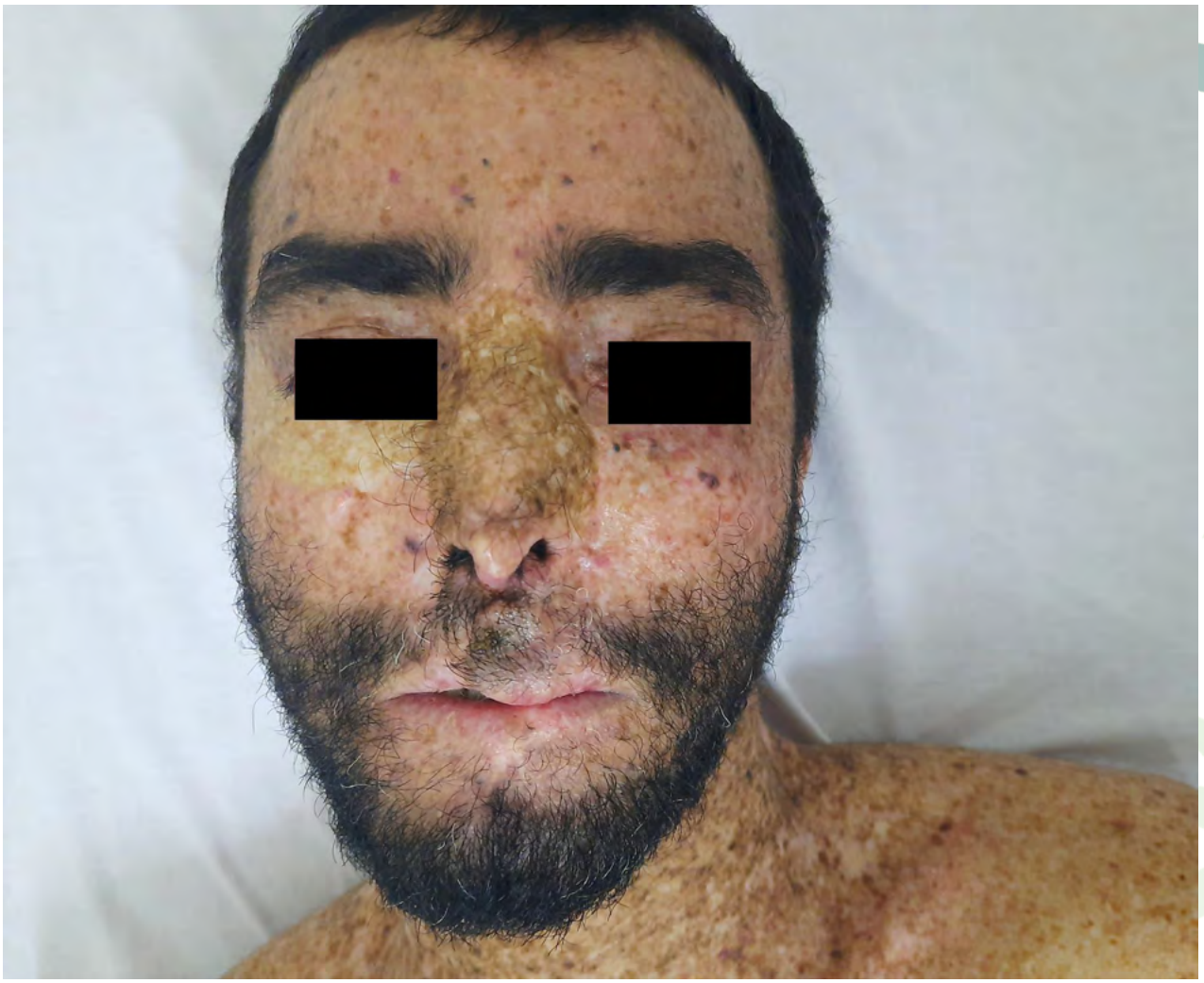

Abstract N°: 829

Title: Netherton syndrome: a new case.

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Introduction

Netherton syndrome(NS) is a rare autosomal recessive disease , often misdiagnosed as atopic dermatitis due to the presence of eczematous skin lesions and allergic problems. We report a rare case of netherton syndrome diagnosed at the age of 13 years old.

Observation

A 13 year-old boy, with no family history of skin disorders, presented for widespread squally lesions evolving since the age of 2 months. He got treatment with emollients and topical steroids with no improvment. On physical examination, his skin was dry, and there were erythematous polycyclic patches with fine double-edged scaling on the abdomen, face, and extremities . He had dry and short scalp hair. The patient had serum eosinophilia at 836 elements /mm 3 and high serum total IgE levels (9632IU/ml). The scaly lesions characteristic of ichthyosis linearis circumflexa, hair abnormalitiess and elevated IgE with hypereosinophilia suggest the diagnosis of NS. Hair optical microscopy analysis showed trichorrhexis invaginata or bamboo hair,confirming Netherton syndrome disease. The patient got treatment with acitretin (0.5 mg/kg per day). At six-month follow-up visit, his skin lesions improved but not completely resolved. We keep a close follow-up of the patient.

Discussion

We reported a new case of Netherton syndrome . It is a rare disease characterized by a triad of congenital ichthyosiform erythroderma (CIE) or ichthyosis linearis circumflexa (ILC), hair shaft abnormalities, and atopic diathesis (elevated serum IgE). ILC consists of migratory polycyclic erythematous patches surrounded by a serpiginous overlying double edged scale. Among NS manifestations, the most specific is a hair follicle alteration called trichorrhexis invaginata (TI) or bamboo hair, considered pathognomonic. TI is best observed under trichoscopy or trichogram. Atopic manifestations include atopic dermatitis, urticaria, angioedema and elevated serum IgE . Treatment may include emollients, topical corticosteroids, calcipotriol, narrowband UV-B phototherapy, psoralen–UV-A photochemotherapy, and retinoids, with variable effectiveness.

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Abstract N°: 847

Title: Ulcerated plaque of the face revealing a Bowen's disease in a patient with epidermodysplasia verruciformis

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Introduction

Epidermodysplasia verruciformis, also known as Lutz-Lewandowski disease, is a rare inherited disorder that most commonly inherited in an autosomal recessive manner, predisposes patients to widespread human papillomavirus (HPV) infection and malignant tumors such as Bowen's disease or squamous cell carcinoma, especially in photo-exposed areas. Herein, we describe a case of epidermodysplasia verruciformis in a patient with clinically polymorphic lesions and the presence of Bowen's disease on the face.

Materials and methods

Results

A 27-year-old patient, with a first-degree consanguinity, no similar cases in family, was referred for an ulcerated facial plaque. The lesion had slowly enlarged since its appearance 2 years ago. On clinical examination there was an erythematous, bad-delineated plaque on his right temple. Within the lesion, ulcerations were observed. wartlike lesions and reddish-brown pigmented plaques were observed on the back, the hands, the upper and lower extremities, and the face, and pityriasis versicolor-like lesions mainly in the back. Dermoscopic examination of the facial lesion found glomerular vessels, ulcerations, scabs, and white areas without structure. A skin biopsy was performed confirming Bowen's disease and the patient underwent a complete removal of the lesion.

Discussion

Epidermodysplasia verruciformis is a multifactorial disease involving specific viruses, genetic, immunologic, and environmental factors. At least 20 β-types of HPV have been isolated, but the prognosis is related to the oncogenic potential of some of them found with greater frequency. Indeed, HPV 5 and 8 are responsible for 90% of carcinomas.

An associated cellular immunity deficiency leads to a failure to recognize HPV, and thus to the inability to eradicate the induced lesions. This immune deficiency is characterized by an inhibition of Natural Killer activity and cytotoxic activity of T cells.

It is characterized by the occurrence of flat wart-like keratotic papules, hypo or hyperpigmented macular lesions and pityriasis versicolor like lesions. These lesions are located mainly on the back of the hands, forearms, face (especially the forehead), legs and trunk.

The lesions may become malignant in approximately 30% of cases: Bowen's disease, squamous cell carcinoma and basal cell carcinoma, most commonly between the third and fourth decades of life, especially in areas exposed to sunlight.

The knowledge of the cutaneous manifestations of this rare disease leads to an early diagnosis before the development of cutaneous cancers.

Abstract N°: 852

Title: Erythrokeratodermia variabilis: 3 new cases

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Introduction

Erythrokeratoderma variabilis (EKV) is a rare genetic disease with a cutaneous expression, due to a keratinization disorder. This condition can be very disabling. We report 3 new observations of EKV.

Observations

case 1: A 3-year-old child was seen in consultation for annular erythematosquamous lésions of the face and limbs , with a symmetrical disposition evolving since the age of 3 months. Skin pathological examination showed acanthosis ,papillomatosis and orthokeratotic hyperkeratosis**.** Anatomoclinical correlation leaded to EKV diagnosis. Treatment with acitretin has been initiated with clinical improvement**. Case 2:** A 22-month-old girl was referred to our department with reddish- brown hyperkeratotic and well-demarcated plaques on the extremities evolving since the age of 4 months. The clinical aspect was compatible with an EKV. The patient was treated with emollients and keratolytics. **Case 3 :** A 20-year-old women, presented for annular, pigmented and symmetrical ichthyosiform patches of the limbs, evolving since childhood. After the diagnosis of EKV, skin lesions progressively improved with oral acitretin.

Discussion

Erythrokeratodermia variabilis(EKV) is caused by mutations in GJB3 or GJB4, which encode connexin 31 and connexin 30.3, respectively. Clinically, it is characterized by the association of persistent erythematous and hyperkératotic plaques with transient, changeable red patches. The histological features of EKV are not specific. An anatomoclinical correlation leads to the diagnosis. Oral retinoids are the first line treatment.

Abstract N°: 865

Title: Epidermodysplasia verruciformis in association with ARPC1B deficiency syndrome

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Introduction

Epidermodysplasia verruciformis (EV), also known as Lewandowsky-Lutz syndrome or tree man disease is a rare genetic skin disorder.It is characterized by abnormal susceptibility of the skin coating to human papillomaviruses (HPVs). ARPC1B deficiency syndrome is a novel syndrome of combined immune deficiency, infections, allergy, and inflammation. We report a new case of EV in association with ARPC1B deficiency syndrome.

Observation

A 9-year-old boy born to consanguineous parents, with a medical history of pulmonary tuberculosis diagnosed at the age of 6 years old,was seen in consultation for lesions over the face, neck, chest, and extremities . On physical examination, there were multiple diffuse hypochromic scaly patches , pink to brownish papules looking like flat warts and seborrheic keratosis-like lesion on the back .The clinical presentation was characteristic of EV. The patient got treatment with emollients and photoprotection. Then, he had several hospitalisations for febrile dysenteries, and many episodes of pulmonary infections. An immune deficiency was suspected. HIV testing was négative . A genetic analysis was performed showing **a** mutation in the ARPC1B gene **.** ARPC1B deficiency syndrome was retained**.**

Discussion

Epidermodysplasia verruciformis (EV) is a rare genodermatosis classically associated with mutations of the EVER1/TMC6 and EVER2/TMC8 genes . It is responsable of disseminated eruptions of hypo- or hyperpigmented macules and wart-like papules that can coalesce and scale. It is uniquely characterized by an increased susceptibility to specific human papillomavirus (HPV) genotypes.EV can be acquired and is usually seen in immunodeficient patients such as after renal transplantation, in Hodgkin's disease , in systemic lupus erythematosus, and with human immunodeficiency virus (HIV) infection .To our knowledge , this is the first case of EV in association with ARPC1B deficiency syndrome.

Abstract N°: 874

Title: Dystrophic epidermolysis bullosa inversa - a case report

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Introduction

Materials and methods

Results

Introduction

The inverse type of recessive dystrophic epidermolysis bullosa (RDEB-I) is a rare variant of dystrophic epidermolysis bullosa (DEB). The estimated prevalence is 0.1 per million live births. We present a case of a female patient with two genetic disorders, affecting skin and neural system, RDEB-I and Charcot-Marie-Tooth (CMT) disease. We present a clinical presentation, diagnostic pathway and recommendations for patients with RDEB-I. To our knowledge, the co-existence of RDEB-I and CMT in the same patient has not been reported yet.

Case report

45-year-old female patient was admitted to our department, due to blistering, painful erosions and residual scarring in the axillary, lumbosacral and inguinal area, posterior neck, scarring alopecia and anonychia. She also reported painful erosions in the oral, anal and genital mucosa. She lost all her teeth due to dental caries at the age of 20. She had mild difficulties with swallowing. She reported an aggravation of the disease during summer. Blistering was present since birth but began to localize in flexural regions in the early adulthood. Her brother also had similar skin lesions.

Based on clinical presentation with flexural distribution of blisters, subepidermal blister on histopathological examination, absent anchoring fibrils on transmission electron microscopy and mutation of gene *COL7A1* on genetic analysis, a diagnosis of RDEB-I was made. Genetic analysis also revealed mutation of gene MFN2, consistent with CMT disease. In relation to CMT, she had peripheral neuropathy and difficulties in walking. Swallowing problems could result from esophageal strictures, but she refused esophageal examination.

Skin lesions were treated symptomatically with hydrocolloid dressings and antiseptic cream.

Discussion

RDEB-I differs from other subtypes of DEB in unique distribution of skin lesions and thermo-sensitivity nature of the disease. Collagen type VII is normally present or slightly reduced in lesional skin; however, with electron microscopy, anchoring fibrils are absent, suggesting structural abnormalities of type VII collagen and impaired proper assembly into anchoring fibrils. RDEB-I is caused by specific glycine and arginine substitutions which leads to synthesis of thermo-labile type VII collagen. This might explain the predilection for flexural areas with higher skin temperature.

Clinical presentation of RDEB-I is changing with age. The transition from generalized blistering in the neonatal

period to flexural involvement is usually observed before the age of 4. The prognosis of RDEB-I patients is more favorable than in other DEB subtypes. Skin lesions improve with age, the growth and development of children are not retarded and the course of the disease is milder, with rare acral skin involvement and assumingly absent risk of squamous cell carcinoma.

Treatment of all types of inherited EB is currently only supportive with appropriate wound care, prevention of blister formation and secondary complications. Promising therapeutic options are emerging, including protein replacement and gene therapy.

Patients with RDEB-I should be advised to keep the temperature of the involved sites as low as possible, to avoid sun exposure, to minimize mechanical friction of intertriginous areas, to consume cold food and beverages. These simple recommendations can lower the severity of the disease and improve the patients' quality of life.

Discussion

Abstract N°: 957

Title: Epidemio-clinical profile of children with neurofibromatosis type 1(NF1) :20 cases

Noura Walid[1], Fatima-Zahra Elfatoiki[2], Hali Fouzia[3], Soumia Chiheb[3]

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Introduction

Neurofibromatosis type 1 (NF1) is a common genetic disease. Its diagnosis is based on precise clinical criteria, its complications are varied and unpredictable. The follow-up of children with neurofibromatosis is essential and the treatment of the disease is based on a multidisciplinary decision.

The goal of our work is to study the epidemiological and clinical profile of children with NF1

Materials and methods

We present a retrospective study of 20 cases of type 1 neurofibromatosis, collected during the pediatric dermatology consultation at the IBN ROCHD hospital center in Casablanca, over a period of 4 years, from 2018 to 2021.

Inclusion criteria: the diagnosis of definite NF1 according to the diagnostic criteria of the NIH (The national institute of health).

Results

In our series, the average age of patients at the time of diagnosis was 8 years with a sex ratio of 1.2. The reason for consultation was café-au-lait spots for 95%, the age of onset was 2 months for 40%, co-sanguinity was present in 45%. On examination all the children had TCF and lentigines and 7 children or 35% had cutaneous neurofibromas, no neurological signs were reported but 35% of the children had skeletal deformities. The paraclinical assessment revealed the presence of a periportal NF in a single patient, a plexiform NF in another patient, cerebral and medullary nodules in 2 children and Lish nodules in 4 children . School difficulties were a complication in 8 children or 40% .

Conclusion

NF1 is a common genodermatosis and can be severe. Its skin involvement represents the first warning sign, which makes the screening and follow-up of children with NF1 a priority in dermato-pediatric consultation.

Abstract N°: 1012

Title: Twins with neurofibromatis type 1: about a case

Anass Saddik[1], Fz El Fetoiki, Hayat Dehbi Skalli, Fouzia Hali, Soumiya Chiheb

[1] Department Of Dermatology And Venereology, Morocco

Introduction

Neurofibromatosis type 1 (NF1) or Von Recklinghausen disease is manifested by cutaneous café-au-lait spots and neurofibromas. It is one of the most common autosomal dominant genetic diseases. It is extremely variable in its individual manifestation. Cutaneous and neurological symptoms are the most common manifestations, but they can also affect other organs, including the eyes.

Materials and methods

Here, we present data from a pair of monozygotic twins with neurofibromatosis type 1.

Results

Case 1:

Child aged 2 years and 8 months, with no notion of consanguinity in the parents, from a twin pregnancy with psychomotor retardation. Follow-up with us for neurofibromatosis type 1, who has presented for 10 months a large café au lait spot on the level of the abdomino-sacral region extending to the right flank, a few small diffused café-au-lait spots. As well as a plexiform neurofibroma next to the lumbar spine with hyperpilosity next to it. The ophthalmological examination found 3 iris nodules of sakurai-lisch of the right eye. The cerebral MRI was without abnormality.

Case 2:

Child aged 2 years and 8 months, with no notion of consanguinity in the parents, from a twin pregnancy with psychomotor retardation. Follow-up with us for neurofibromatosis type 1, who has been presenting for 10 months with small cafe au lait spots spread over the whole body. Ophthalmological examination revealed sakurai-lisch iris nodules in the right eye.

Discussion

Neurofibromatosis type 1 (NF1) is the most common autosomal dominant neurocutaneous disease. The clinical diagnosis of NF1 is based on the presence of at least two of the following criteria: at least six café-au-lait spots, > 2 neurofibromas of any type or 1 plexiform neurofibroma, freckles in the axillary or inguinal region, a optic glioma, a characteristic bone lesion such as sphenoidal dysplasia or thinning of the cortex of the long bones with or without pseudarthrosis, and a first-degree relative with NF1. Phenotypic variability is high, ranging from a few café-au-lait spots to malignant peripheral nerve sheath tumors or severe disfigurement by plexiform neurofibromas. Members of the same family and even identical twins with NF1 often show variable expression of the disease. Molecular genetics allows the identification of pathogenic mutations in certain patients. Patient care is best done in centers specializing in neurofibromatosis.

Abstract N°: 51

Title: Novel Topical Booster Increases Minoxidil Sulfotransferase (SULT1A1) Enzyme Activity to bolster Minoxidil response.

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Introduction

Minoxidil has been used as a topical treatment for androgenetic alopecia (AGA) for more than 30 years. Unfortunately, clinical trials have demonstrated that approximately 60 to 70% of patients do not achieve hair growth following six months of treatment. Minoxidil is a pro-drug requiring conversion to minoxidil sulfate by sulfotransferase enzymes (SULT1A1). We have reported extensively that SULT1A1 activity in the outer root sheath (ORS) of the hair follicle correlates directly with topical minoxidil response. Here we present the results of a topical minoxidil adjuvant therapy designed to increase the SULT1A1 activity of the ORS.

Materials and methods

A novel topical formula was developed. Nineteen patients with clinical diagnosis of AGA were recruited for a fourteen day study. Twelve hairs from boarder of scalp with alopecia and normal scalp were plucked for sulfotransferase analysis at the first visit. Subsequently, the patients were provided the adjuvant therapy and instructed to apply 2 ml of the new minoxidil booster once daily in the same target area. After fourteen days, twelve hairs from the same location were collected again for sulfotransferase analysis.

Results

ORS sulfotransferase activity increased for 10 of 19 patients after 14 days of applying the novel formula. More importantly, subjects predicted to be non-responders to minoxidil from the assay had the most significant increase in their SUT1A1 activity. Pre-treatment, the average OD in the non-responder group was 0.2206 (95%CI: 0.1661 to 0.2750) compared to post-treatment 0.4946 (95%CI: 0.2036 to 0.7855) ($p<0.03$).

Discussion

In the reported pilot study, we demonstrate the ability of a novel topical formula to increase the activity of SULT1A1 in the outer root sheath of the hair follicle. Increasing the activity of SULT1A1 will likely increase the efficacy of topical minoxidil for the treatment of AGA.

Abstract N°: 105

Title: Patient-reported satisfaction with hair regrowth in a study of ritlecitinib in alopecia areata: results from ALLEGRO-2b/3

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Introduction

ALLEGRO Phase 2b/3 was a multicenter, randomized, double-blind, placebo-controlled trial that demonstrated statistically significantly greater scalp hair regrowth per clinician-assessed Severity of Alopecia Tool (SALT) scores with ritlecitinib compared to placebo among patients with alopecia areata (AA) (NCT03732807) over 24 weeks. Patient-reported outcomes, such as patient satisfaction, are essential to better understand the patient experience with ritlecitinib in the treatment of AA. This analysis aimed to evaluate patient-reported satisfaction with hair regrowth among patients receiving ritlecitinib and placebo groups and evaluated the correlation between clinician-assessed efficacy and patient-reported satisfaction.

Materials and methods

Patients ≥12 years old with AA and ≥50% scalp hair loss received daily ritlecitinib or placebo for 24 weeks, ± initial 4-week 200 mg loading dose: 200/50 mg, 200/30 mg, 50 mg, 30 mg, 10 mg, or placebo. Patients randomized to placebo switched to ritlecitinib 200/50mg or 50mg after Week 24; patients randomized to ritlecitinib remained on their assigned dose. The Patient Satisfaction with Hair Growth (P-Sat) measure was administered to evaluate participants' satisfaction with hair regrowth since the start of the trial in three domains: amount, quality, and overall satisfaction. The proportions of patients reporting any satisfaction were reported for all patients. Polyserial correlations between SALT scores and the three P-Sat scores at Weeks 24 and 48 were calculated for all patients combined. P values were not controlled for multiplicity.

Results

A total of 718 patients were randomized. At Week 24, the proportions of patients reporting satisfaction overall with their hair regrowth was 68%, 62%, 67%, 62%, and 36% in the 200/50 mg, 200/30 mg, 50 mg, 30 mg, and 10 mg ritlecitinib groups, respectively, vs. 23% in the placebo group. At Week 48, the corresponding proportions had increased to 73%, 67%, 73%, 71%, and 40% in the 200/50 mg, 200/30 mg, 50 mg, 30 mg, and 10 mg ritlecitinib groups, and 68% among patients in the placebo group who switched to ritlecitinib after Week 24. Similar results were observed for patient satisfaction for the amount and quality of hair regrowth. All P-Sat domain scores were strongly correlated with SALT scores at Weeks 24 (range: 0.75-0.78; p-values <0.05) and 48 (range: 0.71-0.75; p-values <0.05).

Discussion

Approximately two-thirds of patients receiving active ritlecitinib doses reported satisfaction overall and with the amount and quality of their hair regrowth at Week 24, almost three-fold greater than those who received placebo. Strong correlations observed between SALT scores and P-Sat indicate a high concordance between improvement in scalp hair growth evaluated by clinicians and the satisfaction experienced by patients.

Abstract N°: 184

Title: Physician-reported characterisation and treatment utilisation of patients with Alopecia Areata using survey data

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Introduction

Alopecia areata (AA) is a chronic immune-mediated disease with no currently approved EMA or FDA treatment. AA affects the hair of the scalp, face and/or body and can negatively impact quality of life (QoL). Information is limited on how AA is managed in clinical practice. This work aimed to describe physicians' assessment of severity and current therapeutic approach, including wig use, in patients with AA.

Materials and methods

An ongoing online survey conducted in 5 European countries, starting in November 2021, enrolled dermatologists involved in the management of AA. They completed patient record forms (PRFs) for 7 consecutive adult patients with mild (n=1), moderate (n=3), and severe (n=3) AA. Patients were included based on physician's own definition of AA severity. Selected variables from the PRFs are reported using an interim sample as of January 7th, 2022.

Results

In all, 197 physicians (Germany n=60, Spain n=60, Italy n=39, UK n=25, and France n=13) provided data on 1,354 patients with mild (n= 196), moderate (n=590), and severe AA (n=568).

When asked to choose the 3 main factors used to determine AA severity, 35% of physicians said the amount of scalp involvement, 28% hair loss extent, and 9% the amount of other body hair involvement (non-scalp hair, eyebrows [EB], and eyelashes [EL]).

Physicians' most important treatment goals were to reduce scalp hair loss (for 89% of their patients), improve QoL (50%), reduce psychological impact of AA (38%) and achieve long term AA control (29%). Reducing EB/EL hair loss were more important treatment goals for clinicians in patients with severe AA (39%/27%) than in those with moderate (21%/10%) or mild (6%/5%) AA.

Worsening condition was the most common reason given by physicians for switching to current treatment (30%, 51% and 45% of patients with mild, moderate, or severe AA respectively). Other common reasons were lack of initial efficacy in patients with mild AA (27%), and loss of response over time in patients with moderate/severe AA (22%/28%).

Topical corticosteroids were the most common treatments currently prescribed across severity (37% of patients) followed by oral (22%) and intralesional (21%) corticosteroids. Topical minoxidil (17%), and topical calcineurin inhibitors (14%) were also common across severities. Up to 25% of patients with severe AA were receiving either azathioprine, cyclosporine, or methotrexate (vs. 4% with mild and 15% with moderate AA). Topical

immunotherapies (diphenylcyclopropenone, squaric acid dibutylester, dinitrochlorobenzene and others) were currently prescribed to 15% of patients with severe AA (2% with mild, 8% with moderate AA). Oral JAK inhibitors were currently prescribed to 14% of patients with severe AA, 3% with mild and 5% with moderate AA. Respectively 6%, 2% and 11% of patients with mild, moderate, and severe AA were not currently prescribed any treatment for their AA.

In all, 38% of patients with severe AA had ever used a wig, vs. 2% with mild, and 8% with moderate AA.

Discussion

Scalp hair loss drove physicians' severity assessment and treatment goals for AA. QoL improvement and reduced psychological burden were also prioritised goals. Corticosteroids were the most common treatments while systemic use was limited. Most common reasons for treatment changes reflect the limited efficacy of current therapeutic options. Wig use was common in patients with severe AA. These findings highlight the need for effective treatments, especially for patients with severe AA.

Abstract N°: 337

Title: Nail amyloidoma: 2 case reports of a new entity

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Nail amyloidoma: 2 case reports of a new entity

Introduction

Materials and methods

Results

Amyloidosis is characterized by extracellular deposits of abnormal insoluble proteins. It can occur as a systemic (generalized) form, or as an organ-limited (localized) form, depending on the number of affected tissues. In the nail unit, only nail alterations in the context of systemic amyloidosis have been described. We report, for the first time, two cases of primary localized amyloidosis in the nail without systemic involvement. Both cases presented clinically as an asymptomatic slowly growing nodule under the distal nail bed of a toe. Histopathology was suggestive of amyloidosis and immunohistochemistry on the amyloid deposits was negative for keratins, serum amyloid-associated protein, and transthyretin in both cases. Immunoglobulin light chains immunohistochemistry was negative in one case, and inconclusive in the other. In both cases, an extensive work-up excluded systemic amyloidosis. We propose that the term nail amyloidoma could be used to name this new entity. Treatment was based on local excision, and no local recurrence or evolution to systemic amyloidosis was observed on the long-term follow-up.

Discussion

Abstract N°: 365

Title: Global Guidelines in Dermatology Mapping Project (GUIDEMAP): a systematic review and critical appraisal of alopecia areata clinical practice guidelines

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Introduction

Alopecia areata (AA) is a common non-scarring hair disorder with an estimated global prevalence of 2%; associated psychosocial morbidity; and a higher disability burden compared to psoriasis and melanoma. Clinical practice guidelines (CPGs) provide recommendations based on best available evidence that can help guide clinical practice and improve patients' outcomes. It is unclear how many CPGs are available globally to assist clinicians in the diagnosis and management of AA.

Our aim was to systematically search CPGs on AA and critically appraise their quality.

Materials and methods

We performed a literature search to identify CPGs published between October 2014 and April 2021. We reviewed the following databases: MEDLINE, Embase, National Institute for Health and Care Excellence (NICE) Evidence Search, Guidelines International Network, ECRI guidelines trust, Australian CPGs, TRIP database, and DynaMed. We supplemented the online search by manual searches for guidelines produced by dermatological societies listed under the International League for Dermatological Societies (ILDS). Three critical appraisal tools were used to evaluate quality of included CPGs: Appraisal of Guidelines for Research and Evaluation (AGREE) II instrument; Lenzer's red flags; and United States Institute of Medicine's (IOM) criteria of trustworthiness.

Results

A total of six AA CPGs from seven manuscripts were included. The majority of CPGs focused on treatment (n=4) or treatment/diagnosis (n=2); diagnosis/investigations (n=1). Five CPGs were in English, and two CPGs were only available in a non-English language which were translated for appraisal purposes. The majority of CPGs were not open access (n=4). Five out of seven guidelines were from national dermatology societies and the remaining papers (n=2) reported a CPG from an international collaboration.

All AA CPGs demonstrated low quality in several domains in the AGREE II appraisal including stakeholder

involvement, rigor of development and applicability, with the latter the lowest scoring domain in all CPGs with a mean of 29%. None of the CPGs included a methodology expert or patient involvement. The mean number of Lenzer's red flags was 3.4 (standard deviation of 1.5) out of a total of possible 8 red flags. IOM's criteria of trustworthiness demonstrated a mean of 1.6 'fully met' criteria (SD 0.8) and 2.4 'not met' criteria (SD 0.8)

Discussion

We found that the majority of current AA CPGs were developed with low methodological quality. There is an underrepresentation from Asia, South America and Africa. We encourage current and future guideline development groups to use validated checklists and tools to develop reliable and trustworthy CPGs.

Abstract N°: 433

Title: Teriflunomide associated alopecia areata - a case report

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Introduction

Alopecia areata (AA) is an immune mediated, nonscarring type of patchy hair loss. Autoimmune diseases are commonly associated with AA. Several drugs have been linked to the development of AA, although drug induced AA is an extremely rare finding. Multiple sclerosis (MS), is one of the most frequent autoimmune diseases of the central nervous system and teriflunomide can be used for its treatment. This anti-inflammatory drug selectively and reversibly inhibits the mitochondrial enzyme dihydro-orotate dehydrogenase, with consequent inhibition of de novo pyrimidine synthesis and reduced lymphocyte proliferation.

Results

A 37-year-old male with a 14-month history of MS presented at our outpatient clinic with a 6 month progressing AA on the scalp and beard - alopecia areata severity index (AASI) 17,6 . Due to MS, he was prescribed teriflunomide 7 months prior to the onset of hair loss. AA had been previously treated with mometasone lotion, which we substituted with a potent topical steroid betamethasone. However, on the follow up visit, rapid progression of AA was observed with AASI 49,4. Teriflunomide was then discontinued and the patient observed partial hair regrowth, that started three weeks after discontinuation. In order to accelerate the hair growth, adjuvant per-oral therapy with methylprednisolone at the starting dose of 40mg was administered 2 months after the discontinuation of teriflunomide, and the dose was slowly tapered and then discontinued in one month. At the follow-up examination 9 months after the discontinuation of teriflunomide, almost complete hair regrowth was observed. The patient is currently in remission.

Discussion

Teriflunomide is an immunomodulatory drug, used for treating MS, which is commonly associated with transient hair loss. In the literature, only a few cases of association between AA and MS are reported, despite both diseases share some common pathogenetic aspects. To the best of our knowledge, this is the first report of a teriflunomide related AA. Based on the Naranjo adverse drug reaction probability scale, the event scored 5 out of 13, making the possibility of the AA being an adverse event from teriflunomide "probable". Moreover, teriflunomide is the active metabolite of leflunomide and four reports of leflunomide induced AA have been published in literature. However, the exact relationship between leflunomide and AA remains elusive and controversial, as some argue that it could play a role even in its treatment through T cell modulating effects. It was in fact successfully used in recalcitrant AA. Drug related alopecia areata is probably an under-diagnosed disease, because the direct causality between hair loss and the medication is difficult to establish. Currently, there are no tests to prove this type of adverse drug reactions. Due to ethical reasons, oral rechallenge of the implicated medication in order to prove the recurrence of alopecia is usually not carried out. In conclusion, the identification teriflunomide and leflunomide as potential triggers for AA, and their discontinuation may result in remission of the disease. On the other hand, although the association between AA and MS is not defined, due to their shared pathogenetic processes, close attention to MS signs and symptoms must be given in patients affected by AA.

Abstract N°: 438

Title: Frontal fibrosing alopecia: demographic, clinical, and trichoscopic features of 20 Moroccan cases

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Introduction

Frontal fibrosing alopecia (FFA) is a lymphocytic scarring alopecia of unknown etiology that affects mainly postmenopausal women. It is responsible for progressive recession of the frontotemporal hairline and sometimes occipital hairline with inconsistent eyebrow hair loss. We aimed to investigate the demographics, clinical and trichoscopic features of FFA in the Moroccan population.

Materials and methods

We conducted a prospective study over a period of 2 years, from January 2019 to January 2020. We enrolled twenty patients, with clinical and/or histopathological diagnosis of FFA, seen at the dermatology department of Ibn Rochd University Hospital in Casablanca, Morocco. Data regarding demographics, clinical and trichoscopic findings were collected.

Results

Twenty patients with FFA met the inclusion criteria. There were all women and half of them were postmenopausal (50%). The average age of disease onset was 46,95 years old. Pruritus was the most reported symptom (80%). An emotional factor was found in 40% of the cases and 45% of the patients reported the use of traditional products to their hairs. All patients presented with frontotemporal hairline recession with parietal or occipital involvement in 70% and 50% of the cases respectively, and 16 patients (80%) experienced eyebrow loss. Facial micropapules were found in 9 patients (45%), followed by patchy hyperpigmentation in 6 patients (30%) and follicular hyperpigmentation in 4 patients (20%).

The majority of patients presented mild FFA (grades I and II), with a recession of less than 3 cm of the frontotemporal hairline (85%). The most frequent trichoscopic findings were perifollicular erythema (80%) and follicular hyperkeratosis (70%), followed by decreased or absence of vellus hairs (60%), lonely hairs (45%), perifollicular blue-gray pigmentation (35%), perifollicular brownish pigmentation (30%) and loss or absence of follicular openings (30%). Tufted hairs and white patches of scarring alopecia were found in 5 (25%) and 4 (20%) patients, respectively.

Conclusion

FFA is increasingly widely described in premenopausal women. Our study, may support the role of cosmetic products or emotional factors in the physiopathology of FFA. Trichoscopy seems a valuable tool in the diagnosis of AFF. Perifollicular erythema, follicular hyperkeratosis and decreased of absence of vellus hairs are easily identified and are very suggestive of the diagnosis.

Abstract N°: 440

Title: Efficacy and safety of Methotrexate combined with oral mini-pulses corticosteroid in universal alopecia areata: a prospective study

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Introduction

The treatment of chronic universal alopecia areata is difficult. Methotrexate and corticosteroids have proven to be effective in less extensive cases and may represent an effective therapeutic alternative when combined. The aim of this study is to evaluate the efficacy and safety of the combination of methotrexate with oral mini-pulses corticosteroid in patients with chronic universal alopecia areata.

Materials and methods

This is a prospective monocentric study conducted at the dermatological department of Ibn Rochd University Hospital in Casablanca over a period of 18 months (between November 2019 and April 2021) enrolling seven patients with universal alopecia areata. Methotrexate was administered at 15 mg per week (n=3) and 20 mg per week (n=4) combined with oral mini-pulses of prednisone 1 mg/kg/d every two weekends. Clinical and dermoscopic evaluations were performed at M1, M3, M6, M12 and M18.

Results

A total of 7 patients were collected, including 5 women and 2 men. The average age of the patients was 27.3 years (ranging from 20 to 48 years). The average duration of the disease was 5.7 years. An emotional shock was found in 4 cases. None of the patients had responded to conventional treatments before initiating the protocol.

Two patients had hair and body hair regrowth (eyebrows, pubic area and armpits), one patient had hair regrowth, and 4 patients had no regrowth. Regrowth was visible after a median of 2 months, but was not complete at 18 months. At the end of the study, the median cumulative dose of methotrexate was 1.4 g. Relapse was observed upon discontinuation of treatment in one patient who had initially achieved regrowth. Reported side effects were arthralgia and amenorrhea (n=1), diarrhea and headache (n=2), weight gain (n=1), and temporary transaminase elevation (n=1).

Discussion

Few studies have treated the combination of methotrexate and corticosteroid therapy. The reported protocols combined weekly injections of methotrexate with boluses of methylprednisolone 500 mg/d for 3 consecutive days. Our protocol has never been reported before.

The added value of corticosteroid therapy is controversial in the literature, and its prescription modalities remains to be defined. Our results remain less satisfactory than those reported in the literature, which could be related to the chronicity and the severity of the disease in our patients (universal versus patchy or total alopecia). Indeed, patients with yellow follicles on dermoscopy showing cicatricial alopecia areata presented a therapeutic failure. In this sense, prognostic factors should be established: type of alopecia, severity and chronicity. Also, the relapse

observed after stopping the treatment in one patient suggests that this protocol could be suspensive.

Conclusion

The combination of methotrexate with oral mini-pulses corticosteroid could be an effective therapeutic alternative in the treatment of universal alopecia areata; however, larger studies are needed to confirm this finding and to specify the modalities of its prescription.

Abstract N°: 513

Title: Nail involvement in pemphigus : Experience of IBN Rochd university hospital

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Introduction

Pemphigus is a chronic, autoimmune, cutaneous-mucosal bullous disease that can be potentially fatal. Nail involvement has been reported in a few series and seems to be underestimated. We aim to analyze the frequency and clinical feature of nail changes in all types of pemphigus through this case series.

Materials and methods

A retrospective study was performed in the dermatology department of Casablanca over a period of 16 years (2006 to 2021) including all patients hospitalized for pemphigus. The diagnosis of pemphigus was based on clinical and anatomopathological data.

Results

We collected 167 cases of pemphigus of which 60 had nail involvement. After eliminating fungal origin, 44 patients were selected in our study. There were 20 men and 24 women. The average age was 53.25 years. Nail lesions were found in pemphigus vulgaris 21 (47.7%), foliaceous 12 (27.2%), vegetative 2 (4.5%), seborrheic 3 (6.8%), gestational 2 (4.5%), paraneoplastic 2 (4.5%), herpetiform 2 (4.5%).

The nail lesions were polymorphous in our patients with a number of 66 lesions: Onycholysis 15 (21.5%) Pachyonychia 17 (25%) Paronychia 14 (25%) Onychomadesis 7 (10.7%) Beau's lines 4 (7.1%) Periungual ampulla 4 (7.1%) Subungual hemorrhage 5 (7.5%)

Two cases of nail destruction were found in patients with vegetative pemphigus. Involvement of the fingernails was noted in 20 cases (45.4%) with predominance of the thumb and index finger. Involvement of the toes was found in 11 cases (25%) with predominance of the big toe. The disease was bilateral in 15 cases (34%). Patients were treated mainly with oral corticosteroid therapy (90.9%) and complete remission of the nail involvement was observed in 27 patients (26.4%) after 6 months of treatment.

Discussion

Nail lesions in pemphigus are caused by the blisters in the nail bed or matrix or by the acantholysis of the lateral nail fold as part of the autoimmune process. The most reported forms are paronychia and onychomadesis, as in our patients. Beau's lines are an interesting sign because their distance from the proximal nail fold is correlated with the time from the beginning of the disease, and their number indicates the number of ulterior sites. Although nail involvement is often reported with pemphigus vulgaris, in our study the damage included all types of pemphigus. In our study, the most injured nails were the first two, due to the higher risk of trauma. Topical treatment of nail disorders in pemphigus patients is ineffective. Systemic treatment is necessary as was the case in our patients. Nail recovery is usually complete, leaving no permanent defects

Conclusion: Nail disorder in patients suffering from pemphigus should be systematically reported and

recognized by physicians. These signs show cumulative inflammation of the nail following a long period of disease evolution. Nail involvement may precede, be concomitant with, or follow the mucocutaneous lesions of pemphigus and be a sign of disease severity or relapse.

Abstract N°: 578

Title: Platelet Rich Plasma (PRP): A Comprehensive Review

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Introduction

Platelet-Rich Plasma (PRP) is an autologous therapy rich in platelets, growth factors, clotting factors, and leukocytes. PRP offers anti-inflammatory and tissue regenerative effects through a variety of mechanisms of action including angiogenesis, amplification of fibrin formation, and cell differentiation and proliferation. Although the use of PRP has been studied in a wide range of dermatologic, cosmetic, and orthopedic conditions, the efficacy is not well understood. Our objective is to review the use and effectiveness of PRP on dermatologic diseases and cosmetic conditions.

Materials and methods

A literature search of clinical trials, review articles, and meta-analyses was performed through PubMed using the following key words: platelet-rich plasma, PRP, platelet gel, and platelet fibrin. A total of 45 articles published between January 2000 and November 2021 written in English were reviewed.

Results

Treatment with intradermal PRP injections had improvement in hair density in androgenic alopecia, while co-treatment with CO2 laser had improvement in both alopecia areata and vitiligo. Reports of successful treatment have been described in lichen planopilaris, lichen striatus, lichen planus, and trachyonychia, although these conditions have not been studied in controlled trials. Improvement in psoriasis disease severity was described after both PRP monotherapy and combination treatment with methotrexate. PRP was also found to increase dermal collagen proliferation and have higher patient self-assessment scores of photoaging and fine lines. Additional benefit from PRP has been seen in wound healing, orthopedic conditions and injuries, periodontal disease, and embryonic implantation.

Discussion

PRP can serve as a safe and frequently effective treatment option for patients with various types of hair loss, vitiligo, psoriasis, non-healing wounds, photoaging, and acne scars. Patient satisfaction was high with patient perceived benefit from treatment usually present. Further areas of research include standardizing PRP protocols of administration and uncovering possible genetic or environmental influences on growth factor expression.

Abstract N°: 726

Title: Induction of alopecia areata after covid-19 vaccination

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Introduction

The COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus (SARS-CoV-2) has had a catastrophic impact on public health. The FDA responded by approving Pfizer BioNTech to use in people ages 16 and older. Despite overall safety, some side effects have been reported. Acute telogen effluvium post COVID-19 infection cases have been reported with a median onset of 45 days after positive testing results and resolution within 2 months for mild-to-moderate cases[1]. A search for reported alopecia areata cases after COVID-19 vaccination in the Centers for Disease Control and Prevention Vaccine Adverse Event Report System (VAERS) database list 111 reported cases, 72/111 (70.6%) from Pfizer and 39/111 (38.25%) from Moderna[2]. Scollen et al. reported a series of nine cases of alopecia areata after SARS-CoV-2 vaccination within the United States in patients with personal or family history of autoimmune disease[3].We present a case of a patient with new onset of severe alopecia areata (AA) following injection of the BNT162b2 vaccine.

Results

In March 2021, a 57-year-old female with type 1 diabetes and psoriasis attended our outpatient clinic with a chief complaint of patchy hair loss following COVID-19 vaccination. The patchy hair loss started on the bitemporal and occipital scalp the day following her first dose of the BNT162b2 vaccine (Pfizer–BioNTech). The patches progressed to 50% scalp involvement despite initial treatment of systemic triamcinolone 40mg/cc injections. 95% of regrowth was observed within eight months of initial visit with mini-pulse systemic dexamethasone, clobetasol solution, and oral minoxidil.

Discussion

The time of onset of AA suggests an etiological relationship with COVID-19 vaccination. We have encountered two more patients with AA relapse after COVID-19 vaccination. Though AA pathogenesis is unknown, it is largely suggested that loss of follicular immune privilege (IP) is key. The combination of autoreactive CD8+ T-cells infiltration against melanogenically-active autoantigens, hair bulb IP collapse, and upregulated interferon(IFN)-γ signaling leads to the cytotoxic follicular assault and the resultant patchy hair loss seen in AA. COVID-19 and its mRNA vaccines may induce AA by activating IFN-mediated pathway, stimulating major histocompatibility complex (MHC)-1 expression on the proximal outer root sheath and NK-cell receptors (NKG2D) in the hair bulb of anagen HF causing IP collapse. Other interferon-mediated hair loss diseases include lichen planopilaris (LPP) and frontal fibrosing alopecia (FFA) which also have shown relapse association with the COVID-19 vaccination5.

Flares among patients with rheumatoid arthritis and psoriasis after COVID-19 mRNA vaccination have been documented[6]. As a result, patients with autoimmune disease exhibit greater vaccination hesitancy due to fear of worsening of their symptoms. It is important for physicians to continue educating eligible patients the importance of COVID-19 vaccination. However, there is also a need for additional large-scale studies to document effect of

COVID-19 and vaccination among patients with autoimmune comorbidities.

Though a causal relationship between COVID-19 vaccination and AA cannot be confirmed, we suspect a strong correlation by chronological association. Physicians should encourage vaccination in eligible populations while thoroughly educating patients with autoimmune disease of the safety and efficacy of available vaccines.

Abstract N°: 843

Title: Candida albicans diffuse onychomycosis revealing an auto-immune polyendocrinopathy candidiasis ectodermal dystrophy syndrome (APECED syndrome)

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Introduction

Autoimmune polyendocrinopathy candidiasis ectodermal dystrophy (APECED) ,also known as autoimmune polyendocrine syndrome type 1 (APS-1), is an autosomal recessive disease characterized by the clinical triad of chronic mucocutaneous candidiasis (CMC), hypoparathyroidism, and adrenal insufficiency.We report a rare case of APECED revealed by Candida albicans diffuse onychomycosis.

Observation

A 6 year old girl , born to consanguineous parents, was seen in consultation for nail lesions of the 2 hands evolving since the age of 2 years old. On physical examination, there were an onychodystrophy with a xanthonychia and pachyonychia of the nails of both hands. Oral mucosa physical examination showed a white, soft, slightly elevated plaque on the tongue. Microscopy and fungal culture on nails and oral specimens isolated candida albicans . A CMC was suspected. Genetic investigations revealed a mutation in the autoimmune regulator gene AIRE leading to the diagnosis of APECED syndrome . the patient was treated by oral and topic fluconazole with clinical improvment.

Discussion

APECED syndrome is caused by mutations in the Autoimmune Regulator (AIRE) gene, which impair the thymic negative selection of self-reactive T-cells and underlie the development of autoimmunity that targets multiple endocrine and non-endocrine tissues. CMC, defined as chronic intractable infection of skin, nails, and mucous membrane with Candida is the 'signature' APECED infection affecting 80-90% of patients. In our case, profuse Candida albicans onychomycosis revealed this rare genetic disease.

Abstract N°: 863

Title: Clinico Epidemiological Profile of Childhood Alopecia Areata : A retrospective study from a tertiary care center in Morocco

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Introduction

Alopecia areata is a common autoimmune disease that significantly affects quality of life. Significant variations in the clinical presentation of AA have been observed, ranging from small, well-circumscribed patches of hair loss to a complete absence of body and scalp hair.

The objective of this work was to study the epidemiological and clinical characteristics as well as the management of alopecia areata in children in the dermatology department of the Ibn Rochd university hospital center in Casablanca.

Materials and methods

A retrospective descriptive study between January 2011 and December 2021 including all cases of alopecia areata in patients under the age of 14 seen in the dermatology department of the CHU Ibn Rochd in Casablanca.

Results

A total of 103 patients were identified. The sex ratio was 0.94 (50 boys for 53 girls). The average age was 8.2 years with extremes ranging from1 year and a half to 14 years. The mean age at onset was 7.2 years. The average duration of the evolution was 18.6 months (15 days - 10 years). A personal history of atopy (allergic rhinitis, asthma) was found in 9 patients (8.7%), trisomy 21 in 7 patients (6.7%), diabetes in 2 patients (2%), thyroid disease in 2 patients (2%), congenital heart disease in 2 patients (2%). Epilepsy, primary immunodeficiency and celiac disease in 1 patient each. The notion of consanguinity was reported in 2 patients (2%). Two patients had a family history of alopecia areata.

A probable triggering factor was found in 11 patients (10.5%); stress in 6 cases (5.8%), including 2 cases coinciding with confinement due to Covid 19, anxiety in 4 patients (3.8%) and an emotional shock in 1 case. Two patients had trichotillomania associated with primary enuresis in one of them.

Clinically, the form of alopecia areata in multiple plaques was predominant in 34 patients (33%) of which 10 cases had associated involvement of the eyelashes and eyebrows. Ten patients (9.7%) had a single plaque, including 2 cases who also had eyelash and eyebrow involvement. The severe forms were represented by universal alopecia in 21 patients (20.3%), alopecia totalis in 11 patients (10.6%) and alopecia ophiasis in 3 patients (3%). Nail involvement was observed in 6 patients (5.8%), trachyonychia in 4 cases and pachyonychia with paronychia in 2 patients.

Topical corticosteroids associated with minoxidil in more than half of our patients (57%). Strong topical corticosteroids alone were prescribed in 25 patients (24%). The combination topical corticosteroids, minoxidil and oral corticosteroid therapy in 12 patients (11.6%). Oral corticosteroid therapy alone in 4 cases and associated with minoxidil in 1 patient. Methotrexate was used in 4 patients (3.8%).

The evolution was favorable in 22 patients (21.3%) of which 4 cases had a complete regrowth. An absence of regrowth was noted in 9 patients (8.7%) and minimal regrowth was observed in 12 patients (11.6%). The remaining patients (46%) were lost to follow-up after treatment initiation.

Discussion

In our study, we notice the frequency of severe forms with a capricious evolution.

Alopecia areata is the third most common skin condition in the pediatric population. A thorough evaluation for other autoimmune diseases is essential.

Its management is based on topical treatments in limited forms and systemic treatments in severe forms.

Alopecia areata has a huge impact on the psychological well-being of the child and his family, which makes its management even more difficult.

Abstract N°: 892

Title: Hair structure and microelement content changes associated with the intense hair loss in patients after COVID-19

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Introduction. Currently, an upward trend is observed in the number of patients with hair diseases, ranging from intense hair loss to various clinical forms of alopecia. The hypothesis of the influence of exogenous and endogenous factors on the functional status of hair, especially essential and toxic ME (microelements), has attracted the attention of numerous researchers.

In the view of recent events in the world, namely the pandemic, the problem of hair loss in people who have suffered a Coronavirus infection is becoming increasingly frequent in the practice of dermatologists. The connection between the hair loss and COVID-19 still needs to be investigated.

The aim of the study was to investigate the ME content in COVID-19 patients complaining of the intense hair loss and to track the hair structural changes.

Materials and methods. A total of 25 patients with the history of heavy hair loss and 15 healthy subjects were examined. The hair structure examination was done using scanning electron microscopy (SEM) technique. The ME content in hair was determined through quantitative and qualitative emission spectroscopic analysis.

Results. Among the subjects 17 female and 8 male patients with the intense hair loss following coronavirus infection were examined. Patients complained of excessive hair loss about 2 months after the disease. Abrupt hair loss was noted after washing the hairy part of the head and combing hair.

SEM has revealed several types of structural changes in the root structure, namely, with remnants of root sheaths in 12 (48%) patients; atrophic, without root sheaths in 8 (32%); with root sheaths in 5 (20%). Protrusions and depressions were found in the stem structure.

Characterizing quantitative parameters, we have established the difference between the hair ME content in COVID-19 patients suffering the intense hair loss and that of the norm. Statistically probable is a significant ($p<0.05$), in comparison with the values in the control group, increase in magnesium content (up to 30.7±11,81 μg/g), chromium (to 1.54±0.48 μg/g), manganese (to 2.9±0.9 μg/g), iron (to 11.3±3.64 μg/g), copper (to 3.71±1.15 μg/g), barium (to 6, 7±2.6 μg/g) and lead (to 3.11+-0.9 μg/g).

The content of the studied ME in hair statistically significantly differs from parameters found in the control group, which may testify to the combined toxic effect and provoke the increased hair loss.

Discussion. The intense hair loss in COVID-19 patients is associated with a significant imbalance of ME. Changes in the structural and spectral composition of hair indicate an atrophic nature of alopecia. The above changes justify the expediency of a detailed examination of such patients followed by the prescription of appropriate pathogenetic therapy.

EADV SYMPOSIUM 2022
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Abstract N°: 982

Title: Vellus facial hair involvement in frontal fibrosing alopecia

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> **Introduction**
>
> Vellus hair damage in frontal fibrosing alopecia (FFA) may be accompanied by red dots in the eyebrows and in the glabellar area, on the bridge of the nose, on the forehead and cheeks (Porriño-Bustamante ML, et al., 2021). Facial erythema, diffuse or localised in the glabellar area, is described as part of FFA (López-Pestaña A. et al.,2015, Pirmez R. et al., 2014).
>
> In some cases facial erythema is associated with follicular hyperkeratosis (Pirmez R. et al., 2014).

Aside from red dots the involvement of face vellus hair also manifests itself in appearance of non-inflammatory papules on the skin of the temples, cheeks and chin in 14-18% patients (Bomar L, McMichael A., 2017; Kerkemeyer KLS, et al., 2021).

The aim of the study was to estimate the prevalence of various variants of facial vellus hair involvement if FFA patients.

Material and Methods

We observed 129 patients with lichen planopilaris from 2013 to 2022. FFA was diagnosed in 28 (21,7%) patients (27 women and 1 man) from 129 total. The association of the classic form of lichen planopilaris with FFA was observed in 3 (2,3%) patients. The diagnosis of FFA was established on the basis of clinical presentation, trichoscopy and histology. We evaluated the clinical features and the prevalence of facial vellus hair lesions in FFA.

Results

Involvement of the face vellus hair in FFA patients presented with red dots in the glabellar area and on the eyebrows in 25% and 10% patients, respectively. Non-inflammatory facial papules were observed in 40% FFA patients. We observed diffuse facial erythema in one patient, who also had red dots on the forehead, eyebrows, glabellar region and cheeks – the characteristic presentation was regarded as manifestation of rosacea. Facial erythema intensity and frontotemporal hairline perifollicular desquamation severity decreased with isotretinoin 20 mg per day for 2 months prescription. Currently, the patient carries on treatment

Discussion

A characteristic feature of FFA is a combination of damage to the terminal and vellus hairs. On the face non-inflammatory papules may be accompanied by localised or diffuse red dots, which may have good response to systemic retinoid therapy

Abstract N°: 1086

Title: Red scalp disease: Rosacea of the scalp

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Introduction

Red scalp disease is a frequent complaint that alterates patient quality of live because of pruritus, and its treatment is challenging. Herein we report a case of red scalp disease evolving for 5 years with clinical and dermoscopic features of rosacea, and its response to oral doxycycline.

Materials and methods

Results

A 60-year-old male with no medical history, presented a red and itchy scalp since 5 years. He was treated by oral antihistamines, antiseborrheic shampoos and topical corticosteroid applications without success. He reported flushing. Clinical examination revealed temporal red scalp and multiples telangiectasia of the face. Trichoscopy showed temporal erythema and telangiectasia with rare follicular papules. Ocular examination didn't find lesions related to rosacea. The patient was treated by oral doxycycline at a dosage of 100mg dayly for 3 months. The improvement of pruritus was noticed, and the patient was refered for vascular laser for telangietasia.

Discussion

Red scalp disease was first reported by Thestrup-Pedersen and Hjorth in 1987 who described diffuse itchy and burning scalp erythema and its non-response to any therapy including topical steroids or antiseborrhoeic therapy. Dilated and tortuous vessels are typically found like in Rosacea which is caracterised by persistent erythema and telangiectasia, in combination with episodes of swelling, papules and pustules. Pathogenetic speculations include a photodamaged skin. Another hypothesis is a perifollicular inflammation and increased expression of the neuropeptide substance P in affected hair follicles. These findings suggest a connection between sensory irritation and cutaneous vascular reactivity.

On the basis of our observation, we suggest red scalp disease accompanied with scalp discomfort may be a rosacea-like dermatosis of the scalp.

Abstract N°: 127

Title: Erythema multiforme associated with cytomegalovirus primoinfection in an immunocompetent patient

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Introduction

Erythema multiforme (EM) is an acute, self-limiting, immune-mediated hypersensitivity reaction, that presents with characteristic cutaneous and mucosal lesions. Several factors have been suggested to be associated with the development of EM, such as infections (90%), particularly herpes simplex virus (HSV) and *Mycoplasma pneumoniae*, medication use and autoimmune disease.

Materials and methods

We report a case of EM associated with cytomegalovirus (CMV) primoinfection in an immunocompetent patient.

Results

An 18-year-old healthy boy was observed in our Dermatology Clinic due to an asymptomatic disseminated dermatosis characterized by multiple erythematous target lesions, some of which with central vesicles and bullae, resembling a "bull's eye", located on the trunk and limbs. In addition, the patient presented erosions of the lips. One month earlier, the patient had a sore throat associated with fever, diagnosed as viral pharyngitis. He denied introduction of new drugs. The skin biopsy was compatible with EM. Among the infectious serologies, IgM antibody titers against CMV were positive, whereas IgG antibody values were negative. HSV polymerase chain reaction test performed on the base of lip erosions was negative. Laboratory evaluation was otherwise unremarkable. The diagnosis of EM major induced by CMV primoinfection was established, and the patient was treated with prednisolone 40 mg/day (0.75mg/Kg/day) for 5 days, with complete clinical resolution in 2 weeks.

Discussion

CMV infection is usually acquired in childhood and in the majority of cases remains asymptomatic. Cutaneous manifestations of this infection, which are rare and nonspecific, have been reported mostly in patients under immunosuppressed conditions, including AIDS, malignant neoplasms, and immunosuppression after organ transplantation.

Like a very few reports in the literature, our case highlights the need to consider CMV infection as a potential cause of EM, including in immunocompetent individuals, particularly when the most frequent etiologies were ruled out (HSV and *Mycoplasma pneumoniae*).

Abstract N°: 134

Title: Combination therapy with intralesional injection of the Measles-Mumps-Rubella vaccine and cimetidine versus intralesional bleomycin and cimetidine in palmoplantar warts

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Introduction

Despite the availability of multiple treatment options, palmoplantar warts are often recurrent and resistant to treatment. The aim of this study was to compare the efficacy of combination therapy with Measles-Mumps-Rubella (MMR) vaccine and *cimetidine* versus intralesional bleomycin and cimetidine in palmoplantar warts.

Materials and methods

In this randomized, controlled clinical trial study, 48 patients with resistant-to-therapy palmoplantar warts were recruited. The first group (24 patients) received intralesional MMR vaccine and oral cimetidine 30 mg/kg per day and the second group (24 patients) received intralesional bleomycin (1 mg/ml) and oral cimetidine 30 mg/kg per day. The treatments were repeated at 2-week intervals for two months unless the cure achieved at earlier time. Response was assessed at each visit and at 12th week.

Results

Complete clearance was observed in 83.3% (20/24) of the patients in the MMR group and 87.5% (21/24) in the bleomycin group (P=0.36) at twelve weeks follow up. Recurrence was not observed in any of the completely cured patients at 6 months' follow-up.

Discussion

Both combination treatment options seems to be effective and promising in the treatment of palmoplantar warts.

Abstract N°: 153

Title: Comparison between lymecycline with multidrug therapy and standard multidrug regimen (WHO-MDT) in the treatment of multibacillary leprosy patients: A retrospective cohort study

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Introduction

Hansen's disease or leprosy is a chronic, infectious disease that has locally and globally afflicted all populations. Despite standard treatment with WHO-MDT, the incidence of drug resistance has been an increasingly prevalent global problem in leprosy management. This paper aims to perform a retrospective cohort study on the use of lymecycline as an adjunct drug to WHO-MDT and as a possible treatment option in resistant cases of leprosy.

Materials and methods

The research is a retrospective cohort study in the Department of Dermatology of Jose R. Reyes Memorial Medical Center from January 2011 to July 2021. Pre- and post-treatment bacillary index, presence of new lesions, nerve function impairment, and leprosy reactions are other parameters that were obtained through chart review.

Results

The results show a significant difference in BI in both groups at the end of the treatment. However, a higher reduction in BI was noted for the lymecycline group. For the group that took WHO-MDT alone, BI decreased by 0.7 ($P<0.001$) whereas patients who took lymecycline and WHO-MDT had a BI difference of 3 ($P<0.001$) upon completion of treatment. A significant decrease in the recurrence of lesions ($P=0.006$) and nerve function impairment ($P=0.038$) was also noted in the lymecycline group whereas there was no significant difference in leprosy reactions between the two groups.

Discussion

Lymecycline 600 mg daily for 3 months can be used as an adjunct medication in cases of leprosy resistance and treatment failure among multibacillary patients. Lymecycline significantly reduces bacillary index, recurrence of skin lesions and nerve function impairment through its possible immunomodulatory, antiapoptotic, and neuroprotective effects.

Abstract N°: 171

Title: Co-occurence of active cutaneous leishmaniasis and squamous cell carcinoma.

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Introduction

Cutaneous Leishmaniasis is a great simulator, it can present as ulcerative and nodular lesions mimicking a squamous cell carcinoma. However, its ability to clinically simulate different diseases can lead to confusion.

Materials and methods

We report the case of an ulcerative lesion with nodular borders revealing both squamous cell carcinoma and cutaneous leishmaniasis.

Results

An 83-year-old patient, with a history of chronic sun exposure, was referred to our department for an ulcerative and nodular lesion of the first interdigital space of the right hand, that had been evolving 1 year prior to his consultation.

Clinical examination showed a 2.5 cm lesion with ulcerated borders, covered by yellow adherent crusts, located in the first right interdigital space (Figure 1).

Dermoscopic examination revealed a milky pink background, yellow tears, ulceration and arborizing vascularisation (Figure 2). Physical examination didn't find any palpable lymph nodes.

Skin smears for leishmaniasis bodies were positive in 2 different samples. A skin biopsy was performed, showing a vegetative dermatitis with granulomatous appearance and reactive pseudoepitheliomatous hyperplasia in favor of a chronic granulomatous leishmaniasis.

Intra-lesional injections of Glucanthime have been administrated. As the patient did not improve after the third injection, an excision of the lesion was indicated. The histological study of the excisional specimen was in favor of a well-differentiated keratinizing and infiltrating squamous cell carcinoma with healthy margins.

Discussion

Cutaneous leishmaniasis is a parasitic infection with a cutaneous tropism, linked to the inoculation of leishmania transmitted by some types of phlebotomine sandflies.

Because of its varied clinical expression, several cases of leishmaniasis mimicking squamous cell carcinoma have been reported in the literature. Some other case reports have described the occurrence of squamous cell carcinoma late in the course of old leishmaniasis lesions . However, the coexistence of active cutaneous

leishmaniasis and squamous cell carcinoma has been rarely described. For instance, a case of simultaneous occurrence of squamous cell carcinoma and conjunctival leishmaniasis in an HIV-positive patient has been reported.

In our case, this coexistence can be explained by the development of squamous cell carcinoma on a neglected leishmaniasis lesion, this hypothesis is supported by the chronic evolution of the ulceration. Less probably, It may correspond to a random occurrence of squamous cell carcinoma and a sandfly bite in the same area.

It seems also interesting to underline the particularity of the dermoscopic aspect in our case, associating at the same time specific signs of leishmaniasis like the yellow tear appearance, and the atypical tree trunk vascularization found in the squamous cell carcinoma.

Conclusion :

Cutaneous leishmaniasis and squamous cell carcinoma may have confusing clinical similarities. Good dermoscopic analysis can guide the diagnosis. Extensive exploration is necessary to avoid misdiagnosis.

Figures :

Figure 1 : Clinical appearance showing a raised erythematous lesion with ulcerated borders, covered by yellow crusts, located in the first right interdigital space.

Figure 2 : Dermoscopic image showing the coexistence of signs of leishmaniasis (yellow tears) and squamous cell carcinoma (milky pink background, ulceration and tree trunk vascularization).

Figure 1 :

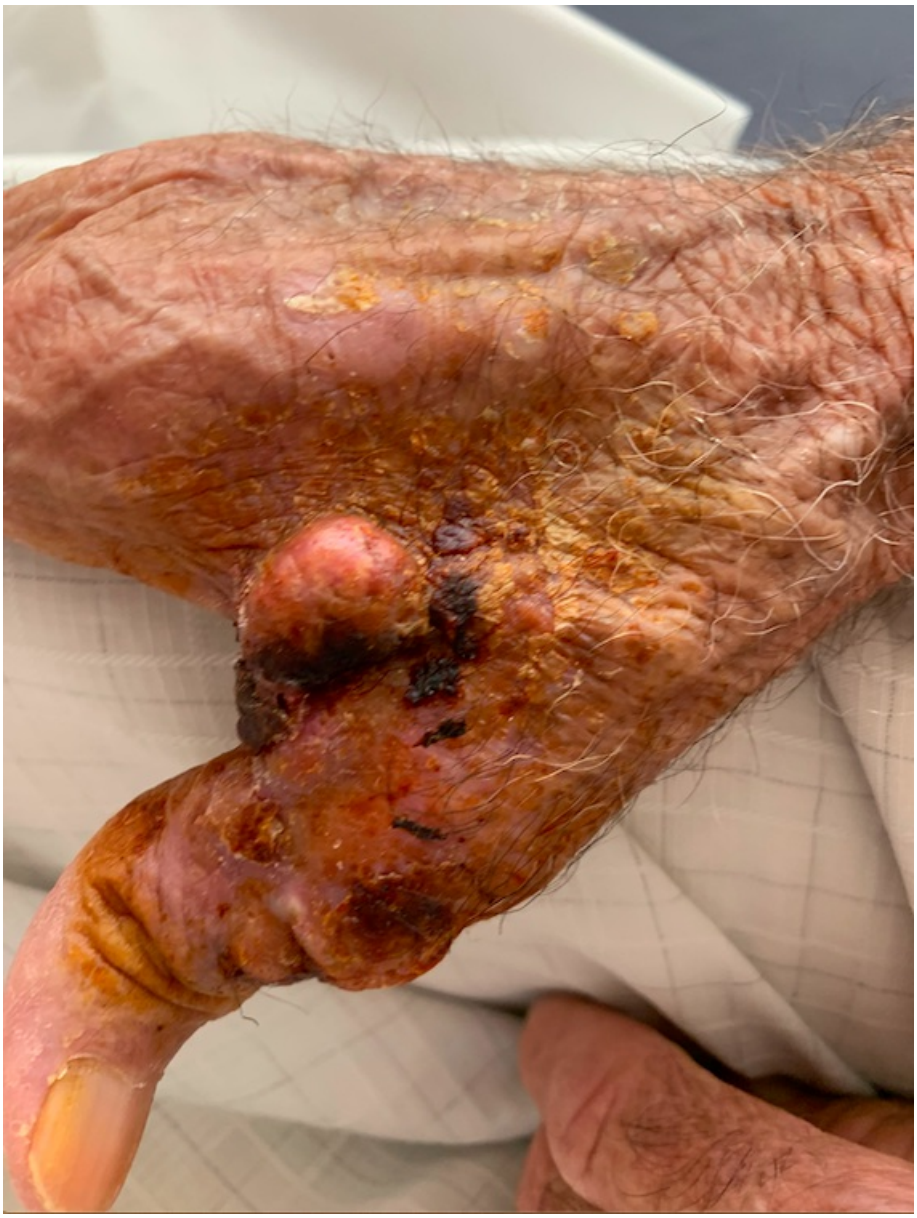
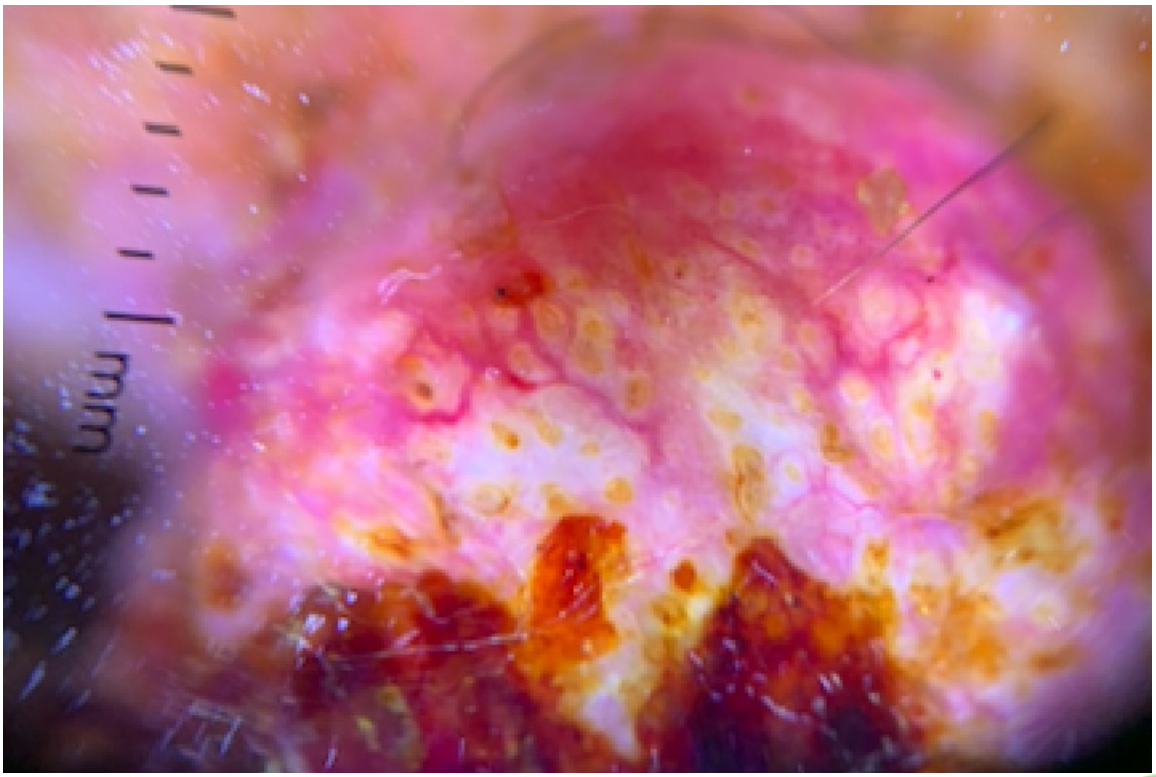


Figure 2 :



Abstract N°: 252

Title: Hansen's disease in a 10-year-old boy with T-cell lymphoblastic lymphoma

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Introduction

A major cause of morbidity and mortality, patients with hematologic neoplasms can suffer from infections as a complication of the underlying malignancy or by the treatments being done.

Materials and methods

This is a case report of a T-cell lymphoblastic lymphoma with lepromatous type of Hansen's disease.

Results

A 10-year-old boy developed multiple erythematous papules and plaques with associated hypoesthesia and occasional tenderness while undergoing chemotherapy. While on remission from his T-cell lymphoblastic lymphoma, he presented with focal seizures and painful right dorsal wrist with papal hand deformity. Investigations revealed nodular granulomatous dermatitis on biopsy, numerous acid-fast bacilli on slit-skin smear, a clear PET scan and CSF cytology. The case was diagnosed with Hansen's disease multibacillary, lepromatous (MB-LL) with type 1 lepra reaction. Multidrug therapy with prednisone was started with noted resolution of seizures and fainting of lesions.

Discussion

The emergence of leprosy in patients with cutaneous T-cell lymphoma have been reported. Likewise, the development of lymphoma in patients with established leprosy has also been documented, but leprosy in patients with precursor T-cell lymphoblastic lymphoma is a rare occurrence whether in adult or pediatric population. Whether leprosy predisposes to, or is merely associated with malignancies, is a controversial issue which necessitates further study.

Abstract N°: 319

Title: Epidemio-clinical and therapeutic particularities of cutaneous Leishmaniasis: a series of 1200 cases.

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Introduction

Cutaneous leishmaniasis (LC) is a common zoonosis in Tunisia. The objective of our work was to describe the particularities of this disease.

Materials and methods

A retrospective study collecting all cases of confirmed CL followed over a period of 4 years (January 2017–April 2021).

Results

1200 patients were included with a sex ratio M/F of 1.02. The mean age at diagnosis was 16 years (1 month-98 years). 89% of patients had a stay in an endemic area with a winter predominance noted in 63% of cases. The average consultation time was 57 days. The clinical appearance was: crusty nodule-ulcer (64.8%), papulo-nodule (13.4%), sporotrichoid form (10%), ulceration (8.4%), erysipelatoid form (5.3%), lipoid form (4.6%), erythematous plaque (1.6%), kaposiform form (0.3%), and mycetoma-like (0.08%).Multiple lesions were noted in 67% of cases with an average size of 4 cm. The limbs represented the most frequent location (72.9%) followed by the face and neck (23.56%), covered areas [breasts, buttocks, genitals] (3.2%) and scalp (0.34%). Two hundred and sixty-five patients were hospitalized, 86% of whom received glucantime IM. Adverse effects of glucantime® were noted in 90 patients of the type of stibiointolerance (17.5%) and stibiointoxication (22%). The evolution was marked by the disinfiltration of the lesions (71.9%), persistence of the lesions (1.3%) and recurrence (0.1%).

Discussion

Our study is the largest monocentric series of LC in a region endemic to leishmania major. The late consultation period, joined to the other Tunisian series, testifies to the slowly insidious and indolent character. Our series is characterized by the clinical polymorphism of the lesions with unusual localizations. Glucantime remains the reference treatment which may be responsible for adverse effects of varying severity.

Abstract N°: 356

Title: Immunoreactivity of patients with genital herpes underwent Covid-19

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Introduction

The questions of studying the role of organism's defense systems in pathogenesis and clinical course of herpes infection in patients suffering from Covid-19 require deep research and stipulate the necessity to improve methods of therapy.

Materials and methods

We have studied parameters of immune and interferon (IFN) status in persons infected with recurrent genital herpes (RGH) having Covid-19 during exacerbation of the disease.

Results

The study showed that these patients were characterized by changes in immune status, defined as secondary immunological insufficiency. Decrease of relative and absolute contents of CD3+, CD4+, CD4+/CD8+ index, phagocytic function of neutrophils testified to the general depression of immunological protection, which intensity was different in patients with various clinical forms of RGH. Thus, it was shown that the greater the frequency of relapses in patients with RGH, the more the adaptive capacity of the immune system decreases, transiently developing into a persistent immunological insufficiency. The study of IFN status showed that the concentration of serum IFN in patients of different groups decreased according to the severity of the course of the viral process. At the same time, the average α- and γ-IFN values in patients with different clinical forms of RGH were significantly lower than the corresponding values in the norm. On the one hand, these results suggest potential capabilities of IFN system in subjects with RGH who had undergone Covid-19 to perform their protective and regulatory functions, and on the other hand, reduced capacity of leukocytes to produce α - IFN and γ - IFN indicates a decrease in nonspecific protective forces of the body, in particular, deficiency of antiviral protection and presence of immunological insufficiency.

Discussion

These data served as a basis for comprehensive immunomodulatory therapy with the domestic interferon inducer gozalidone and immunomodulators to persons who had contracted Covid-19 with RGH.

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INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 362

Title: Unusual clinical manifestation of Trichophyton rubrum

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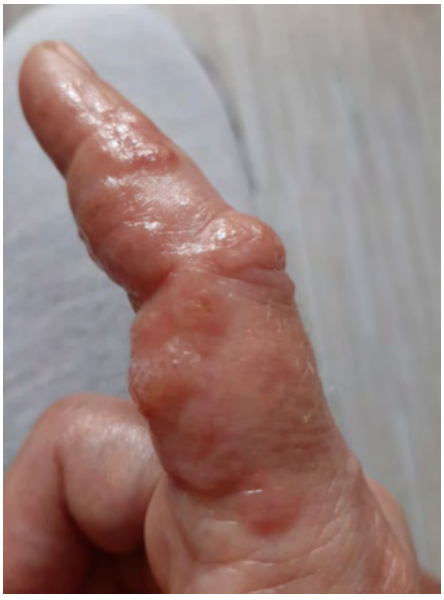
Introduction

Materials and methods

Results

A 54-year-old woman was consulted at an out-patient clinic in December 2019 due to itchy fluid-filled erythematous vesicles at the second digits' PIF joint area of her right hand, that were previously treated with antiviral medications upon suspicion of herpes simplex. Previously performed fungal culture and microscopy tests were negative. Topical corticosteroid therapy was prescribed with the diagnosis of dyshidrosis, though no effect was observed over the course of 4 months after adjusting the treatment to try different types of corticosteroids.

During follow-up in May 2020 progression of the condition was observed: nodulo-vesicular rash spread to the dorsal side of the right hand digits and the palm as well as the left hand wrist flexure, palm and interphalangeal joints. The patient complained of intense itch and burning. Due to the course of the disease and the deterioration of the condition despite topical corticosteroid therapy, viral polymorphic erythema was suspected. Laboratory tests for HSV, CMV, EBV antibodies were performed to differentiate between viral polymorphic erythema, herpes simplex and dyshidrosis; empiric antiviral therapy (acyclovir) was prescribed. The laboratory tests indicated positive HSV IgG antibodies and negative IgM, hence herpes simplex was rejected, EBV IgG antibodies were positive, CMV antibodies were negative.



Following this consultation, the patient was hospitalized at the day centre for a course of phototherapy (UVB 311 nm) with addition of emollients, systemic and topical corticosteroid therapy and antihistamines. Bloodwork did not

indicate any abnormalities, patch testing to evaluate possible type IV sensitization with S-1000 series was also negative. After the completion of the phototherapy course, the condition improved slightly, no new vesicles observed, though erythema, scaling, itch and burning sensation remained.

Although previously several times negative, additional examination for fungal microscopy and culture was performed and indicated positive results, showing growth of *Trichophyton rubrum*. Treatment was adjusted to *Terbinafine* cream 3 times per day and oral Terbinafine 250 mg q.d. During a follow-up consultation in September 2020, the condition had majorly improved and the rash cleared up.

Figure 1. Nodulo-vesicular rash in May 2020

Discussion

Abstract N°: 363

Title: Efficiency of complex treatment for cutaneous leishmaniasis

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Introduction

Cases of atypical and complicated cutaneous leishmaniasis (CL), which are difficult to treat with existing treatment methods, have become increasingly frequent in recent years. Therefore, the development and implementation of new effective therapies for CL is of current interest. Moreover, early diagnosis and highly effective treatment of CL will prevent the development of complicated forms of the disease and improve patients' quality of life.

Materials and methods

We studied 35 patients aged of 18-65 years old with cutaneous leishmaniasis and localized lesions in open areas of the body. A zoonotic form of leishmaniasis with duration of disease from 2-3 weeks to 4-5 months and with ulcerative and complicated forms of disease were diagnosed in all investigated patients. Ulcerative leishmaniomas without complications was seen in 15 patients; leishmaniomas with tubercles of insemination, lymphangioitis and lymphadenitis - in 6 patients. The rest patients had a tuberculous stage of leishmaniasis. All patients underwent microbiological examination for Borovsky' corpuscles.

Complex method of treatment included indirect lymphotropic injection of the antibiotic kanamycin sulfate in combination with the enzyme preparation lidaza, immunocorrective agent gosalidone, and external application of zinc hyaluronate gel.

Results

Depending on the method of treatment all patients were divided into 2 groups representative of age, clinical forms, and duration of the disease. Group 1 (17 patients, control) received antibiotics in the form of intramuscular injections or internally, external disinfectants and anti-inflammatory ointments. Group 2 (18 patients) received a new complex pathogenetic method of therapy. The treatment contributed to the regression of all the elements with the formation of superficial, mild skin scar atrophy, and the best effect was achieved in the patients of the 2nd group. At the same time, in patients with complicated forms (ulcerated and lymphangitis) the terms of healing of ulcers and regression of pathological elements were shortened on the average by 7.1 and 8.6 days respectively, with the terms of the inflammatory process resolution (resorption of infiltrate, ulcers clearance from necrotic and purulent stratification) depending largely on the pathological process duration and early start of treatment.

Discussion

A new complex method of CL treatment, especially in its complicated forms, helps to increase the therapeutic and economic efficiency by accelerating the healing of ulcerous elements, resorption of inflammatory infiltrates, as well as earlier elimination of the pathogen from the lesion centers and can be recommended for outpatient conditions.

Abstract N°: 436

Title: Immunological Profile of Lepra Reactions - altering the course of the world's oldest disease?

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Introduction

Leprosy is an ancient albeit neglected chronic infectious disease caused by M.leprae , affecting the skin and peripheral nerves, often among the world's most impoverished communities. Acute inflammatory reactions known as lepra reactions alter the chronic course of leprosy and result in considerable complications, deformities, and disabilities. Early diagnosis is key. However, specific tests for reactions which aid us to act as a preventive level are not yet available. In this study, we aim to identify potential immunological biomarkers for leprosy during the inflammatory reactions.

Methods

To identify biomarker profiles associated with early onset of type 1 and 2 leprosy reactions, we conducted a prospective cohort study involving leprosy patients with Type I reactions (TIR) (n=30), Type II reactions(T2R) (n= 30) and controls without reactions (n=30) in a leprosy tertiary care centre in a southern coastal Indian city. We measured the levels of 27 plex-panel of cytokines and growth factors longitudinally of these patients.

Results

We observed that IL-17, MIP-1 alpha, IFN-γ _and VEGF levels peaked at diagnosis of T1R, compared to when reactions were absent. Likewise, the levels of IL-7, IL-10, PDGF-BB levels peaked at T2R and levels significantly decreased post therapy. Thus, ratios of these pro-inflammatory cytokines versus IL-10 and IL-7, may provide a useful tool for early diagnosing T1R & T2R, respectively and for evaluating treatment.

Discussion

This study identifies the utility of immune-profiles as promising biomarkers for early and specific detection during acute inflammation in T1R and T2R .Further studies may enable us to identify immunological biomarkers for other chronic (infectious) diseases to help early diagnose these episodes and contribute to early treatment and prevention of disability.

Abstract N°: 477

Title: HPV type 57-associated skin tag in an armpit

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Introduction

Skin tags are reactive proliferations composed of normal or hyperplastic epithelium overlying a fibrovascular tissue and are very common in the general population. They are associated with skin ageing, obesity and friction, which explains more frequent localization in the neck, armpits and groins. Although the etiological association of human papillomaviruses (HPVs) with the development of skin tags has not been confirmed, several case reports and case series have reported the presence of HPV type 6/11 in 20-88%, HPV type 16/18 in 25%, and HPV5/93/174 in 15% of skin tags. However, since HPV RNA transcripts in skin tags were undetectable, Dianzani et al. suggested only latent infection of skin tags by HPVs. On the other hand, Pezeshkpoor et al. did not detect any low- or high-risk *Alpha*-HPVs in histologically confirmed skin tags. Interestingly, cutaneous wart-associated HPVs have not yet been tested in skin tags.

Materials and methods

A 15-year-old girl was referred to the dermatology clinic with a 6-month history of disturbing warty lesions on both hands and armpits. She was an intensive tennis player. Her medical history was unremarkable. Physical examination revealed pinkish-yellow keratotic papules on her hands and wrists, typical of common warts, and numerous soft skin-coloured papules in the armpits, some of which were covered with a filiform keratosis (Figure 1A, 1B, and 1C). After obtaining the patient's written informed consent, the lesions on her left wrist (lesion 1) and left armpit (lesion 2) were photographed, excised, and halved for histopathologic examination and molecular analysis by type-specific quantitative real-time polymerase chain reactions (qPCRs), allowing detection of the most common cutaneous wart-associated *Alpha*-HPVs (HPV2/27/57), *Gamma*-HPVs (HPV4/65), *Mu*-HPVs (HPV1/63), and 28 high- and low-risk *Alpha*-PV types.

Results

Histopathologic examination of the lesion one from the left wrist revealed a typical common wart (Figure 2A), while microscopic features of the lesion two from the left armpit were consistent with squamous papilloma, possibly an old common wart (Figure 2B). HPV57 DNA was detected in both lesion 1 (Ct=10.2) and lesion 2 (Ct=15.7) with type-specific HPV viral loads (VL) of $4.9x10^4$ and $2.3x10^2$ copies/cell, respectively. HPV27 DNA was also detected in lesion 2, but was much less abundant (Ct>35.0, VL $5.0x10^{-4}$ copies/cell).

Discussion

To the best of our knowledge, this is the first case of cutaneous wart-associated HPV27 and HPV57 identified in the axillary skin tag with histopathological features suggestive of HPV infection. Thus, we have expanded the spectrum of benign skin lesions, associated with the cutaneous HPV types. Consistent with our previous research on type-specific VLs of HPVs in common warts, we assumed that HPV57 with a high VL in both studied lesions

was most likely etiologically associated with the development of the common wart on the patient's wrist and was assumingly involved in the development or at least in secondary infection of the papilloma in the armpit. HPV27 was considered a non-causative HPV type that most likely only transiently infected or colonized the skin tag. Our findings justify further research on cutaneous HPV-associated skin tags to clarify their relationship to different HPV types, to enable the potential differentiation of HPV- and non-HPV-associated skin tags, and to implement any necessary precautions when contacting potentially infectious soft fibromas.

Abstract N°: 563

Title: Curious case of an anthrax-like lesion in a young female patient

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Introduction

Materials and methods

Results

Anthrax is a serious acute infectious disease caused by coming into contact with the spores produced by a bacteria known as Bacillus anthracis. This rod-shaped gram-positive bacteria is frequently found in soil and usually affects domestic and wild animals, and can be transmitted to humans either through skin contact, inhaling or ingesting contaminated products. Anthrax is very rare in Romania, with a total of 8 suspected cases of cutaneous anthrax being reported in 2018, out of which only 1 was confirmed. Given the low incidence, the case of a 45 year old female patient, presenting with a lesion compatible with cutaneous anthrax and with a history of farm work around cattle and other domestic animals sparked a lot of interest and demanded further investigations.

The patient presented in our clinic for a well-defined round-oval lesion, about 3 cm in diameter, with hardened erythematous edges and a hard necrotic center, surrounded by slightly erythematous, painful and pruritic skin. The lesion, located on the anterior surface of the right thigh, appeared spontaneously, in the form of a small erythematous depression, which progressively evolved over the course of 3 weeks, despite the administration of an oral antibiotic treatment at home. The patient reported close contact with cattle and domestic animals and given the presentation and history, the suspicion of anthrax emerged. Under local anaesthesia biological samples such as lesion crusts and wound exudates were collected and sent to the Central Medical Military Institute for further information regarding the causative agent. The results came back negative for Bacillus anthracis and positive for Staphylococcus haemolytocus, Streptococcus agalactiae group B and Enterococcus faecalis. During hospitalisation the patient received treatment consisting of a systemic antibiotic, antifungal, corticosteroid, analgesic, antihistamine and anxyolitic treatment and a local antibiotic and dermatocorticoid treatment, under which the lesion showed a favourable evolution.

Anthrax can be fatal if left untreated, which is why treatment should be initiated as early as possible, especially in countries where anthrax is common in animals and vaccination levels of livestock are low, such as Romania.Vaccine prophylaxis is an important step in trying to eradicate this disease. Furthermore, knowledge of the correct differential diagnosis and proper course of treatment in case of a confirmed result is of utmost importance, given the fatality rate. One wrong diagnosis could irreversibly alter a patients life. This case brings forward all the correct steps in diagnosing and treating this otherwise treatable infection that can be easily mistaken nowadays, given its rarity and various presentations, such as that of our patients'.

Abstract N°: 593

Title: Tinea faciei et corporis caused by Trichophyton benhamiae in a child

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Introduction

Trichophyton benhamiae is a zoophilic dermatophyte that can cause inflammatory dermatophytosis in children and adolescents. In addition to tinea capitis, it may cause tinea corporis, tinea manus and frequently tinea faciei. Guinea pigs are the primary carrier, and other small animals are occasionally a source of infection.

Materials and methods

We present a case of a healthy 5-year-old Caucasian girl, with erythematous plaques on both eyelids, on the forehead and nose, with micropustules and peripheral scaling. She also had a few erythematous plaques with peripheral scaling on her left forearm and hand. The relevant finding from the history was the presence of a pet guinea pig in the household.

Results

A sample was taken by scraping edge of the lesions and T. benhamiae was identified by its macroscopic (yellow stained colonies) and microscopic features.

The patient was treated with oral terbinafine 125mg/d for 6 weeks and topicaly with terbinafine cream.

Discussion

T. benhamiae is an emerging zoophilic dermatophyte with an underestimated infection rate. Epidemiological data, such as the presence of pets, especially guinea pigs, are important clues for suspecting and correctly diagnosing this fungal skin infection. Once diagnosed, the use of terbinafine is highly recommended to achieve optimal outcomes.

Abstract N°: 650

Title: Mycobacterium chelonae infection in an immunocompetent host associated with prurigo nodularis

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Introduction

Prurigo nodularis (PN) is a chronic skin disorder characterized by multiple, intensely pruritic, papules and nodules commonly located on the extremities. PN pathogenesis is complex including an immune dysegulation implicating eosinophiles, T cells and their cytokines (IL-31, IL-4), dermal neuronal hyperplasia and dysregulation of several neuropeptides. Numerous infectious agents (hepatitis C, *Helicobacter pylori, Strongyloides stercoralis, mycobacteria* and HIV) have been suggested as possible triggers but evidence for a strong causal relation are lacking.

Results

An 80-year-old female with no significant previous history, apart atopic asthma, presented with a 2-year history of pruritic, excoriated nodules symmetrically distributed on the extremities and the trunk (Fig 1a). Lesions initially appeared in the abdomen and no prior trauma or invasive procedure were noted at the site. She reported regular swimming in her private pool and repetitive mechanical scratching of lesions with a numerical scale of pruritus at 9/10. Clinical response to high-potency topical steroids was partial. PN was diagnosed and NBUVB phototherapy was prescribed. Skin lesions progressed and subcutaneous nodules appeared on the abdomen. Histologic examination of a subcutaneous nodule revealed granuloma with multi-nucleated giant cells (Fig 2). *M. chelonae* was detected in the cultures from this skin lesion. Histology of a cutaneous nodule showed orthohyperkeratosis, a dermal interstitial inflammatory infiltrate of lymphocytes compatible with PN. Workup for immune deficiency and whole-body CT scan were normal. After susceptibility testing, linezolide was prescribed for 2 months and clarithromycine for 6 months. At 2-month follow-up, clinical improvement was noted and lesions resolved adequately (Fig 1b).

Discussion

In a case series of six patients affected by PN, mycobacteria other than tuberculosis were identified by culture of skin biopsy specimens with a good response to antitubercular drugs in two cases. [1] In our case, *M. chelonae* infection could have triggered the appearance of PN as suggested by the good treatment response. *M. chelonae* is ubiquitous in the environment and can be found in water, soil and aquatic animals. *M. chelonae* has been identified in up to 38.2% of swimming pool water samples. Skin infections mainly result from direct contamination of wounds with water or inoculation during invasive procedures i.e. contaminated catheters. The form of cutaneous infection varies according to the patient's immune status; from self-limiting granulomas after direct inoculation in immunocompetent individuals to severe disseminated forms in case of immunodepression. Disseminated lesions in an immunocompetent host are rare.

M. chelonae infection should be considered as a possible trigger in the presence of atypical, treatment-refractory skin lesions of PN.

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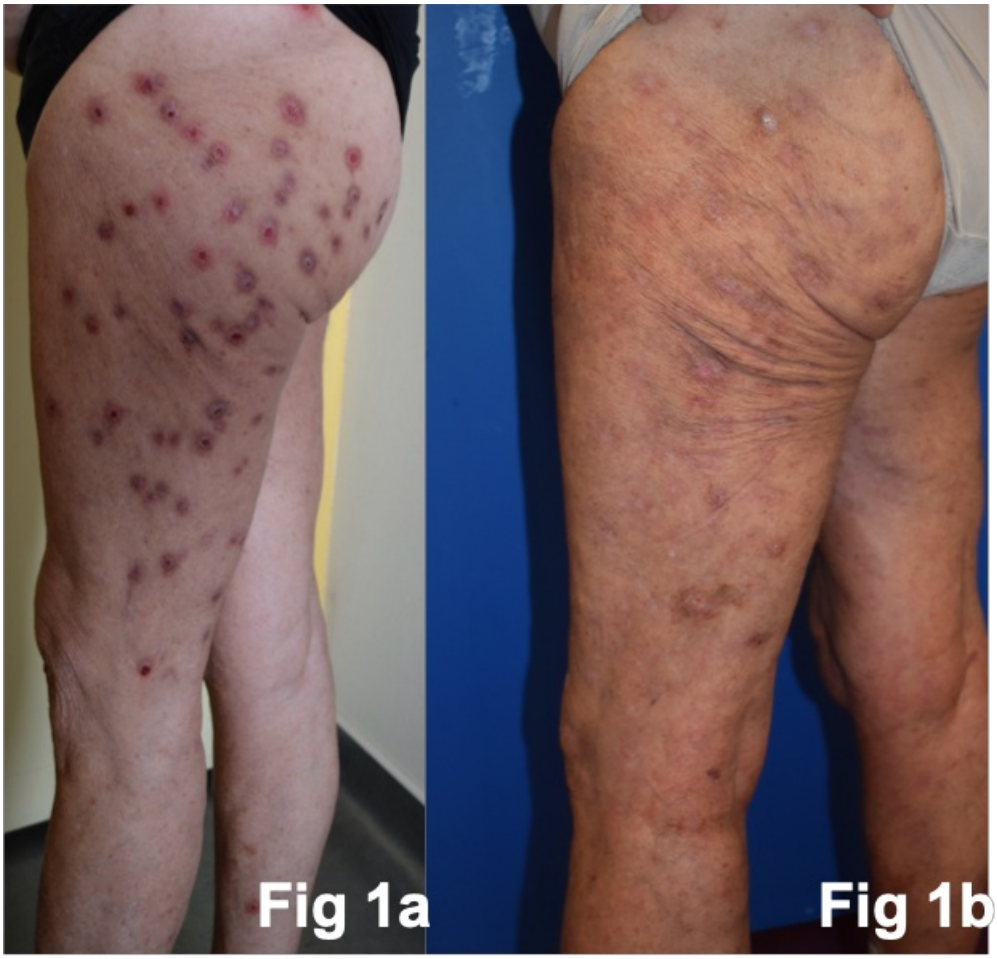

Fig 1: 1a. Excoriated nodules symmetrically distributed on the extremities and the trunk. 1b Response after 2 months of treatment with linezolide and clarithromycine.

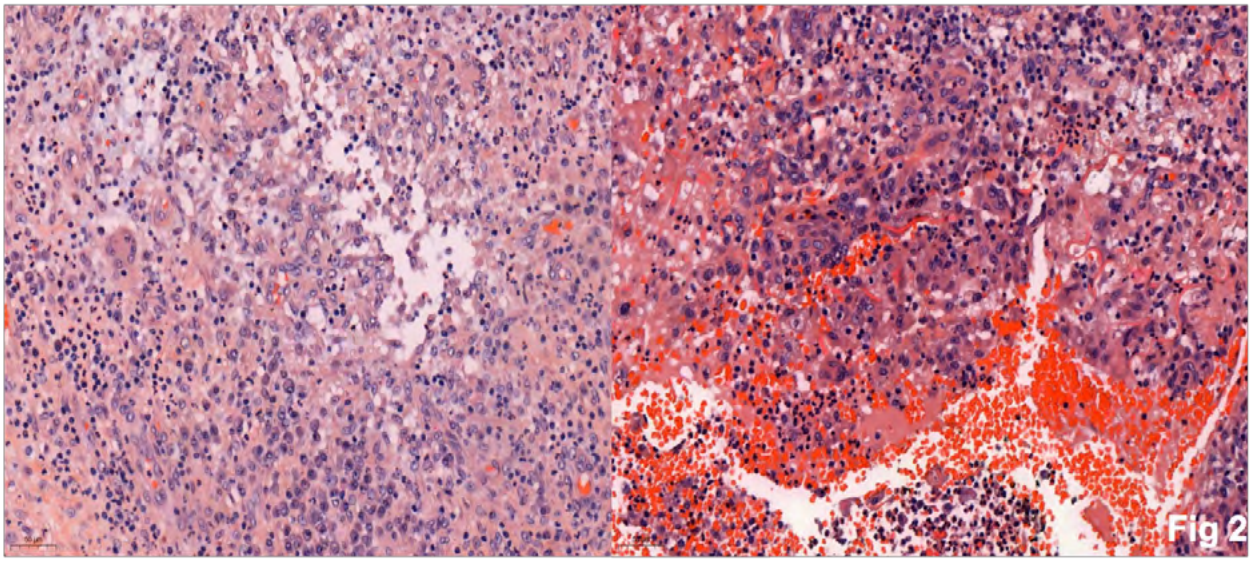

Fig 2. Hemalun-Eosine staining, magnification x 200. Presence of a polymorph lymphoplasmacytic infiltrate associated with granuloma formation with multinucleated giant cells and neutrophils.

Abstract N°: 682

Title: Leprosy with Lucio Phenomenon: A Report of Two Patients In Malaysia and Clinical Outcome

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Introduction

Lucio phenomenon (LP) is a rare and potentially fatal complication of lepromatous leprosy. It was previously found mainly in Central America but has since been reported sporadically in other parts of the world especially Asia. Clinical diagnosis could be challenging especially in non-endemic areas due to the subtle preceding signs of the disease. We report two cases of LP in Malaysia and their clinical outcome.

Results

Case 1

A 32-year-old Malaysian lady, presented to the emergency with a history of sudden erythematous patches followed by blistering and painless ulcerations on both lower limbs for 1 week duration. She reported a 6-month history of thickening of the nose and loss of eyebrow. Physical examination revealed an afebrile woman with madarosis and significantly infiltrated eyebrows, nose and ears. There was extensive foul-smelling ulceration of the feet and shin with weepy discharge and diffuse hyperpigmentation of the leg.

Slit skin smear (SSS) revealed a bacteriological index of 3.33 and morphological index of 0.67 with a positive leprae PCR on skin biopsy sample. Histopathological examination (HPE) revealed perivascular and perineurial aggregates of foamy histiocytes with numerous acid-fast bacilli within. A diagnosis of leprosy with Lucio phenomenon was made, and she was started on multidrug therapy (MDT) for lepromatous leprosy, together with oral prednisolone. Her condition improved after treatment of one week with drying of the ulcers and fading of the hyperpigmented patches. The ulcers fully epithelialized without surgical intervention after 3 months of treatment.

Case 2

A 41-year-old Indonesian gentleman was referred for vesicles and ulceration of both lower limbs for 1 month duration. Physical examination revealed madarosis with infiltration of facial skin. Skin was sclerotic with painful ulcers over both lower limbs. His fingertips were peppered with yellowish sloughy erosions. Other findings include peripheral neuropathy and papulonodular swelling scattered on the trunk. SSS was positive and mycobacterium leprae PCR was positive in the tissue biopsy sample. HPE showed marked lymphocytic and plasma cells infiltrates as well as foamy macrophages and acid-fast bacilli.

A diagnosis of Lucio phenomenon was made, and standard MDT was initiated. Dapsone was later replaced with ofloxacin due to dapsone-induced haemolytic anaemia. Surgical debridement was performed for the sloughy ulcers. Oral prednisolone was added. Subsequently, the ulcers healed with scarring and syndactyly of his toes. His mobility had improved after treatment; albeit requiring the use of walking aids.

Discussion

Lucio leprosy is a diffuse lepromatous leprosy with non-nodular infiltration of the skin - giving the appearance of

a youthful oedematous skin that may smoothen wrinkles on the face. LP is a variant of erythema nodosum leprosum (ENL) usually affecting patients with Lucio leprosy. Symptoms are described as erythematous patches that develop vesicles or blisters that ulcerate. Patients who develop LP are susceptible to infection of the cutaneous ulcers and septicaemia.

Various treatment has been described including antimicrobials, thalidomide, and steroids. These two cases illustrate the good response to steroid treatment together with MDT. Complications including prolonged treatment duration, scarring and physical disabilities, can be minimized by early detection and aggressive treatment.

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Abstract N°: 743

Title: Disseminated Zoster in an immunocompetent patient: a case report

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Introduction

Zoster is caused by reactivation of latent varicella-zoster virus (VZV). Generalized zoster is seen in 2% of the general population, mainly in immunocompromised patients [1]. The rash presents as clusters of vesicles and papules on an erythematous base at approximately the same stages of development [2]. Zoster can be complicated by postherpetic neuralgia, dissemination, bacterial superinfection and encephalitis [2]. We describe a case of generalized herpes zoster in an immunocompetent patient.

Case report

A 67-year-old Moroccan man, with no pathological history presented to the emergency with generalized rash covering her body evolving for 4 days in a context of fever and conservation of the general state. The patient did not receive any immunosuppressive treatment in last few years. On physical examination, the patient was conscious, hemodynamically and respiratory stable, apyretic at 37°C. On dermatological examination, we founded ulcerative and necrotic lesions grouped into bouquet sitting on erythematous skin following the path of the ophthalmic nerve associated with significant palpebral edema preventing eye opening. The rest of the dermatological examination showed multiple umbilicated vesicular lesions in different stages with diameter of 2-6 cm covering the entire body, including the face, abdomen, back and limbs. The patient described a sensation of discharges along the ophthalmic nerve path. He did not have enlarged liver or any central nervous system involvement. Ophthalmologic examination did not reveal any anomalies. Chest X-ray was normal. A review for primary and acquired immune deficiency was made of blood count, protein electrophoresis and HIV serology and was normal. The patient was treated with Acyclovir 10 mg/kg intravenously every 8 hours for 7 days associated with analgesic treatment.

Discussion

The risk of herpes zoster is higher in the immunocompromised population [3]. The rash is characteristic: vesicles and papules on erythematous skin following the path of a metamer. In approximately 33% of immunocompetent patients, a few scattered lesions may appear outside the localized rash. However, when more than 20 diffuse lesions are identified, the diagnosis of disseminated herpes zoster is retained [4]. Disseminated herpes zoster is at high risk of visceral involvement, particularly pulmonary, hepatic and neurological. Other complications may occur, including ulceration, bacterial superinfection, and postherpetic neuralgia. Therefore, early diagnosis and treatment are important to reduce morbidity and mortality [5]. Our patient presented a generalized herpes zoster with initial involvement of the dermatome of the ophthalmic branch of the V nerve and subsequent dissemination to the rest of the body, without any apparent state of immunosuppression. To our knowledge, less than 10 cases

of generalized herpes zoster in immunocompetent patients have been described in the literature, most of whom were older than 65 years of age [6]. This is also the case of our patient; this suggests that age may be a risk factor in the dissemination of herpes zoster.

Conclusion

Our case illustrates a rare form of disseminated zoster in an immunocompetent patient. This underlines the importance of a complete clinical examination in front of any rash suggestive of herpes zoster in order to search for possible complications and optimize management.

Abstract N°: 825

Title: Varicella zoster virus infection associated with erythema multiforme: a rare pediatric case.

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Introduction

Postinfectious erythema multiforme is an uncommon skin disease in childhood. The two main infectious agents are mycoplasma pneumoniae and herpes simplex virus. We report a rare case of erythema multiforme (EM) associated with varicella zoster virus infection in a 12-month-old boy.

Observation

A 12 month old boy ,with no previous medical history ,was seen in consultation for a pruritic vesiculous éruption evolving for 2 days . Physical examination revealed a polymorphous skin eruption of erythematous vesicles and papules.The diagnosis of varicella was retained.3 days later the patient was reexamined in our structure for an exacerbation of the rash . Simmetrically distributed circular erythematous lesions with concentric colour changes and a central blister formation was observed on the extremities. The eruption was characteristic of EM.The occurrence of EM lesions after varicella eruption was consistent with an erythema multiforme associated with varicella zoster virus infection .

Discussion

Erythema multiforme (EM) is considered as a hypersensitivity disorder which is triggered by multiple factors such as infection, drugs and food. Infectious agents are considered to be a major cause of EM but only few cases of erythema multiforme associated with varicella-zona infection are reported in littérature. Despite its high incidence as a pathogen in childhood. We described a new pediatric case of this rare association.

Abstract N°: 896

Title: Atypical cutaneous tuberculosis in an immunocompetent girl

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Introduction

Tuberculosis (TB) is a multisystemic infectious disease caused by Mycobacterium tuberculosis. Cutaneous TB can involve the entire integument and palpebral localization is exceptional.

Materials and methods

We present a case of childhood TB in an immunocompetent girl with a nodular palpebral lesion.

Results

An 11-year-old girl, consulted for a nodule of the right lower eyelid that had been evolving for 3 months. The lesion had appeared after excessive crying and rubbing of the eyes and had progressively increased in volume and then fistulized, motivating her consultation with an ophthalmologist where she was put on protected amoxicillin and valacyclovir without improvement. The patient was vaccinated with BCG, was in good general condition and did not report any respiratory signs or signs of tuberculosis impregnation. Clinical examination revealed a nodular, erythematous, painless lesion with yellowish, hemorrhagic crusts on the free border of the lower eyelid measuring 3 mm in major axis. Dermoscopy revealed an erythematous telangiectatic background with patchy yellowish areas. The ophthalmologic examination was normal and the palpable lymph nodes were free. A skin biopsy of the lesion was performed. The anatomopathological study showed the presence of an inflammatory granuloma, made of lymphocytes, plasmocytes and polynuclear cells with the presence of a suppurated caseous necrosis suggestive of TB. The workup for other tuberculous foci, including a chest x-ray, was normal. The tuberculin skin test (TST) and quantiferon were negative. The therapeutic decision was to start the patient on antibacillary treatment: RHZE for 2 months and then RH for 4 months.

Discussion

TB is one of the top 10 causes of death worldwide, according to the WHO. Cutaneous TB is often misleading and challenging, as it results in a broad differential diagnosis. TB involvement of the eyelids is mostly secondary to orbital involvement and often presents as a draining sinus. Isolated eyelid involvement without orbital or systemic involvement is extremely rare. Palpebral contamination may occur by the hematogenous route from another adjacent site or from a distant tubercular site. Direct inoculation after trauma, as in the case of our patient, may explain the primary involvement of the eyelid. The diagnosis is based on a combination of epidemiological, clinical, biological and pathological findings. Tuberculosis infection, history of previous TB, tuberculin TST, chest X-ray, direct examination for BK by culture or gene amplification, and pathological examination, when possible, provide arguments to support the diagnosis. Clinically, periocular skin involvement is characterized by the appearance of a small nodule that ulcerates and spreads locally with possible pain and purulent secretions. The involvement is most often unilateral. The immunological profile of the patient determines the anatomopathological presentation: foci of necrosis predominate in patients with low immune status. The extension of the disease is mandatory,

including examination of the eye for uveitis, vasculitis and macular edema. A general examination is also necessary. Lack of early diagnosis and treatment leads to palpebral complications, such as ectropion. Eyelid scarring can lead to lagophthalmos or adhesion of the eyelid structures to the underlying orbital bones. Treatment of this condition involves anti-tuberculosis chemotherapy with isoniazid, rifampicin and pyrazinamide.

Abstract N°: 920

Title: Kaposi varicelliform eruption in a pemphigus foliaceus patient

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Introduction

Kaposi varicelliform eruption (KVE), also known as eczema herpeticum (EH), is a rare and disseminated form of herpes simplex virus (HSV) infection 1 or 2 and only rarely of coxsackie A16 or vaccinia virus. KVE usually appears on preexisting dermatoses, mainly atopic dermatitis, but also seborrheic dermatitis, impetigo, scabies, ichthyosiform erythroderma, Darier's disease, benign familial pemphigus, ichthyosis vulgaris, mycosis fungoides, etc. Autoimmune blistering diseases (AIBDs) including pemphigus, bullous pemphigoid and epidermolysis bullosa acquisita have been occasionally reported, pemphigus foliaceus (PF) being rarely found complicated by KVE. The probable mechanism of this combination involves the defective skin barrier together with the systemic immunosuppressive treatment which compromises the integrity of the immune system. We describe a PF patient who presented with extensive EH.

Materials and methods

An 84-year-old Caucasian man with previously diagnosed PF presented with the sudden onset of a new vesicular rash affecting the scalp, face and upper chest. General complaints of fever and lassitude were also present. The immunosuppressive therapy for his PF included oral prednisolone, azathioprine, calcium supplement and PPIs prophylaxis. He had no history of herpes virus infections. On admission, multiple cluster vesicles and crusted erosions affected the scalp, face and upper trunk. Given the clinical appearance and the distribution of the lesions, the immunosuppressive therapy the patient had been receiving and the unexpected "PF flare", herpes simplex infection was suspected. Apart from routine laboratory tests, a Tzanck smear and HSV culture were performed.

Results

Routine laboratory investigations demonstrated anaemia (Hb 90 g/L), mild leukocytosis (WBC 14 x 10^9/L) and elevated erythrocyte sedimentation rate (45 mm/h). Tzanck preparation from the herpetiform lesions revealed multinucleated giant cells. HSV culture of the lesions was also positive. The diagnosis of HSV1 infection was made in a patient with previously confirmed PF under systemic immunosuppressive therapy. The patient was administered oral valacyclovir 1g x 3 times a day for 10 days, intravenous ceftriaxone 2g daily for 7 days and topical fusidic acid cream twice daily. Significant clinical improvement was observed within a short period of time.

Discussion

The first two cases of KVE occurring in patients with pemphigus were reported by Marton and Angyal in 1963 and since then, only a few observations were found in the literature of PF with KVE. In the context of a pre-existing AIBD, the differentiation of EH may be difficult. For this reason the clinical suspicion of HSV infection should be verified by laboratory tests such as Tzanck smear, viral culture or polymerase chain reaction (PCR) detection of HSV DNA. Appropriate treatment should not be postponed due to the significant percentage of morbidity and mortality related to bacterial superinfections with impetiginization, bacteremia and viremia with systemic

dissemination in immunosuppressed patients.

Abstract N°: 936

Title: Tinea profunda of the genital area

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Introduction

Tinea genitalis is a relatively new entity of dermatophyte infection and is considered as a „life-style-disease", observed manily in young adults. By definition it is localized on the mons pubis and labia in women and on the penis in men, with the possibility of expansion into the groin and scrotum. Predisposing factors include contacts with pets, travelling, heterosexual contacts, warm and humid climate and genital shaving.

Results

A 35-year-old female patient presented at our department due to extensive, painful and erythematous plaques in pubic area, with numerous papules, pustules, erosions and purulent discharge, which were present for about two months. She also had numerous annular erythematous macules on the trunk, thighs, face and scalp. The inguinal lymph nodes were enlarged. Due to extensive inflammation which impaired her walking and subfebrile temperature, she was admitted to hospital. She arrived from Afganistan 10 days prior to the visit. The lesions were previously unsuccessfully treated with systemic antibiotic and topically with antibiotic and antimycotic. Epidemiological anamnesis was positive as her husband also had erythematous scaly lesions on the trunk.

Mycological microscopic examination from several lesions revealed hyphae and a zoophilic dermatophyte *Trichophyton interdigitale* was cultivated. In addition, *Escherichia colli* (ESBL+) and *Klebsiella pneumoniae* were isolated from the pustule. Laboratory examination showed leucocytosis (14.6 10^9/L) and elevated CRP (87 mg/L).

Treatment with systemic terbinafine 250 mg daily was introduced. Adjuvant peroral therapy with methylprednisolone 16 mg daily was administered with slowly tapering of the dosage over the next two weeks. Initial peroral antibiotic treatment with amoxicillin and clavulanic acid was later switched to parenteral piperacillin and tazobactam according to results of sensitivity testing. Lesions were also treated topically with terbinafine. Partial improvement of all skin lesions was observed after three weeks, with normalisation of inflammatory parameters and improved gait. Unfortunately, the patient was lost to follow-up.

Discussion

Tinea genitalis profunda was diagnosed in our patient, along with tinea capitis, tinea faciei and tinea corporis. Infection of the genital area could result from autoinoculation of the dermatophyte from the extragenital tinea.

Tinea genitalis can clinically present with follicular pustules, deep plaques, nodules, purulent discharge, kerion celsi or Majocchi's granuloma-like lesions. In previous reports, zoophilic dermatophytes were most common causative pathogens. It is often misinterpreted as bacterial folliculitis, psoriasis or eczema and therefore diagnosed with a significant delay. Limited healthcare access, as in our patient, can additionally contribute to diagnostic delay.

Appropriate diagnosis and treatment are mandatory to prevent secondary bacterial infection and scarring

alopecia. Tinea genitalis should be considered in the differential diagnosis of inflammatory lesions in the genital area. Microscopic examination and cultivation are diagnostic gold standard. Histopathological examination, PCR and cultivation of bioptic specimen can be helpful in case of false negative mycological examination. Peroral terbinafine and itraconazole are the drugs of first choice. In case of extensive inflammatory lesions, adjuvant short term systemic corticosteroid therapy is recommended.

Abstract N°: 953

Title: Epidemiology of dermatomycoses in the Mid-West of Ireland: A 20-year single institution retrospective review

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Introduction

Dermatomycosis is infection of the skin, hair or nails caused by dermatophyte fungi. Common conditions in this category include onychomycosis, tinea pedis, and tinea capitis - dermatophyte infection of the nail, foot and scalp respectively. Fungal skin infections are recognised as one of the most common health disorders globally, and their epidemiology has been widely studied. Dermatophytes can be classified as anthropophilic, zoophilic or geophilic species based on their primary habitat association. The national contribution in this regard has been scant, with just two papers - both reporting paediatric tinea capitis only - published in the last 20 years, and none in the last seven. This study sought to establish a comprehensive retrospective epidemiological analysis of all dermatological mycology tests performed in our institution over a 20-year period.

Materials and methods

All mycology laboratory test results were extracted from the Laboratory Information Management System (LIMS, iLab, DXC Technologies) from 2001 to 2020 inclusive for analysis. Specimen types were categorised according to site of sampling. The data were analysed using Microsoft Excel.

Results

12,951 specimens of skin, hair and nails were studied. Median patient age was 42 years (IQR 26-57) with a slight female preponderance (57.2%). Two thirds of samples (67%, n=8633) were nail, and 32% were skin scrapings (n=4,118). 200 hair samples (1.5%) were received.

Anthropophiles predominated every age and gender category, with highest prevalence in the 10-20 years age category (80% of dermatophyte isolates). Zoophilic dermatophytes were more commonly present in females (38% F, 23% M, proportion of dermatophytes) and in those under 10 years of age or from 45 to 70 years (36% and 34% respectively). Yeast infections were more prevalent in older patients (29% of >60 vs 17% of <60, proportion of all fungal positives).

Trichophyton rubrum was the most prevalent pathogen detected, accounting for 53% of all dermatophytes detected, 61% of those detected from nail samples and 34% from skin and hair samples. Trichophyton tonsurans was the most prevalent dermatophyte in tinea capitis, representing 37% of dermatophytes detected. Both of these organisms are anthropophilic, and this group showed consistently increased prevalence in proportion to all fungal isolates. Anthropophilic dermatophyte predominance increased during the study period, from 55% of samples in the first five years of the study to 88% in the final five years. Conversely, yeast and zoophilic dermatophyte detection decreased.

Discussion

This study provides a detailed overview of the epidemiology of the fungal cultures of skin, nail and hair samples in the Mid-West of Ireland over a twenty-year period. Monitoring this changing landscape is important to identify likely sources of infections, to identify potential outbreaks, and may help guide empiric treatment. To the best of our knowledge, this study provides the first detailed analysis from Ireland of fungal detections from skin, hair and nail samples, and is the first epidemiological fungal report of any kind in over seven years.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 954

Title: An unwanted guest - Cutaneous larva migrans

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Introduction

Cutaneous larva migrans (CLM), also known as creeping eruption, is a parasitic infection caused by animal hookworms. CML is caused by incidental infestation of a person with animal nematode larvae usually affecting dogs and cats. Hookworm related CLM represents the dead-end host in humans, infective larvae will no longer reproduce thereafter. The disease is self-limiting. Approximation for the natural duration of the disease may vary considerably and is probably influenced by the type of the worm.

Materials and methods

Results

We present a case of larva migrans infection in South Eastern Europe. A 30-year-old male presented to our Department with a pruritic erythematous eruption composed of papules, pustules and a few blisters with exudate, several tortuous indurated inflamed tracks on the posterior thorax with extended satellite pustules to the shoulder, axilla and the rest of the back. The lesion had been intensely pruritic, leading to epidermal damage and secondary infection. The lesion had appeared 3 weeks before and rapidly increased in size. He presented to another dermatology Department where he received systemic and topical corticosteroid therapy, without significant improvement. The patient had been working on a house project and had been laying on the lawn of the yard. Peripheral blood analysis revealed eosinophilia with neutropenia. Direct mycologic and parasitology examinations were negative.

Based on the clinical aspect, the treatment he used and important fast spread, Tinea incognito and Strongyloides stercoralis infection were the most probable differential diagnoses. The histopathologic examination revealed interstitial granulomatous dermatitis with eosinophils, a nonspecific result with the need of interpretation depending on the clinical appearance. The final diagnosis of CLM was made based on the pruritic eruption with linear serpiginous skin lesions as well as the patient's contact with the ground frequently in recent weeks.

The patient was treated with oral albendazole for 3 days, clarithromycin for 5 days, antibiotic ointment and topical corticosteroids.

The lesion completely disappeared within a few days after treatment was initiated. The response to antihelmintic treatment and fast resolution of the lesion confirmed the initial diagnosis of CLM.

Discussion

The importance of this case is represented by un uncommon helminthic infection in South Eastern Europe with diffuse multifocal papulo-vesicular eruption localized on the back of an adult. Although the rash was not typical, the history is an important element. Advising not walking barefoot and laying on the ground in unknown places are crucial advice in the prevention of occurrence of this disease.

EADV SYMPOSIUM 2022
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Abstract N°: 1029

Title: A fatal case of Lucio phenomenon in untreated Lucio leprosy

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Introduction

Lucio phenomenon (LP) is a rare and potentially fatal reaction exclusively occurs in diffuse lepromatous leprosy or Lucio leprosy. It is characterized by purpuric macules which progressively develop into extensive painful ulceration primarily affecting the lower extremities. Previously, it is considered an exclusive phenomenon in Latin America, however, recent cases have been reported in other countries.

Materials and methods

Results

A 56-year-old man complained of painful purpuric patches, blisters, and erosions on his face, hands, legs, and feet since 3 days ago. He denied any numbness hypopigmented or redness patches before hospitalization. There was no history of taking herbs, supplements, or other drugs. Over the last last 3 months, his eyebrows, eyelashes, and hair began to fall out, with frequent flu-like symptoms and a runny nose. He did not complain of visual disturbances.

He was moderately ill with normal blood pressure, tachycardia, and tachypnea. Dermatological examination revealed multiple purpuras, erosions, blisters, and edema on the face, earlobes, hands, scrotum, lower extremities, and feet (**Figure 1. A-G**) with a negative Nikolsky sign. There were madarosis, palpebral edema, and conjunctival injection on both eyes (**Figure 1. H**). Laboratory investigations showed anemia; thrombocytopenia; leukocytosis; impaired kidney function; hyperglycemia; hyponatremia; hypoalbuminemia; C-reactive protein 193.8 mg/L; procalcitonin 89.1 ng/mL; d-dimer 7200 µg/L; and prolonged prothrombin time and activated partial thromboplastin time. Microbial culture of skin erosion showed *Proteus vulgaris*. Slit skin smears indicated a bacterial index of 6+ with morphological index of 13.66%. The Ziehl-Neelsen stains for AFB were positive (**Figure 2**).

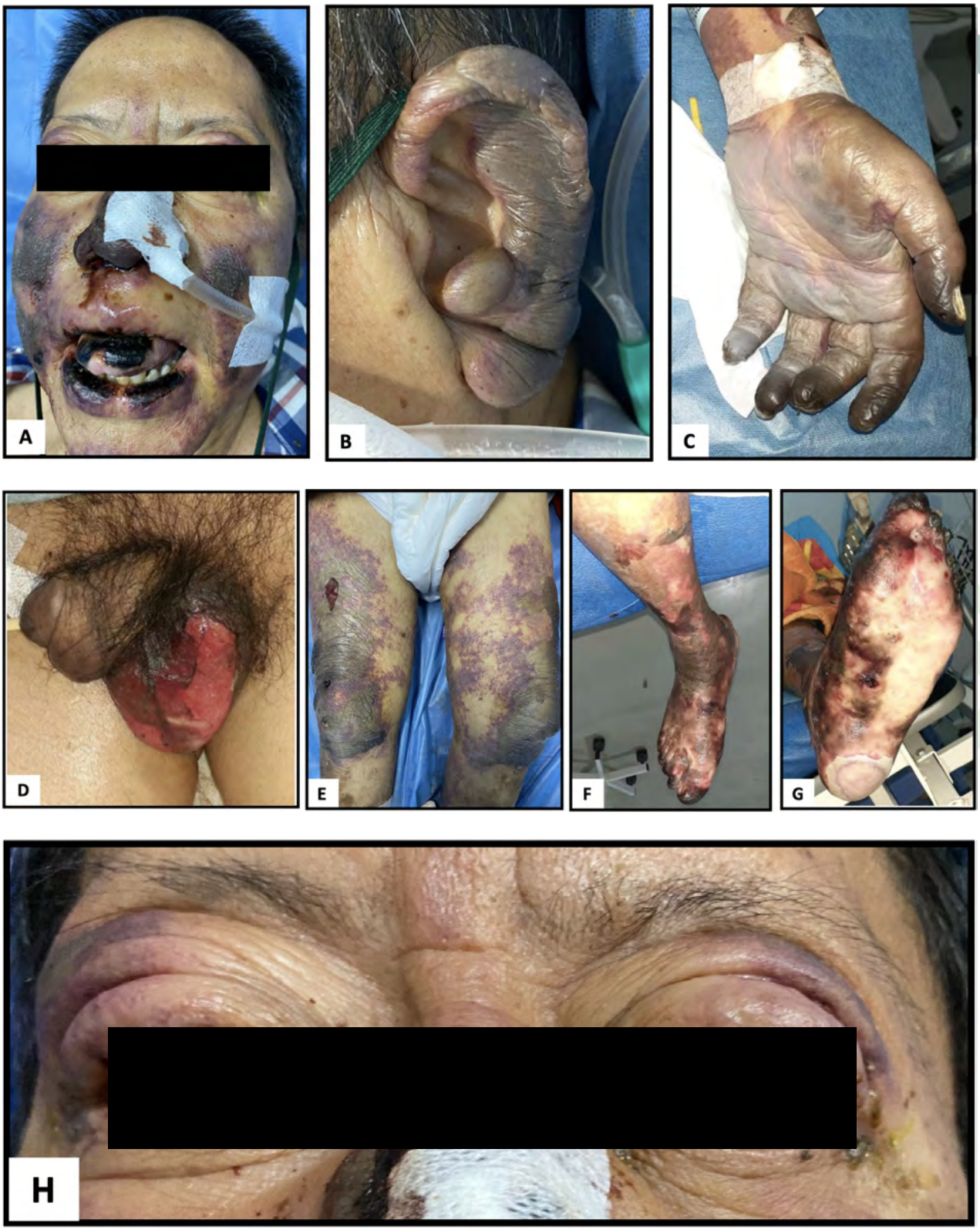

Figure 1. A-H.

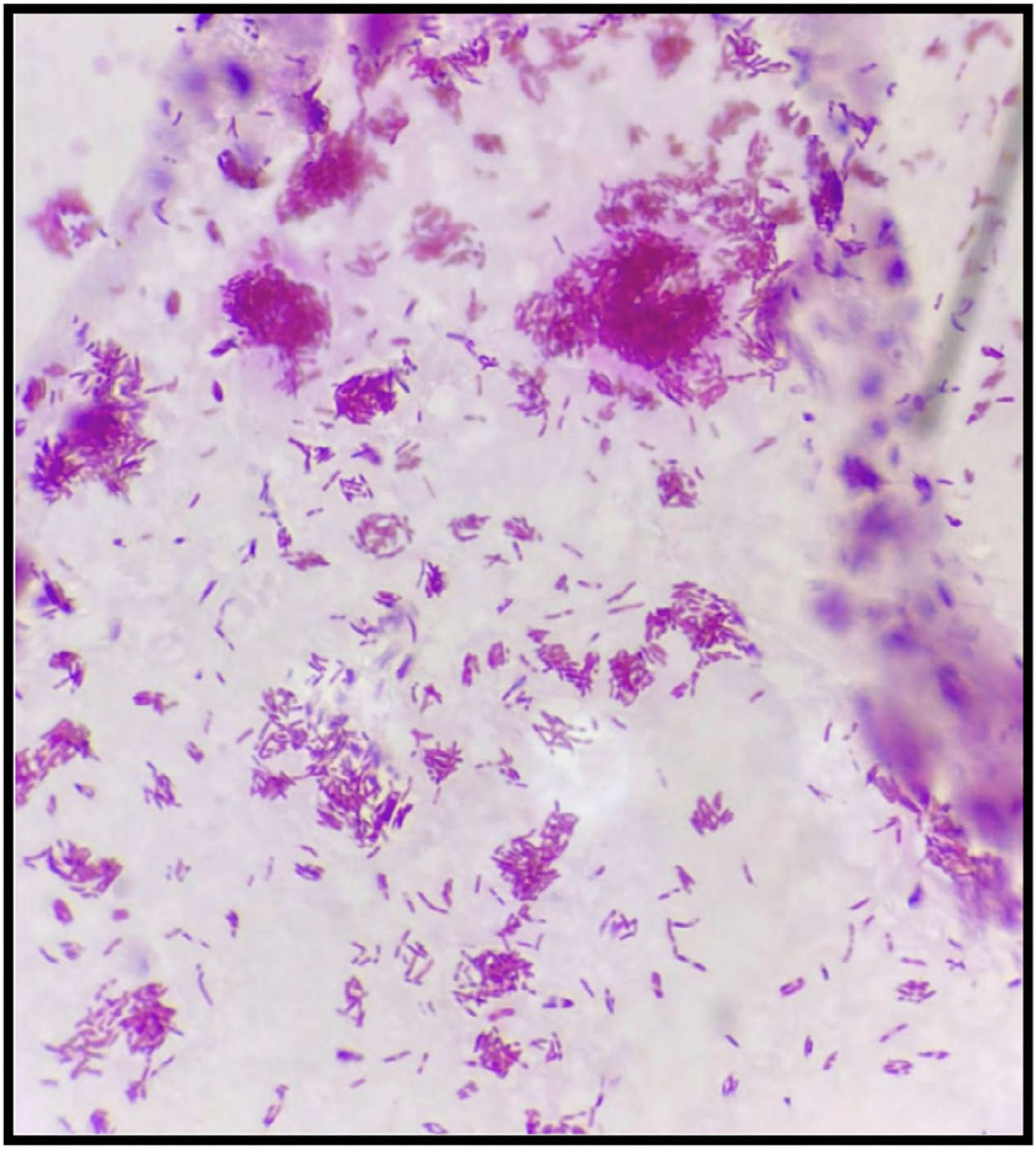

Figure 2.

He was diagnosed with Lucio phenomenon, sepsis, diabetes mellitus, and disseminated intravascular coagulation. He received multibacillary multi-drug therapy; methylprednisolone; meropenem; insulin; heparin, and blood transfusion. We planned to perform a skin biopsy and bone marrow puncture to assess the involvement of vascular endothelial and bone marrow in this patient, respectively. However, because his condition was progressively worsening and there were contraindications, the procedures were postponed. Unfortunately, his clinical condition was deteriorating with decreased consciousness and extensive cutaneous infarcts (**Figure 3**). He died due to the consequent septic shock after 19 days of hospitalization.

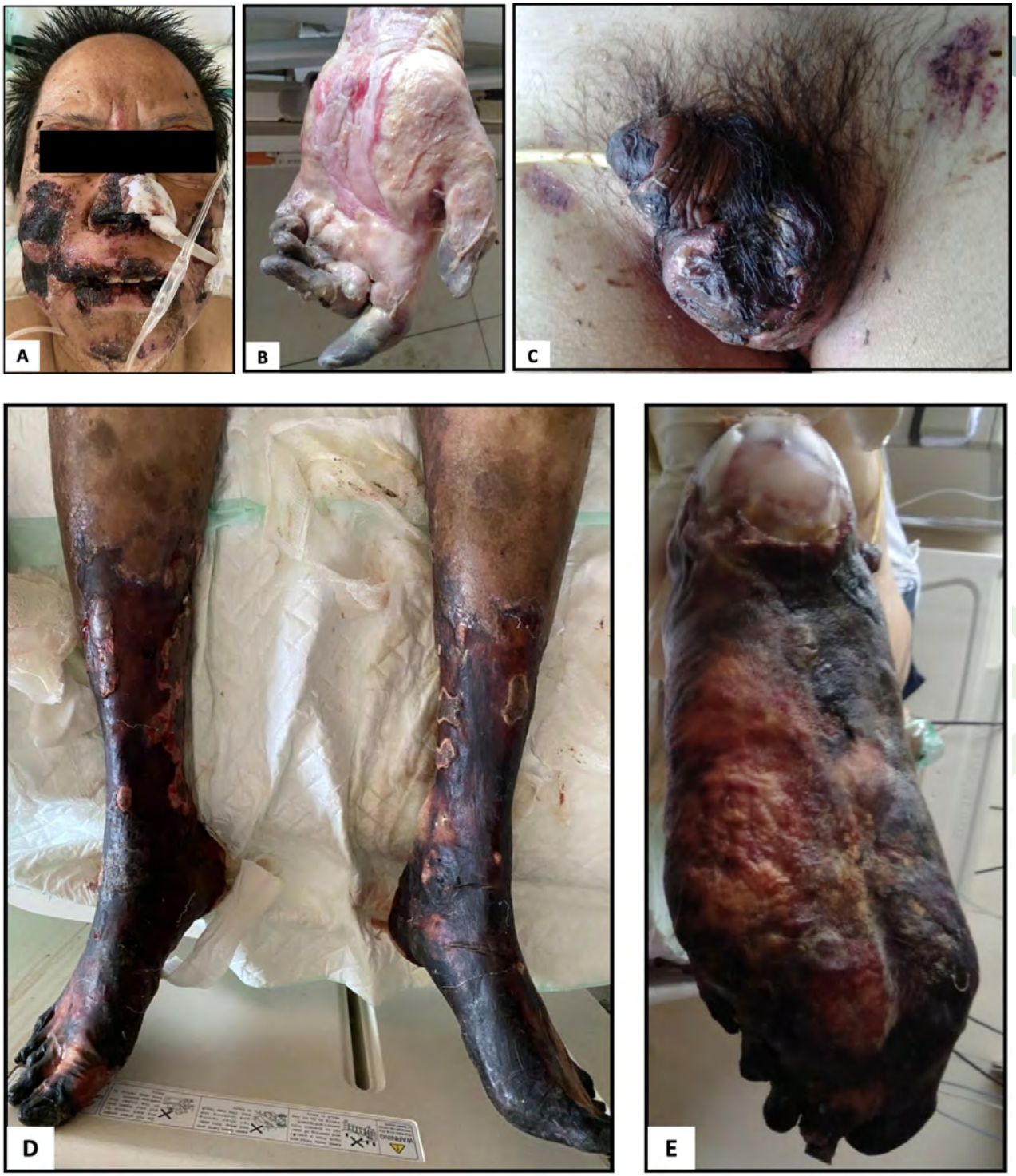

Figure 3. A-E.

Discussion

Clinical manifestation and histopathologic characteristics are essential to diagnose LP. Early recognition and prompt management are the key to successful therapy and preventing complications. Until now, there is no standard guideline for the treatment of LP due to its rare incidence. Multi-drug therapy for multibacillary leprosy is recommended for the management of LP. The use of corticosteroids and thalidomide is still controversial.

Abstract N°: 1041

Title: Rickettsiosis with renal involvement: about a case

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Introduction

Rickettsiosis is a zoonosis, caused by infection with Rickettsia. Despite its reputation for benignity, its complications are serious, in particular kidney damage. We present the case of a patient seen in the ward for a febrile skin eruption with inaugural renal involvement.

Materials and methods

Results

A 37-year-old man with a history of diabetes on insulin, who presented with a febrile rash for one week associated with arthralgia, headache, vomiting, myalgia and anorexia. Examination found a maculopapular purpuric rash separated from intervals of healthy skin with ascending evolution sitting at the level of the trunk and the limbs with adenopathy under the left mandible. Examination found no bedsores. Biology noted impaired renal function with clearance at 29 ml/min, hyperkalaemia at 5.3 meq/l. The diagnosis of rickettsiosis was evoked, the patient was referred to the infectious diseases department where the diagnosis was confirmed by positive serology. The patient was put on doxycycline 200 mg/d with correction of hydro-electrolyte disorders and symptomatic treatment. The evolution was marked by an improvement of the general state, regression of the cutaneous eruption and normalization of the renal function.

Discussion

The positive diagnosis of rickettsiosis is based on epidemiological, clinical and biological data. The diagnosis is often made by serology, but the specific PCR based on the swab of an inoculation ulcer remains a simpler and faster tool. Renal involvement is tubulo-interstitial, rare and reversible under antibiotic and symptomatic treatment. Empirical therapy should be prescribed for any suspicion of rickettsiosis before diagnostic confirmation. Tetracyclines are the reference treatment.

Abstract N°: 1045

Title: secondary syphilis with alopecia and ocular manifestation

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Introduction

Materials and methods

Results

Introduction:

Syphilis is a sexually transmitted disease caused by infection with Treponema pallidum. A worrying resurgence of syphilis has been observed in recent years. Secondary syphilis is known to be highly mimetic, and can be revealed by various clinical manifestations. Ocular involvement in syphilis is uncommon. Alopecia is a rare presentation of secondary syphilis affecting 2.9% to 7% of patients. We report a case of ocular syphilis and alopecia in an immunocompetent patient.

Case report:

A 24-year-old homosexual man with a history of multiple unprotected homosexual encounters and genital ulceration 3 years ago, who consulted the ophthalmological emergency for a decrease in visual acuity, with the Blurry vision associated a headaches that had been evolving for a month. Slit lamp examination revealed panuveitis with a vascular tortuosity in the right eye and whitish nodules in the left eye. A syphilitic serology was positive. The patient was referred to dermatological consultation. The clinical examination found, two patches of nonscarring alopecia were present on the occipital areas of the scalp, measuring respectively 2cm× 3cm and 0,5cm × 1cm. There was no scaling and crusting, and hair pull test was negative. An alopecia of the eyebrows with appearance of 'moth-eaten' on the left eyebrow. Hairs on the rest of the body were normal. A hypo-pigmented scar on the penis. Lymphadenopathy was absent, a hypo-pigmented scar on the penis. The neurological examination was normal. On biological examination, syphilitic blood serology was positive with a TPHA of 5120 and a VDRL of two. A lumbar puncture performed, revealing a cellularity of 45 elements, the protein and glucorrachia were normal, with a positive TPHA of 160 and a negative VDRL. HIV and hepatitis B, C serology was negative. The rest of the biological work-up was normal. We completed a retinal angiography, which showed an aspect of placoid chorioretinitis. The diagnosis of secondary syphilis retained. We concluded that the patient had tertiary syphilis with ocular and neurological involvement. The patient treated with penicillin G 20 MU/d for 14 days. His vision and alopecia were improving.

Discussion:

Apart from the cutaneous findings and alopecia, secondary syphilis has a diverse systemic manifestation including gastrointestinal, renal, musculoskeletal, neurovascular and ocular involvement. Ophthalmic and neurological involvement are prominent. Ocular syphilis is rare and can affect all ocular tissues, mainly the posterior segment. Meningitis is associated with ocular involvement in 50% of cases and may be asymptomatic, justifying the systematic performance of a lumbar puncture. SA in secondary syphilis is a nonscarring alopecia, and four

different clinical patterns have described in the literature, 'moth-eaten' alopecia the most common pattern, considered as a pathognomonic sign of secondary syphilis; it characterized by the presence of small areas of nonscarring alopecia not entirely devoid of hair, with poorly defined edges and irregular size. Alopecia of the eyebrows or 'omnibus sign', a historically well-known sign of secondary infection characterized by thinning of the distal third of the eyebrows. A treatment based on parenteral penicillin G.

Discussion

Abstract N°: 85

Title: Two-Face: A case of recurrent vegetative pyoderma gangrenosum of the face

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Introduction

Pyoderma gangrenosum (PG) is a rare, ulcerating, rapidly progressing neutrophilic dermatosis. It has 4 subtypes, namely classic (ulcerative), bullous, pustular, and vegetative.

Materials and methods

This is a case of a 46-year old male presenting with an erythematous papule progressing into a vegetative plaque on the right cheek, which was initially managed as a case of necrotizing cellulitis. There was no intake or application of steroids on the right cheek, however the lesion spontaneously resolved over 2 months, with development of cribriform scarring. A similar looking lesion developed 6 months prior, but this time on the left side of the face with rapid progression.

Results

Histopathology presented with suppurative dermatitis, cultures were inconclusive, and the pathergy test was negative. High dose systemic corticosteroids were started with rapid reduction of pain, size and inflammation.

Discussion

As pyoderma gangrenosum is a diagnosis of exclusion, having a high index of suspicion based on the history of rapid progression, clinical presentation with cribriform scarring, inconclusive cultures and no improvement with antibiotics guided the management of this case as vegetative pyoderma gangrenosum rather than cellulitis.

Abstract N°: 249

Title: High Dose Neuromodulators to Treat Severe Flushing in Erythematotelangiectatic Rosacea

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Introduction

Rosacea is a chronic inflammatory skin condition characterized by facial erythema, telangiectasias, and papulopustular lesions, reported in as high as 22% of the population.[1,2] Most patients are diagnosed after the age of 30, with women and Caucasians being the most frequently affected groups.[2] Although the pathophysiology of rosacea remains unclear, it appears to be multifactorial in etiology with UV radiation, nutrition, temperature, stress, and immune and neurovascular dysregulation all playing significant roles.[3] While not curative, the management for rosacea focuses on limiting these triggers and reducing the duration and intensity of inflammation with topical and oral therapies.[4] The majority of these therapies minimally improve the erythematotelangiectatic phenotype of rosacea and may require treatment with lasers or intense pulsed light.[5] Botulinum toxin, with doses as high as 100 units, has also been used off-label to reduce erythema and flushing given its anti-inflammatory and inhibitory effects on neurotransmitters and neuropeptides and a resulting hypothetical effect on vasomotor tone; however this has been met with variable efficacy and unwanted side effects due to prior protocols.[1,6,7,8] We present a novel protocol of high-dose neurotoxins in treating refractory rosacea with improved outcomes and side effect profile.

Materials and methods

Results

A 42-year-old female presented with recurrent episodes of erythema and occasional papulopustular lesions on the bilateral cheeks and forehead. She failed topical and oral therapies and opted to try off-label neuromodulators. AbobotulinumtoxinA was reconstituted in 1cc of bacteriostatic normal saline and a high-dose microdroplet regimen was initiated. A total of 150-180 units were administered to the affected areas as 3-6-units spaced 1 cm apart. Her symptoms remained well-controlled up to 2-4 months following each treatment, eventually spacing treatments to 6-month intervals.

Discussion

The high-dose microdroplet regimen was found to reduce severe facial flushing and irritation. In addition to notable symptomatic relief, the treatment regimen gradually reduced skin hyperreactivity, which may signify neuropeptide and inflammatory mediator modulation by botulinum toxin type A. Mast cells are known effectors in neurogenic inflammation and have been implicated in the development of rosacea, with new reports demonstrating a significant reduction in mast cell degranulation after neurotoxin use.[9,10,11] Previous studies have also shown that injection of intradermal neurotoxins in psoriasis treatment decreases inflammatory cells and neuropeptides with the improvement of psoriatic plaques, highlighting the beneficial effects of inhibiting cutaneous nerve signaling.[12] Here we present the use of high-dose neurotoxins for the treatment of severe

flushing in erythematotelangiectatic rosacea and presumed downregulation of inflammatory factors, resulting in ongoing benefit and eventual complete stabilization of symptoms. Interestingly, previously reported incidences of facial paralysis were not observed despite this higher dose protocol.[6] We attribute this to strict strategic placement of injections to avoid critical anatomic structures. Neuromodulators have been shown to be a safe and effective way to manage treatment-resistant rosacea, and their beneficial effects in inflammatory cutaneous conditions should continue to be investigated.

Abstract N°: 469

Title: A case of recurrent papulonodular cutaneous Rosai-Dorfman disease

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Introduction

Materials and methods

Results

Rosai-Dorfman disease (RDD) is a benign form of histiocytic proliferation of unknown etiology that was first described by Rosai-Dorfman in 1969. RDD is characterized by a spectrum of clinical signs and characteristic histopathological findings. RDD usually presents with cervical lymphadenopathy, but the extranodal system, including the skin, may be involved. Extranodal involvement is seen in approximately 50% of affected individuals; cutaneous involvement is the most common.

We present a Caucasian man aged 45 years with a 4-month history of skin lesions. The skin changes presented with enlarging erythematous exophytic nodule on the right shoulder and erythematous infiltrated plaques of predominantly annular shape on the left paravertebral and vertebral region of the back.

At the time of examination, besides skin changes, he had no enlarged lymph nodes and no symptoms. He was hospitalized and examined, primarily in terms of cutaneous lymphoma and subacute cutaneous lupus erythematosus. His routine and immunological analyses (C3, C4, ANA-HEp2, ENA Screen, and anti-dsDNA) were normal or negative. Direct immunofluorescence of lesional skin was negative. Histopathology revealed a massive diffuse subepidermal infiltrate of large polygonal histiocytes without atypia with extensive eosinophilic cytoplasm. Some histiocytes showed neutrophilic and lymphocytic emperipolesis. Immunohistochemically, histiocytes were positive for S-100, CD68 and CD163; while negative for HMB45, MelanA and SOX10. Infiltration of numerous neutrophils, small B (CD20+) and T (CD3+) lymphocytes, without epidermotropism, was present between histiocytes.

He was treated with topical corticosteroids which led to complete regression of skin changes. The patient was followed during the next four years. In this period, on several occasions, he had eruption of mainly individual infiltrated plaques, usually over zygomatic regions of the face and on upper arms, without enlarged lymph nodes.

Cutaneous RDD (cRDD) is a rare variant of RDD, in which lesions are limited to the skin. Our patient represents a case of recurrent papulonodular cRDD, with a favorable course. cRDD mainly manifests with a benign clinical course. Usually, the treatment is not necessary. However, in patients with cRDD, recurrences and development of visceral lesions are possible.

Histopathological findings are essential for the diagnosis. The pathognomonic histologic feature of RDD is

emperipolesis of intact lymphocytes by S100- and CD68-positive, and CD1a- and langerin-negative pale histiocytes. Emperipolesis represents engulfing of intact hematologic cells, and should be differentiated from hemophagocytosis where engulfed cells are degraded by histiocytes or megakaryocytes.

Characteristic histopathological and immunopathological features are the cornerstones in the diagnosis of cRDD.

Discussion

Abstract N°: 470

Title: When two rare granulomatous dermatoses are found in the same patient!

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Introduction

Chronic dermohypodermatitis affects with predilection lower limbs; it can be clinically manifested by nodular lesions which can be inflammatory and requires a set of complementary examinations in order to determine the etiological diagnosis, mainly by the anatomopathological study.

We report a new case of chronic dermohypodermatitis whose etiology is represented by two rare dermatoses.

Observation

This is a 67 year old female patient with a history of diabetes for 8 years and hypertension for 9 years under treatment. For the past 2 years, she has presented with subcutaneous confluent nodules with warm erythematous, indurated and circumferential patches on the legs without purpura nor ulcerations. An initial skin biopsy was in favour of a lipoid necrobiosis treated 1 year ago with synthetic antimalarials associated with local corticosteroid therapy. The evolution was marked by multiple inflammatory episodes with centrifugal evolution reaching the knees without any complete regression.

A complete etiological work-up was performed to look for an autoimmune, infectious, tumoral or paraneoplastic etiology, which came back negative and led to a skin biopsy revealing a degeneration of the dermal collagen with histocytic palisades in favour of a lipoid necrobiosis associated at the dermal level with lobular and septal hypodermitis with arterial vascular involvement (nodular vasculitis) in favour of an indurated bazin's erythema. The patient was treated by dapsone with good clinical improvement after the first month of treatment.

Discussion

Necrobiosis lipoidica, known as Oppenheim-Urback disease, is a rare granulomatous inflammatory dermatosis reported in 0.3% of diabetic patients, especially women, and most often localized on the skin of the pretibial regions. Clinically, it can be manifested by confluent nodules in a well-circumscribed erythematous plaque with a yellowish atrophic centre. Histologically, it is manifested by a nodular granulomatous inflammatory infiltrate with a palisading border. In terms of treatment, local corticosteroid therapy is prescribed as the first line for slowly evolving localised forms; for severe forms, other treatments may be proposed like general corticosteroid therapy, synthetic antimalarials, immunosuppressants and surgery. PUVA therapy has also given good results in some experimental studies.

Bazin's erythema indurea is a rare nodular vasculitis often affecting overweight women with chronic venous insufficiency, and is manifested by firm, poorly inflamed nodules of the legs that may ulcerate.

Histologically, it is a mixed lobular and septal hypodermitis with vascular involvement. It is the lobular involvement with foci of fatty necrosis and granulomatous lymphocytic inflammation, with epithelioid, foamy histiocytes and giant cells that is characteristic. The presence of a caseating tuberculoid granuloma with a perivenous disposition suggests a tuberculous origin. These granulomas are often rich in Langerhansian

histiocytes suggesting type IV hypersensitivity mechanisms. The best treatment is usually dapsone. The tubercular origin is still regularly discussed.

Conclusion

The originality of our study lies in the association of two rare granulomatous dermatoses in the same patient whose improvement required the treatment of both etiologies.

Abstract N°: 570

Title: The Role of Demodex in the Ethiopathogenesis of Seborrheic Dermatitis and its Releationship with Disease Severity

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Introduction

Seborrheic dermatitis (SD) is a common, chronic, recurrent, inflammatory skin disease. The reason is still not fully understood. Recent studies conducted suggest that demodex mites may play a role in the etiopathogenesis of seborrheic dermatitis. In this study, we aimed to investigate the presence of demodex in SD and its relationship with disease severity.

Materials and methods

40 patients over the age of 18 who were clinically diagnosed with SD and 40 healthy controls were included in the study. Demodex was sought from the patients' skin with and without lesions, and from the normal skin of healthy controls using the standardized skin surface biopsy method.

Results

In the patient group, demodex was found in 50% of the lesional skin, while the prevalence of demodex was 2.6% in skin without lesion, demodex was present in 12.5% of the controls. The difference was statistically significant ($p < 0.001$). Demodex was found at the highest rate (60.7%) in patients with facial involvement. No relationship was found between the presence of demodex in the lesioned skin and the severity index of the seborrheic dermatitis area.

Discussion

The fact that SD is recurrent and the predilection areas are the same with demodex mites suggest that it may be related with etiopathogenesis. Both SD and demodex infestation occur in the presence of many similar endogenous and exogenous factors. We think that demodex, a member of the microbiota such as Malasesezia, may be a predisposing factor in the development of SD.

Abstract N°: 797

Title: Pyoderma gangrenosum in a patient with sino nasal neuroendocrine carcinoma : The first case report

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Introduction

Pyoderma gangrenosum (PG) is a rare destructive, ulcerative, and inflammatory cutaneous disease. It can be associated with inflammatory bowel disease, inflammatory arthritis, and hematologic malignancy. There are scarce reports of neuroendocrine tumors associated with pyoderma gangrenosum. We discuss the first case of a sino-nasal neuroendocrine cancer patient having presented with pyoderma gangrenosum.

Materials and methods

Results

Case report:

We report a case of a 74 years old patient ,with no history of inflammatory bowel disease, arthritis, or a hematologic malignancy, followed up for sino-nasal neuroendocrine carcinoma since Avril 2021 metastasized to the lung and liver,and treated with palliative chemotherapy.

Since August 2021, he has presented coalescing inflammatory pustules, which progressively fuse, revealing 4 necrotic ulcers, with well-defined and violaceous borders, on the dorsal surface of the right forearm and the 4th right finger, the patient was treated with oral and local antibiotics without any improvement . No scars were detected anywhere else on the body. Swab examination did not isolate any responsible microorganism.

Histopathological examination of the skin biopsy taken from the ulcer's edge showed a mixed, dense, dermal inflammatory cell infiltrate associated with vascular proliferation. No atypical cells were noted. The overlying epidermis showed mild acanthosis but no spongiosis. These findings were compatible with pyoderma gangrenosum

A treatment with oral corticoids has been discussed.But unfortunately the patient was dead a few days after the biopsy of the ulcerations

Discussion

In rare instances, Pyoderma Gangrenosum can occur as a type of paraneoplastic syndrome in patients with cancer. The most common cancers associated with pyoderma gangrenosum are breast cancer followed by rectal, gastric, renal, and lung cancers. Herein, We describe the first case of pyoderma gangrenosum occurring in the course of sino-nasal neuroendocrine carcinoma

In terms of the pathophysiological considerations. It has also recently been found that the tumor mediated production of granulocyte colony-stimulating factors (G-CSF) disrupts the rate of neutrophil release. Therefore, cancer often leads to excess levels of neutrophils in the blood, which may infiltrate the dermal level and cause PG

lesions.

A possible association of solid organ malignancy and PG should be considered in patients with PG of unknown etiology or with a history of malignancy.

EADV SYMPOSIUM 2022
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Abstract N°: 869

Title: Lichen Planus Pigmentosus Inversus: 2 case reports

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Introduction

Lichen Planus Pigmentosus Inversus is a rare variant of LPP which presents with pigmented macules, papules or patches located primarily in the intertriginous areas. Nails, scalp and oral mucosa are usually not affected. It is more common among fair-skinned individuals. The etiology is unknown and no treatment has proved to be effective so far. We present two cases of classical LPPI, each with its characteristic: one with perianal location and the other with associated oral LP.

Materials and methods

Results

First case

A 73-year-old female presented with mildly pruritic brown macules and papules in the axillary, inframammary and inguinal folds, along the lumbar and thoracic spine, and a dark brown patch in the perianal area. The lesions were dating back to one year. No mucosal, nail, or scalp abnormalities were observed.

A biopsy was performed and the histopathological exam showed hyperorthokeratosis, epidermal atrophy with basal vacuolar degeneration, moderate lichenoid inflammatory infiltrate, rare colloid bodies and abundant melanophages in the papillary dermis. Based on the clinical and histopathological characteristics, we confirmed the diagnosis of LPPI. She received treatment with methylprednisolone aceponate 0.1% twice daily for one month, with no improvement. She was lost to follow-up.

Second case

A 58-year-old female presented with asymptomatic brown macules and patches located bilaterally in the axillary and submammary folds, the left antecubital fold and periumbilical. White striations of oral lichen planus were present on the lateral aspects of the tongue at the contact area with metal dental restorations. Lesions appeared progressively three years ago, after a stressful event. The biopsy showed similar changes as in the first case, except for a milder inflammatory infiltrate. We prescribed her topical therapy with a combination of hydroquinone 5%, tretinoin 0.1% and betamethasone valerate 0,1%, once daily for one month, with no results. The oral lesions disappeared spontaneously. She was then lost to follow-up.

In both cases, patients denied having taken any medication and previous inflammatory lesions in the affected areas. Anti-HCV tests were negative.

Discussion

LPPI affects mainly intertriginous areas. The axillary and submammary folds were involved in both of our cases, but the first patient also exhibited non-intertriginous involvement-back lesions. The first patient presented a perianal patch, a location that was not previously reported. To our knowledge, only two cases of LPPI with

associated oral LP are described in the literature. In our second case, oral LP might have been induced by dental metal restorations.

The etiology of LPPI isn`t completely understood. Some cases were associated with HCV infection. Friction and tight underclothing have been proposed as possible triggers. Anti-HCV test was negative in both cases. The second patient mentioned a stressful event before the onset of the lesions.

LPPI is usually resistant to treatment. Topical and systemical corticosteroids, hydroquinone, topical calcineurin inhibitors, oral isotretinoin have been attempted with inconsistent success. Spontaneous resolution can occur. There was no response to treatment in our patients, but the follow-up might have been too short.

More research into the etiology and pathophysiology of LPPI could lead to better treatments and outcomes.

Abstract N°: 887

Title: Level of the antimicrobial peptide cathelicidin in patients with rosacea

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Introduction Rosacea (syn.: rosacea, acne rosacea) is a chronic inflammatory disease of the skin of the face, affecting mainly the central part of the face (cheeks, chin, nose and the central part of the forehead), which has a polyetiological nature and is characterized by a staged course. According to Webster G.F. 2-10% of the world's population suffer from rosacea. The etiology of rosacea is still completely unknown, but most likely has a multifactorial character. In recent years, cathelicidin has played a significant role in the development and course of rosacea. It has been established that peptide LL-37 is obtained from cathelicidin as a result of proteolytic hydrolysis in neutrophils and keratinocytes. The level of LL-37 in the affected skin is significantly increased in all subtypes of rosacea.

Purpose of the study. To study the content of cathelicidin LL-37 in blood serum depending on the clinical course of rosacea.

Materials and methods Materials and research methods. Under clinical observation were 47 patients with rosacea aged 27 to 63 years. There were 18 men (38.3%), women - 29 (61.7%). The ratio of men to women was 1:1.6. Most of the patients were aged 51 to 60 years - 32 (68.1%). Erythematous-telangiectatic stage suffered - 14 (29.8%), papulo-pustular - 25 (53.2%), and pustular-nodular - 8 (17.0%). The concentration of cathelicidin LL-37 in the blood serum of patients with rosacea and healthy individuals (30 people) was determined using enzyme immunoassay.

Results Research results. It was found that the content of cathelicidin LL-37 in the blood serum of patients with rosacea (65.7±14.2) was statistically significantly increased ($p<0.001$) compared with healthy individuals (39.8±14.7 ng/ml). As the severity of rosacea increased, serum levels of cathelicidin LL-37 increased. At the same time, the highest level of this peptide was determined in patients with pustular-nodular (77.8±14.9 ng/ml, $p<0.001$) compared with papulopustular (67.38±15.5) and erythematous-nodular telangiectatic (51.2±13.6 ng/ml) stages of rosacea.

Discussion In patients with rosacea, the content of cathelicidin LL-37 in serum is increased compared with healthy individuals and it depends on the severity of the course of the disease.

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Abstract N°: 963

Title: Cytotoxic molecules attack the basement membrane zone in lichen planus lesions

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Introduction

Lichen planus is a chronic inflammatory disease that clinically presents with localized or disseminated lichenoid papules on the skin and is often followed by reticular or erosive mucosal lesions. The pathogenesis of lichen planus is still largely unknown, however, cytotoxic mechanisms are thought to be a crucial part of it. Only particular cell types, such as cytotoxic T-cells or natural killer (NK) cells, possess the cytotoxic ability, i.e., the ability to kill and eliminate infected or otherwise damaged cells. One of the possible ways by which cytotoxicity can be implemented is by the release of cytotoxic molecules. Cytotoxic molecules are stored in the cytoplasm of cytotoxic cells, within special granules, and are stimulated to be released into the extracellular space and directed towards the target cell. Some of the cytotoxic molecules are perforin, granzymes and granulysin (GNLY), but the details of their expression and action within lichen lesions are still not identified. We aimed to study the expression of the GNLY-positive and perforin-2 (P-2)-positive cells in the lichen planus skin, so we can conclude whether and to what extent they participate in local inflammatory events of lichen planus patients.

Materials and methods

We sampled biopsies of the lesional and non-lesional skin of lichen planus patients and the healthy skin of the controls (10 patients per group). We used the immunohistochemistry method to determine the expression of GNLY+ and P-2+ cells' in the tissue samples.

Results

Our results showed the statistically significant accumulation of the GNLY+ and P-2+ cells in lesional lichen planus skin in comparison to non-lesional patients' skin ($p<0,001$ for GNLY+ cells; $p<0,0001$ for P-2+ cells) and the healthy skin of the controls ($p<0,0001$ for both GNLY+ and P-2+ cells). The largest number of both GNLY+ and P-2+ cells was present in the upper layers of the papillary dermis and the basal layer of epidermis. GNLY+ and P-2+ cells showed their aggregation tendency at the epidermal-dermal junction or in the basement membrane zone (BMZ), where they were located near the sites of visible vacuolar degeneration of the epidermal cells.

Discussion

Lichen planus is a multifactorial disease whose immunopathogenesis is not completely known. Although cell-mediated immune mechanisms are thought to be the most important to the pathogenesis of lichen planus, the exact involvement and contribution of cytotoxic mechanisms and cytotoxic molecules have not been fully investigated in the cutaneous form of lichen planus. The results of our study revealed a significant amount of GNLY+ (9%) and P-2+ cells (12%) in lesional lichen planus skin in comparison to non-lesional lichen planus skin (0.5% for GNLY+ cells and 1% for P-2+ cells) and the healthy control skin (0% for GNLY+ cells and 0.5% for P-2+ cells). GNLY+ and P-2+ cells gathered particularly in the BMZ and parts of evident vacuolar degeneration, which display their participation in damaging the mentioned skin areas. These results indicate the apparent involvement of cytotoxic molecules such as GNLY and P-2 in local immunopathogenic mechanisms of lichen planus. At the

same time, it remains to clarify their exact association and role in the future.

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Abstract N°: 989

Title: Skin lesions in patients with vulvar lichen sclerosus

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Introduction

Lichen sclerosus (LS) – is the most common disease of the anogenital area. The frequency of LS varies from 10% to 38% among patients with vulvar dermatoses according to various data (Chan M.P., Zimarowski M.J., 2015; Singh G. et al., 2016; Sartori G.C. et al., 2018). Concomitant involvement of smooth skin with LS is diagnosed in 10-15% of women and with morphea – up to 20% of cases. While LS occurs in 38% of cases among patients with morphea (Lutz V., et al., 2012). But the data of frequency of different skin lesions in patients with vulvar LS are scanty.

The goal of our study was to evaluate the frequency of skin lesions – LS and morphea - in patients with vulvar LS.

Materials and methods

We examined 177 women with vulvar LS, perianal's involvement in 34 women. The age of the patients varied from 19 to 94 years; the average age was 56,48±1,13 years. The diagnosis was established on a clinical picture and histology results. We have assessed the clinical picture and comorbidities.

Results

Vulva involvement and perianal area involvement was detected in most cases, in 143 women (80,79%). An isolated lesion of the vulva was detected in 50,85% of cases. In other patients, in addition to the vulva, the skin of other localizations was also involved in the process.

The combination of the process on the vulva and in the perianal region was detected in 53 women (29,94%). Involvement of the pubic skin was found in 2 (1,13%) patients.

Concomitant involvement of the vulva and smooth skin was found in 23 patients (12,99%).

Lesions on the vulva and smooth skin without perianal area involvement were detected in 19,21% of women.

When assessing the involvement of other localizations except anogenital area, it was found that the inguinal folds (in 10,73% of the total number of patients with an established diagnosis of vulvar LS), the skin of the back (7,91%), the abdomen (5,08%), and forearms (4,52%) were most often involved in the process.

Morphea was detected in 5 patients (2,82%) with vulvar LS.

Discussion

An isolated lesion of the vulva was found in half of the patients (50,85%). In addition, in women, the perianal area and inguinal folds are usually involved. Involvement of the trunk skin and extremities was detected much less frequently. The combination of vulvar LS and morphea was found only in 3,39% of patients.

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Abstract N°: 1014

Title: Baring it All: A report on the sexual and reproductive health experiences of women+ in Canada with psoriatic disease, inflammatory arthritis, and rheumatic diseases

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Introduction

Psoriasis and inflammatory arthritis commonly affect women+ in the prime of their lives with significant impacts on sexual, reproductive, and mental health. There have been some efforts to provide educational resources and other support by patient organizations globally but no broad efforts to evaluate patient needs and experiences throughout their lives and disease course.

Materials and methods

A survey in English and French was launched across Canada from March 8-April 19, 2021 to explore the experiences of participants with:

- sexual health
- family planning
- parenting
- perimenopause/menopause
- pain
- mental health
- accessing care and treatments (including paying for medications)

A total of 439 people who identified as female (women+) living with psoriatic disease, inflammatory arthritis and rheumatic diseases participated. Several of these conditions may have skin and joint involvement. When asked about their conditions, the majority of participants indicated that they were living with psoriatic arthritis (38%) and plaque psoriasis (36%) with an additional 26% indicating that they experience other forms of psoriasis.

Results were analyzed to provide a national picture and insights based on Canadian geography, age, and identification as a member of a racialized community and/or as LGBTQ2S+ in a first-ever report of its kind in Canada.

Results

Over 60% of survey participants indicated that they did not have enough information about sexual health and their condition(s) and identified information needs relating to managing the impact of fatigue on their sex life, advice on improving sex drive, and sexual positions comfortable for their body as priorities. Less than half of

survey participants indicated receiving counseling from a doctor before pregnancy. Many participants expressed a need for information about medication safety during pregnancy and breastfeeding and managing the impact of pain.

Two in five survey participants (40%) indicated they were currently experiencing symptoms of perimenopause or menopause; however, only half of them (21%) said they understood how menopause affects their condition(s). Just over half of participants said they understand how menopause affects bone health.

Though 91% of survey participants indicated that they can honestly discuss pain with their healthcare provider, only 58% feel like their healthcare provider relates to the pain they experience from their condition. The vast majority (87%) of survey participants worry about the impact of their condition on their mental health, yet only 16% said they have a mental health professional (e.g., psychiatrist, psychologist, social worker) as part of their care team.

Discussion

There are several unmet needs in accessing care, information, and treatment throughout the lives of women+ living with psoriatic disease, inflammatory arthritis, and rheumatic diseases. A shift in models of care to focus on patient needs could assist women+ in navigating a range of difficult decisions, such as choosing safe medications for pregnancy and breastfeeding, reconciling health, work and parenting demands, understanding menopause, accessing mental health support, managing pain, and paying for treatments. A sex and gender lens can be used in the creation of innovative resources, policies, and clinical practices to support people with these condition(s).

Abstract N°: 21

Title: Chemical and morphological study of particulate matter adhered on pollution exposed skin

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Introduction

Various skin disorders can be caused or exacerbated by exposure to air pollution (AP). Although the skin is exposed to numerous air pollutants, the ones that need special attention are the particles that adhere to the skin surface and later have the ability to do direct skin damage. The goal of this international, multicenter study is a qualitative and quantitative assessment of the particulate matter (PM) adhering to the skin of the face, using the Scanning Electron Microscopy (SEM) combined with X-ray Dispersive Energy Spectrometry (EDX).

Materials and methods

A total of 55 healthy volunteers, aged >18 years, in three European cities (Skopje, Zagreb, and Sofia) took part in the study. The participants were asked to spend 12 hours in the town (indoor and outdoor). Tape stripping (TS) was performed to collect stratum corneum samples from the cheeks. The samples were analyzed using an SEM-EDX system with a silicon drift detector at an accelerating voltage of 20 keV. After the preliminary examination, the particles were located and counted using 1000 x magnification. Each particle was analyzed, increasing magnification up to 5000 x for precise dimensions measurements and elemental composition analysis.

Results

In total, 1289 particles were identified in all samples examined, with a particle load ranging from 660 to 4525. The particles were classified into ten major classes and subclasses that further define their composition, size, and possible sources. Biogenic and unclassified particles were counted, with no additional specification. Chlorides were the most numerous particles group dominated by K-chlorides, followed by carbonaceous organic particles, silicates, carbonates, metal-rich particles, and a minor number of bioaerosols, quartz-like, and fly ash particles.

We found no significant differences in the total number of particles between the three cities.

However, we observed differences in chemical composition and morphological properties.

In TS samples from Skopje, metal high and metal-rich particles were the dominant group (20,6%), followed by oxides (20,1%) and salts (17,6%). In contrast, in TS samples from Sofia, silicates were the most numerous particles (34,8%), followed by salts (32,1%) and oxides (16,3%). Similarly, in samples from Zagreb, the most dominant groups of particles were oxides (36,5%), silicates (19,2%), and salts (15,9%). Many of the particles identified, including tar balls and K-chlorides, could be attributed exclusively to ambient air pollution sources. We found substantial differences in the average area of all particles and the average perimeter of particles between the cities. The most noticeable morphological shapes were irregular (carbonates, salts, silicates, quartz-like, metal-rich), acicular (oxides, metal-high), and spherical (carbonaceous bioaerosols) shape.

Conclusion

The SEM-EDX analysis provides evidence of the contamination of exposed skin by various airborne PM of natural or anthropogenic origin. Many of the particles identified could be attributed exclusively to ambient air pollution sources.

Abstract N°: 96

Title: Role of B3, D3 and E vitamins in photoprotection in human primary fibroblasts

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Introduction

During the last 50 years, the incidence of non-melanoma skin cancers (NMSCs) has increased due to changes in lifestyle, thinning of the ozone layer, and increased life expectancy. Ultraviolet (UV) radiations are the most important factor that contributes to photoaging and photocarcinogenesis. UV can directly damage the DNA and trigger the production of ROS, which can oxidize nucleotides. In presence of DNA damages, cells activate p53/p21 pathway to arrest the cell cycle, which is permanently blocked when DNA damages are irreparable. Cells undergo to senescence and produce senescence-associated secretory phenotype (SASP) molecules and proinflammatory cytokines that contribute to photoaging and formation of a cancer-promoting environment. Moreover, the accumulation of senescent cells within a tissue modifies tissue integrity and homeostasis. Skin photoaging involves both epidermis and dermis. In particular, the dermis is reached by both UVA and UVB in which cause collagen disruption and reduction of extracellular matrix leading to decreased tissue elasticity and resistance. The use of photoprotectors could help to prevent UV-induced damages and photoaging. With this aim, we investigated whether active forms of vitamin B3 (nicotinamide-NAM), D3 (calcipotriol-CAL), and E (α-tocopherol- α-T), might protect primary human dermal fibroblasts (HDFs) from UVB-induced damages.

Materials and methods

HDFs were isolated from a healthy donor and treated with 25 µM NAM, 100 nM CAL and 1 µM α-T for 24h. Then, HDFs were exposed to 40 mJ/cm^2 UVB on PBS and incubated for 24h. We evaluated cell viability (MTT assay), proliferation (Ki67 quantification), ROS production (DCFDA assay), gene expression of oxidative stress markers SOD1 and MMP1 (qRT-PCR). We analyzed DNA damages (comet assay) and OGG1 expression, p53/p21 expression, and cell cycle (FACS). Lastly, we analyzed senescence markers (senescence-associated β-galactosidase) and p16 expression.

Results

Cell proliferation and viability were affected by UVB exposure, however treatment with NAM and CAL restored cell proliferation but not cell viability. Additionally, both NAM and CAL treatment reduced ROS production, the expression of SOD1 and MMP1, and nitrate production on irradiated HDFs. DNA damages and OGG1 expression were lower in cells treated with NAM and CAL in comparison with only UVB-treated cells. Consistently, also p53/p21 pathway, which is usually activated in presence of DNA damages, was less active in presence of vitamins pretreatment. Cell cycle, in particular G2 phase, was restored by all vitamins analysed, which correlates with lower level of SA-βGal and p16 expression. Finally, NAM and CAL pretreatment lowered the percentage of apoptotic cells after UVB exposure.

Discussion

Our results suggest that NAM and CAL may be considered as photoprotector molecules inasmuch they reduced ROS production and DNA damages, lowered p53 expression, and p21 activation, which resulted in a restored cell cycle and less level of senescence.

Abstract N°: 132

Title: Primary localized cutaneous nodular amyloidosis on a toe

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Introduction

Amyloidosis represents a group of diseases characterized by extracellular deposition of amyloid and is traditionally classified as systemic or localized. Nodular amyloidosis is the rarest form of primary cutaneous amyloidosis, usually occurring equally among genders, most often in the sixth decade of life. It manifests as single or multiple nodules or infiltrated plaques, usually localized on the face, genitals, trunk, and limbs. Progression to systemic involvement is quite uncommon, occurring in approximately 7% of cases.

Materials and methods

We report a case of a woman with Primary Localized Cutaneous Nodular Amyloidosis (PLCNA) located on an uncommon body site - a toe.

Results

A 68-year-old Caucasian woman, with no comorbidities, presented to our Dermatology Department with a 3-year history of an asymptomatic nodule on the third toe of the left foot. The patient reported no additional symptoms.

On examination, a soft, pink to yellow, waxy-appearing 1x1cm nodule was observed to project from the plantar side of the toe. The lesion was totally excised, and histopathological examination revealed deeply eosinophilic homogeneous material infiltrating the entire depth of the dermis. Congo red staining showed the presence of a brick-red deposit in the dermis, which under polarizing microscopy demonstrated apple-green birefringence.

A thorough review of systems was conducted. Laboratory evaluation was otherwise unremarkable, including complete blood cell count, basic metabolic panel, serum and urine protein electrophoresis, and ANA test. Abdominal ultrasound and chest X-ray showed nothing distinctive.

The diagnosis of PLCNA was established based on clinical and histopathologic findings, in the absence of systemic manifestations of amyloidosis. After one year no recurrence was detected.

Discussion

In PLCNA, the fibrillar component derives from amyloid light chains, that are thought to be locally produced by plasma cells. In contrast, in primary systemic amyloidosis with skin involvement, the light chains are derived from the systemic circulation, mainly in association with myeloma and other plasma cells dyscrasias. In this way, recognition and diagnosis of cutaneous amyloidosis enables discrimination from systemic disease, and if found, prompt institution of appropriate treatment.

Abstract N°: 190

Title: Topical use of superoxidedismutase (SOD) in dermatology

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Introduction

Superoxide dismutase (SOD) is a class of physiological enzymes found in human organism, in most of animals and in various plants. SOD features a potent antioxidant acting by dismutation of superoxide anions into H_2O_2 molecules and further oxygen and water. Topical application of SOD was reported as having wound healing properties but also an antipruritic effect.

Materials and methods

To evaluate the efficacy of superoxidedismutase (SOD) in patients with dermatological diseases

Results

Topical superoxide dismutase (SOD) was used in the different groups of dermatological patients. Investigation was made in Ukraine and Georgia in patients with epidermolysis bullosae, post acne scars, seborrheic dermatitis, atopic dermatitis etc. In some patients SOD was used as a single treatment and in other in the complex with other treatment methods. SOD was appled 2 times per day on affected skin areas minimum during one month.

Discussion

Topical SOD show an excellent result in the treatment of many dermatological diseases

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Abstract N°: 287

Title: Periumbilical purpura: the unveiling sign of acute myeloid leukemia and impeding splenic rupture

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Introduction

Purpura can be the presenting feature of serious conditions, such as hematological malignancies, which require urgent diagnosis and management. Purpura's distribution could be an intriguing feature and a suggestive sign for its underlying etiology. Here in, we report a case of periumbilical purpura as the only presenting sign of acute leukemia and an impending splenic rupture.

Results (case)

A 69-year-old woman with a history of breast cancer in remission, treated by bilateral mastectomy 6 years ago and currently on tamoxifen, presented to the department with rapidly progressive purpuric lesions during the past two weeks. The purpuric lesions started at the periombilical level and spread radially along the stretch marks. On physical examination, the patient appeared pale and frail. She had radially-distributed periumbilical nonpalplable linear purpura along the striae distensae, as well as ecchymotic macules on the upper abdominal and thoracic levels (figure 1). No oral or genital lesions were present and vital signs were normal. Splenomegaly was noticed during abdominal examination. She was taken right away to the emergency room for a full blood count, which revealed the following: WBC 60.9x10^9/L with 73% of blast cells; Hemoglobin 7.6 g/dL; MCV 82 (Fl); platelets 12x10^9/L. One hour later, the patient was hemodynamically unstable with acute alteration of her consciousness state. Urgent contrast-Enhanced CT scanner revealed findings consistent with active bleeding at both the anterior and the posterior aspects of the spleen (figure 2). Hemoglobin had dropped to 4 g/dL and platelets to 8x10^9/L. She had an urgent splenectomy and was transferred to the intensive care unit for management. A conclusive diagnosis of type IV acute myeloid leukemia was made after an osteomedullary biopsy.

Discussion

According to studies, patients with purpura should be referred for full blood count and assessment. A full blood count within 48 hours is suggested to rule out leukemia, but it may be required sooner based on the clinical assessment, as in this case. Although the relationship between etiologies and purpura distribution is poorly understood, it could be a useful orientation tool. For instance, in thrombocytopenia, the purpuric rash appears on the lower limbs and around the head and neck in weeping or vomiting children. Hairy cell leukemia and imatinib-treated patients have been reported to develop a purpuric rash in the periorbital area. Moreover, the Cullen sign, or periumbilical ecchymosis, is an important clinical sign of retroperitoneal or intraperitoneal bleeding. This sign has been described in a wide variety of other disorders, including splenic rupture. The purpuric rash of our patient is indubitably linked to her severe thrombocytopenia. However, the link between this distribution and the intraabdominal hemorrhage points to a possible Cullen sign variant: a purpuric radial periumbilical rash. There are rare described cases of acute myeloid leukemia presenting primarily with spontaneous splenic rupture. However, every clinician should consider splenic rupture in patients with known hematologic malignancies. Acute or delayed splenic rupture can present with signs of bleeding or shock, as in our presented case, but it is more commonly associated with stomach pain, referred shoulder pain, and abdominal distention. Cullen sign purpura could be a

new clinical clue and a red flag for intraabdominal hemorrhage.

Figure 1:

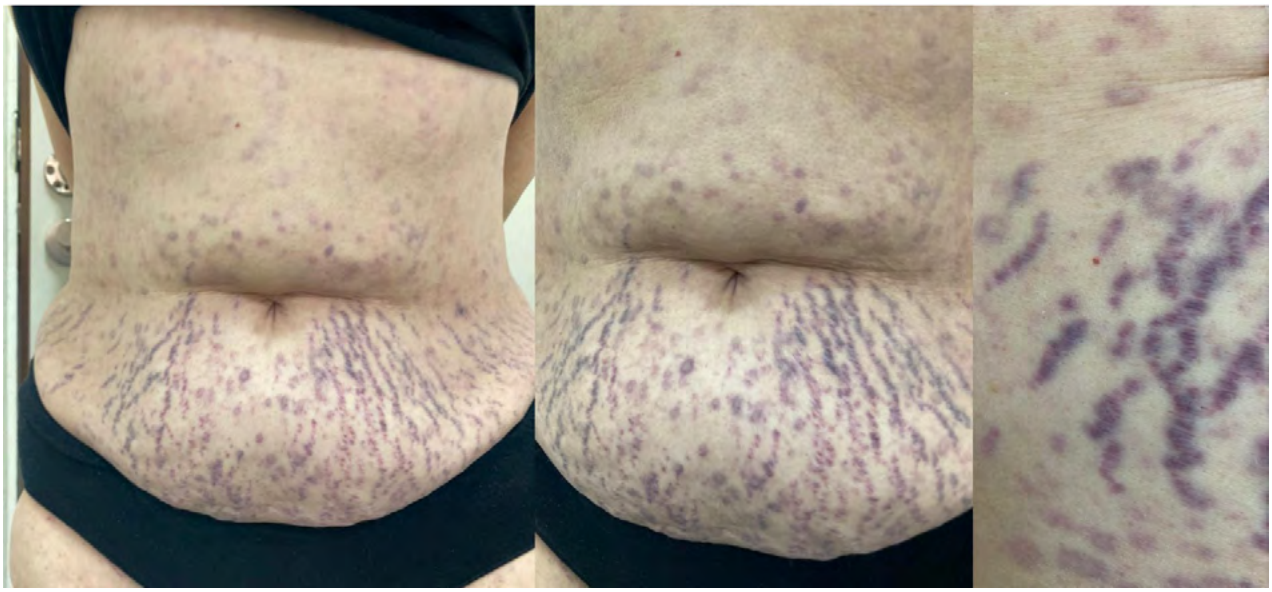
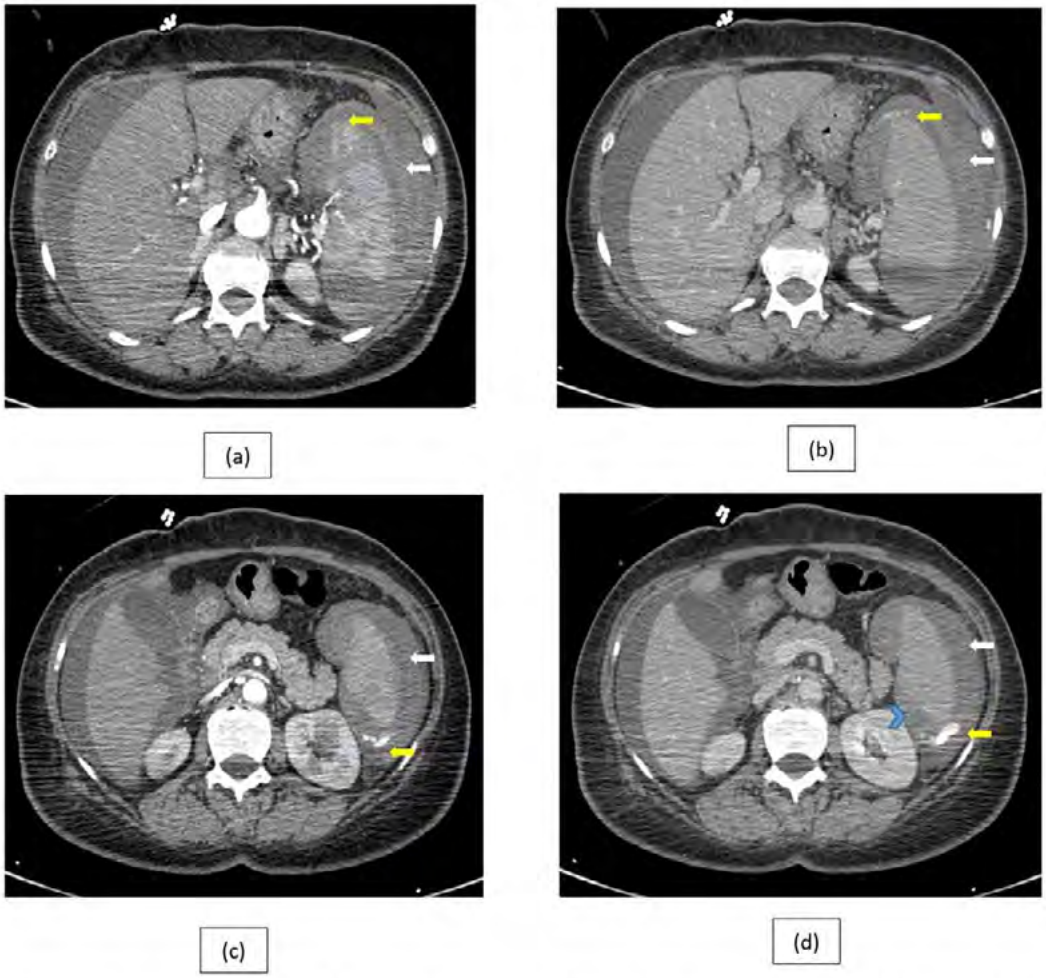


Figure 2:



Contrast-Enhanced Axial CT Scanner performed in a 69 year-old woman referred for acute deglobulization and thrombocytopenia

Transverse images in arterial (a and c) and portal venous (b and d) phases showing contrast medium leak (yellow arrow) that progressively enlarges at subsequent portal imaging. Findings were consistent with active bleeding at both the anterior (a and b) and the posterior aspects of the spleen (c and d).

Hypodensity was also noted at the lower pole of the spleen (arrowhead) as well as hyperdense perisplenic fluid (white arrow).

Abstract N°: 374

Title: Investigating the Effect of Dermatology Clinics on UK Medical Students Confidence and Attitude Towards Dermatology

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Introduction

Despite the high prevalence of dermatological conditions and the impact that they have on health related quality of life, dermatology is consistently given low priority in medical education (1). It has been observed that students perform better and report higher levels of self-confidence in managing dermatology patients after undertaking clinical attachments in dermatology, compared to other teaching modalities (1). Additionally, exposure to dermatology patients during clinical placements is vital to inspire and recruit specialists of the future (2). The aim of our study was to provide insight into medical students' confidence and attitudes before, and after, attending dermatology clinics as well as exploring variation of ethnic diversity amongst dermatological patients in UK teaching clinics

Materials and methods

Online surveys were emailed to UK fourth year undergraduate medical students, before and after they attended the University requirement of two dermatology clinics. Findings were analysed to examine the medical students' confidence in diagnosing and managing dermatological conditions and attitudes towards pursuing dermatology as a future career pre and post-clinic attendance. Additionally, students were asked about exposure to Black, Asian and Minority Ethnic (BAME) dermatology patients during teaching clinics.

Results

61 medical students responded to the pre-clinic questionnaire and 43 medical students responded to the post-clinical questionnaire. Before attending clinics, medical students' confidence was poor with 83% of students reporting they were 'not so confident' or 'not at all confident' in their dermatology knowledge. Additionally, only 20% of students were considering pursuing a career in dermatology, the main reasons cited was due to the lack of exposure and teaching in dermatology during Medical School.

After attending the outpatient clinics, the medical students' confidence significantly increased with 92% being confident their dermatology knowledge. 48% would now consider dermatology as a future career. 79% of students stated that the COVID-19 pandemic had not affected their attitude towards pursuing a career in dermatology. Interestingly, students' confidence in diagnosing skin conditions in BAME patients remained relatively low after attending clinics; with 66% of students feeling 'not very confident'.

Discussion

Our results indicate that attending dermatology clinics increased students' confidence in dermatology and inspired students to consider dermatology as a future career path. Medical students should have opportunities to attend dermatology clinics for patient exposure and to gain experience in managing dermatological conditions to ensure they receive adequate training. Our study also highlights a greater emphasis is necessary within dermatology teaching on the variation in clinical presentations of skin, hair and nail disease in Black, Asian and

Minority Ethnic patients.

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Abstract N°: 408

Title: Access to Sexual Health Services: A Mystery Shopper Service Evaluation on the Provision of Contraceptive Implant Fitting

Bethany Colbrook[1], Hiran Kannan[1], Hannah Maccarthy[1], Danayan Luxmanan[2], Elizabeth Foley[1]

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Access to Sexual Health Services: a mystery shopper service evaluation on the provision of contraceptive implant fitting

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Introduction

Sexual health services in the UK are funded and commissioned by local authorities' public health departments, rather than the NHS. Service provision has undergone changes in recent years, including the tendering of services to clinics in the private sector. All service providers should meet The Faculty of Sexual and Reproductive Healthcare (FSRH) quality standards, including the provision of long-acting reversible contraception (LARC) within a two-week wait period. Although the COVID-19 pandemic placed further pressure on service providers resulting in a relaxation of the guidelines, providers were instructed to return to pre-pandemic service levels by September 2021.

Aims

To determine the extent to which the FSRH two-week service standard for new LARC appointments is met both nationally and regionally, comparing results to those of a similar study conducted during the pandemic in 2020.

Materials and methods

The research method was a telephone-based mystery shopping survey employing the same scenario of a new patient wishing to access sexual health services.

Results

213 sexual health clinics were contacted. Of these, only 47.4% (n=213) met the FSRH standard for LARC appointments. There was statistically significant regional variation (Chi test at 95% significance level, $p<0.001$), and only 5.6% (n=213) of clinics contacted offered a bridging form of contraceptive, namely the progestogen-only pill. When compared to the results for 2020, although there were some regional improvements, there has been a decline in national service levels, 49.5% (n=220) of clinics met the FSRH standard in 2020.

Discussion

Sexual health clinics in the UK are failing to meet the FSRH quality standard and there has been little progress in returning to pre-pandemic service levels. A clear national commissioning standard is required for the timely

provision of LARCs and appropriate bridging contraception, with service providers being held accountable to this standard.

Word count

Title: 17/20

Body of the Abstract: 291/300

Abstract N°: 446

Title: Electronic Patient Information Leaflets in a Dermatology Department: Our Experience.

Anna Wolinska[1], Stephanie Bowe[2], Gregg Murray[2], Cliona Feighery[2], Sinead Collins[2]

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Introduction

It has long been recognised that providing patients with information regarding their diagnosis and treatment encourages compliance and patient satisfaction. As clinicians we have both an ethical and legal responsibility to ensure our patients are well informed. Indeed, patients are becoming more inclined to seek information elsewhere if they feel their questions have not been adequately answered. To consolidate the discussions we have with our patients in the clinical setting patient information leaflets are often utilised.

More and more patients now have easy and immediate access to electronic resources through smartphones and handheld devices. A move to electronic patient information leaflets (e-PIL) is a measure that numerous countries across Europe have already adopted in the distribution of product information for medicines, as summarised by Bolislis et al in 2019[1]. The British Association of Dermatologists offer members free e-PIL handouts for distribution to direct patients to their patient information webpage.

Materials and methods

Coupled with a desire to adopt more environmentally friendly practices both in our personal and professional lives we identified an opportunity to seek alternative options to providing patients with reputable information in a more sustainable and cost-effective way that we could continue in the future. We developed a customisable business card to direct patients to reliable electronic resources. A rollout of e-PIL's was introduced in specialised Dermatology clinics for both adults and paediatric patients to inform on diagnosis and treatment.

Results

Fifteen patients were included in this pilot study and patients were initially surveyed on their willingness to receive e-PIL's. One hundred percent (n=15) of patients or their carers were positively receptive to this method and had the necessary electronic devices to access the appropriate information. Patients were contacted after 7 days and 86% (n=13) reported that they were able to access e-PIL's easily and that their questions had been addressed. Two patients were unavailable for the follow-up survey. Of the thirteen patients surveyed, 100% would be happy to receive e-PIL's in the future.

Discussion

We suggest that this simple yet effective method can easily be successfully implemented across a range of departments nationwide to ensure that we strive to develop and incorporate more green initiatives into our clinical settings whilst continuing to empower our patients through education and support.

Abstract N°: 518

Title: The effectiveness of an online basic dermatology didactic course on the dermatologic knowledge of doctors to the barrios (DTTBs): A quasi-experimental pilot study

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Introduction

In the Philippines, the current dermatologist-to-population ratio is 1:85,117. This ratio gets even smaller as one moves farther away from urban centers. Therefore, most Filipinos rely on government-employed primary care physicians (e.g. doctors under the Doctors to the Barrios program (DTTBs) of the Department of Health) for their dermatologic concerns. Because most of these physicians are general practitioners who received minimal dermatologic exposure in medical school, it is important to ensure that they are equipped with basic dermatologic competency in the diagnosis and management of skin diseases that they will likely encounter in the community.

Materials and methods

This is a quasi-experimental before and after study, which aimed to determine the effectiveness of an online basic dermatology course in increasing the dermatologic knowledge of DTTBs as well as their confidence in their ability to diagnose and manage common skin diseases (bacterial skin infection, dermatophyte infections, seborrheic dermatitis and superficial yeast infection, acne, scabies, psoriasis and the cutaneous manifestations of COVID-19). The dermatologic knowledge of DTTBs was assessed through a clinical photo examination, and their confidence in their dermatologic competency through self-evaluation questions using five-point Likert scale. These measures were taken before, immediately after, and one week after completion of the online basic dermatology course as a pretest, posttest, and retention test respectively.

Results

All currently deployed DTTBs were invited and from these 392 DTTBs, 149 volunteered to participate. Among them, 81 completed the pretest, posttest, and retention test. A repeated measures ANOVA with a Greenhouse-Geisser correction showed that their mean scores in the pretest, posttest and retention test differed statistically significantly between time points ($P < 0.0001$). Thus, their dermatologic knowledge and confidence in diagnosing and managing common skin diseases significantly increased after attending the course.

Discussion

The online basic dermatology course is effective in increasing the dermatologic knowledge of DTTBs as well as their confidence in their dermatologic competency. An online basic dermatology didactic course appeared effective in increasing the dermatologic knowledge of DTTBs as well as their confidence in their dermatologic competency.

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Abstract N°: 524

Title: Acceptability of Artificial Intelligence among dermatologists

Rashi Pangti[1]

[1] Lady Hardinge Medical College, India

Acceptability of Artificial Intelligence among dermatologists

Introduction

The field of medicine is generally slow to adopt newer technology. There is often apprehension among clinicians as to how this will affect their practice. Artificial intelligence (AI) is gaining importance in medicine, more so in specialties that depend on an image-based diagnosis like radiology, histopathology, and dermatology. In dermatology, several machine learning algorithms for diagnosis have been developed and are freely available for use. We undertook this study to know the acceptability of AI among dermatologists, their attitude towards it, and specific apprehensions associated with it.

Materials and methods

We prepared a questionnaire using Google Forms and circulated it among qualified Indian dermatologists and dermatology trainees. The questionnaire comprised of 12 statements, the reply to which was one of the following: strongly agree, agree, agree nor disagree, disagree, strongly disagree, and four questions, the reply to which was yes, no or can't say.

Results

There were 166 respondents (99 male, 67 female). The mean age of respondents was 36.45±13 years. The mean duration of experience was 7.80±10.92 years. The percentage of dermatologists working in a government hospital was 28.31%, those working in a private hospital or clinics were 29.52%, 16.87% had their own clinic and the remaining 25.30% were trainees. There was no difference in the perception of AI based on public or private sector employment or between the two genders.

A significantly greater percentage of older dermatologists, >35 years of age, as compared to those aged ≤35 years perceived that AI will benefit dermatology more than other specialties in medicine (p=0.03) and that any new development in AI in dermatology is welcome (p=0.012). Dermatologists aged ≤35 years perceived more often that AI may replace dermatologists in the future (agree/strongly agree: 16.21% versus 5.45%; p=0.007).

Dermatologists with experience >5 years agreed that AI should be made part of training during dermatology residency (p=0.001) and were more interested in AI (p=0.004) than the trainees and the dermatologists with <5 years' experience. Most (62.05%) dermatologists responded that they were interested in AI. The majority also perceived that AI will be used more by the general practitioners (75.3%), alternative medicine practitioners, traditional healers (79.52%), and by patients for self-diagnosis and self-treatment (84.34%).

Discussion

A greater percentage of the older as compared to the younger dermatologists had acceptability for AI use. This may reflect the greater apprehension among the younger dermatologists who are yet to settle in their career after completing their degree.

Overall, there is a positive attitude towards AI among most dermatologists seen in our study. However, to the question in the survey regarding AI being a boon or bane to dermatology, it was observed that most of the dermatologists were still not sure of the risks or benefits of AI.

Our study thus brings a fresh perspective to know these specific apprehensions among dermatologists regarding AI. This can then be taken care of by the regulatory bodies of the country involved in AI in healthcare.

Our study was limited by the number of respondents to the survey.

Abstract N°: 540

Title: Skin dysfunction in patients with cardiomyopathy due to desmoplakin mutations

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Skin dysfunction in patients with cardiomyopathy due to *desmoplakin* mutations

Introduction

A cause of arrhythmogenic cardiomyopathy (AC) is a truncation in *desmoplakin* (*DSP*). Homozygous carriers have both skin and heart muscle disorders but it is unknown how these organs are affected in heterozygous carriers. The aim of this work is to describe cutaneous findings and skin barrier function in patients with AC due to heterozygous *desmoplakin* mutations.

Materials and methods

Patients with AC and a truncating *DSP* variant were selected from the Inherited Cardiovascular Diseases Unit of Hospital Virgen de las Nieves in Granada, Spain. A dermatologist performed a physical evaluation and measured skin barrier function parameters including transepidermal water loss (TEWL), stratum corneum hydration (SCH), temperature, pH, erythema and melanin. A cutaneous biopsy was taken from non-lesioned skin from the palm and were studied with hematoxylin-eosin and immunohistochemistry study.

Results

Twelve patients were included in the study, being 66.7% (8/12) men. No relevant macroscopic changes in skin and hair were detected. Clinically, only 33.3% (4/12) of patients had dermatological manifestations: 16.7% (2/12) had androgenic alopecia, Ludwig grade I, and 16.7% hyperkeratosis in pressure areas of the hands. However, significantly lower skin temperature (29.56 vs. 30.97 °C, $p = 0.036$) and higher transepidermal water loss (TEWL) (37.62 vs. 23.95 $g \cdot m^{-2} \cdot h^{-1}$, $p = 0.028$) were observed compared to sex- and age-matched controls. Histopathology of the skin biopsy showed widening of intercellular spaces and acantholysis of keratinocytes in the spinous layer. Immunohistochemistry showed a strongly reduced expression of DSP in all samples. Trichogram showed regular nodules (thickening) compatible with pseudomonilethrix.

Discussion

Heterozygous patients with truncation-type variants in *DSP* have lower skin temperature and higher TEWL, constant microscopic skin involvement with specific patterns and pseudomonilethrix in the trichogram.

Abstract N°: 586

Title: Two rare cases of cutaneous Rosai-Dorfman disease

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Introduction

Rosai-Dorfman disease (RDD), or sinus histiocytosis with massive lymphadenopathy, a rare benign disorder with unknown etiology and pathogenesis, is characterized by the proliferation of non-Langerhans histiocytes. Classic RDD usually presents with bilateral painless cervical lymphadenopathy, fever, weight loss, but very rarely, the disease may be limited to the skin. The latter variant, also called cutaneous RDD, may appear as red-brown, xanthomatous or violaceous macules, papules, nodules, or plaques, mostly involving the face.

Materials and methods

Results

In the first case, a 46-year-old woman, with no past medical history presented with a red, well-circumscribed nodule, localized on the anterior chest, which had a 3-month history of enlarging. She applied various topical treatments, without improvement. Dermoscopic image showed arborizing vessels on a reddish background. In the second case, an otherwise healthy, 53-year-old woman presented for two red, well delimited, indurated plaques, on the forehead and left cheek, which were evolving for a year. Dermoscopy revealed arborizing vessels on an orange homogeneous background. Neither of the patients had concomitant lymphadenopathy or other constitutional symptoms. In both cases, punch biopsy and immunohistochemistry staining were performed. Histological analysis showed nodular proliferation in the reticular dermis, consisting of large polygonal histiocytic cells, with pale eosinophilic, granular cytoplasm, mostly multinucleated, with vesicular nuclei and prominent nucleoli. An abundant mixed infiltrate with lymphocytes, plasma cells and neutrophils was present, some of the latter being observed in the cytoplasm of the histiocytic cell (emperipolesis). Immunohistochemistry showed that S100 is intensely positive in large histiocytic cells (Rosai-Dorfman cells). The proliferative cells also expressed CD68 and were negative for CD1a. Taking everything into consideration, the diagnosis of Rosai-Dorfman skin disease was established. In both cases, spontaneous resolution occurred, with no signs of recurrence at 6-month follow-up.

Discussion

Cutaneous RDD is an unusual clinical entity with unspecific, various types of lesions, single or multiple. Thus, the clinical diagnosis may be challenging, and it is important to consider this disease in the differential diagnosis of facial lesions. Dermoscopy may also be useful.

Abstract N°: 600

Title: Intralesional methotrexate for the treatment of keratoacanthoma

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Introduction

Keratoacanthoma is a cutaneous tumor clinically presenting as a dome-shaped nodule with a central keratinous plug that grows quickly, remains stable for a variable period of time, and remits spontaneously. The lesion can appear similar to a squamous cell carcinoma and the link between a keratoacanthoma and squamous cell carcinoma has been heavily debated, with some authors considering them a continuum of a single disease.[1] Nonetheless, its clinical appearance and progression may help distinguish it from a squamous cell carcinoma which develops slowly and does not self-resolve.

Materials and methods

We report the case of a 67-year-old female patient who presented with a rapidly growing, 1.5cm diameter dome-shaped nodule, with central hyperkeratosis, localised on the right alar crease. The lesion had developed in the previous 2 months and both its aspect and the rapid growth were clinically suggestive of keratoacanthoma. The patient was counseled on various therapeutic options and opted for treatment with intralesional methotrexate. Hematological, hepatic, and renal blood tests were within normal limits.

A total 1.5 ml of 12.5mg/ml methotrexate solution was injected using the following protocol: 4 injections equally divided around the keratoacanthoma, blanching its rim and a fifth injection under its base.

Results

At 8 days follow-up, the nodule had significantly regressed and a small area of necrosis was visible in the center of the lesion. Three weeks after the initial injection the lesion had disappeared completely with an excellent cosmetic result. No further injections were needed.

While the patient reported moderate pain in the first three days after the injection, there were no other local or systemic side effects. There was no recurrence in the following 15 months of follow-up.

Discussion

Keratoacanthomas are rapidly growing tumors that usually appear in the older population on sun-exposed areas. Although they have a characteristic clinical appearance and can regress spontaneously, watchful waiting until resolution is uncommon as there is no reliable method of differentiating them from squamous cell carcinomas.

While there are no clear guidelines, management options include electrodessication and curettage, surgical excision, topical therapy and intralesional therapy. Intralesional methotrexate is a simpler and cheaper alternative to surgical excision and carries a low risk of local or systemic side effects. It usually leads to superior cosmetic results, as was seen in our case and could be used as a treatment option for keratoacanthomas of the face, with only the cases which do not adequately respond after 2-3 injections being referred for surgery.

References:

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EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
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Abstract N°: 662

Title: Implementation of Local Safety Standards in Invasive Procedures in Dermatology Following a Never Event

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Introduction

Never events are patient safety incidents that have the potential to cause serious patient harm or even death but are wholly preventable if the appropriate guidance was followed.

Evidence have shown since the introduction of the WHO checklist there has been an improvment in patient outcomes with reduction in complication rates. Despite this, the amount of wrong site surgery incidents did not decrease. Accordingly, in 2015 the National Patient Safety Agency (NPSA) introduced the concept of national (NatSSIPs) and local (LocSSIPs) safety standards for invasive procedures using the same priciples as the WHO checklist.

Understanding the importance of this, University Hospitals Birmingham (UHB) Foundation Trust set up a Quality Improvement Project on developing and implementing LocSSIPs in all departments undertaking invasive procedures. With the over-arching aim is to reduce incidents and never events by focusing on the core key elements, and the specific saftey checks for each procedure.

Materials and methods

Using the Model for Improvement method, the project plan was divided into 4 phases: scoping, development, implementation and maintenance and monitoring.

Following a Never Event of wrong site surgery in Dermatology, an investigation was undertaken.

Root cause analysis found there were multiple contributary factors including communication breakdown and that normal protocol was not followed. We therefore focused our project on the Dermatology department to develop and implement LocSSIPs.

We worked closely with the department's clinical service lead to identify key steps and worked to personalise the checklist to Dermatology with the aim of improving patient safety and achieving a reduction in serious incidents.

To standardise safety checks, UHB has developed 5 key areas or elements of safety pertaining to the operator, the patient, allergies, procedural and post-procedural care. Our safety standards were framed on NPSA guidance, safety alerts and standards of the WHO checklist but tailored for procedures within Dermatology. Following implementation, compliance was audited quarterly.

Results

image 1

LocSSIPs were developed and approved with all 5 key elements included *(image 1)*.

Following a successful initial trial in May 2021, compliance was audited in June 2021 and it showed 100% compliance and 100% correctly completed forms. The following audit cycle in September 2021 showed compliance of 100% however the correctly completed forms was at 80%. Action plans, including direct re-training, were made to boost this number and subsequently improvement was shown in December 2021: compliance of 100% and correctly completed forms of 100%.

Discussion

There is overall good compliance however as with every quality improvement process, the work is longitudinal, and the troubleshooting process is still ongoing. Continuous auditing and monitoring of their use is required as well as the long-term effects on serious incidents to determine the true impact of LocSSIPs on patient safety in invasive procedures.

There is also continued feedback from staff to develop and refine the safety standards.

LocSSIPs cannot guarantee that serious incidents will not occur but do provide a consistent and standardised practice in patient care having an invasive procedure. However by ensuring good compliance, the better the outcomes will be, hence this is our main focus long-term.

Abstract N°: 837

Title: Spontaneous keloids : About a case

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Introduction

Keloids are benign tumors of the dermis most often secondary to a trauma. They occur in predisposed people, particularly those with pigmented skin. Spontaneous keloids are extremely rare , they take the same appearance and location as secondary keloids and follow the same evolution, without a triggering cause being found.

We report a case of spontaneous keloids in a 15 years old patient.

Materials and methods

A 15 years old patient, with no medical history, was admitted to our establishment for multiple skin nodules that appeared spontaneously since the age of 11 years without any tendency to regress with an aggravation in premenstrual period, for which she received 15 corticosteroid injections.

The patient reported that her sister has the same symptomatology but with less lesions.

The clinical examination found flesh-colored skin nodules of soft consistency and different sizes on the upper back and pre-sternal area and folliculitis scar in the lower back.

A punch biopsy was performed to confirm the diagnosis and to rule out differential diagnoses such as cutaneous leiomyomas, which came back in favor of the diagnosis of keloid.

The patient will be treated with CO2 laser combined to corticosteroid injections.

Discussion

Spontaneous keloid remains a rare entity and challenging to diagnose. Few cases were reported in the literature .

Their physiopathology is poorly elucidated, some reported cases were associated with certain syndromes which may raise the question of a genetic link between spontaneous keloids and certain mutations, Some others were reported after the use of isotretinoin.

In our case the hypothesis of keloid following the folliculitis of the back is possible but it does not explain the appearance of lesions at the pre-sternal area

Abstract N°: 868

Title: Becker naevus syndrome of the lower back: an anusual localisation .

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Introduction

Becker naevus syndrome is a rare epidermal naevus syndrome. It includes a Becker naevus in combination with other cutaneous and extracutaneous abnormalities. We report a rare case of becker naevus syndrome with an anusual presentation.

Observation

A 38-year-old female patient presented for a slightly brownish mark on her back that had been present since birth. She reported no hirsutism, irregular menstruation or any similar cases in the family. At dermatological examination, a triangular well-defined plaque with hypertrichosis, was found in the lower back .Clinical examination showed scoliosis .Gynecological examination was normal. Imaging exams performed included radiography of the spinal column, which confirmed the presence of scoliosis.The diagnosis of becker naevus was retained.

Discussion

Becker naevus syndrome is defined by the association of a Becker naevus with various cutaneous, muscular and skeletal anomalies including scoliosis.This syndrome generally originates at birth, intensifies significantly in adolescence and is one of the syndromes that constitute epidermal nevus syndrome. In this syndrome,the nevus usually consists of a cutaneous hamartoma characterized by circumscribed hyperpigmentation with hypertrichosis , commonly occurring around the upper trunk, mainly the shoulder, chest or scapular region. The localisation in the lower back, as in our case, is anusual.

Abstract N°: 890

Title: Microwave ablation - our experience with new thermal endovenous ablative modality

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Microwave ablation – our experience with new thermal endovenous ablative modality

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Introduction

Venous insufficiency of the lower limbs is very common pathology in western countries. It consist from a conglomerat of signs and simptoms, produced by elevated venous pressure in superficial and deep veins of the legs. It has a large prevalence in adult population: 10-33% of adult women and 10-20% of adult men are affected. Advanced forms of chronic venous insufficiency are present at 3-11% of adults. In the last decade of the 20th century, endovenous ablative techniques of treatment were introduced in clinical practice. At first thermal modalities, as laser and radiofrequency, and in later several ultrasound guided modalities found a path to operating theatres: thermal, chemical to cyanoacrylate glue ablation. In recent years, microwave venous ablation – previously used in oncological applications – was introduced.

Materials and methods

Microwave venous ablation modality was introduced in clinical practice in our institution in March 2021. In this technique, electromagnetic field makes water dipoles in tissue to rotate, their friction raises tissue temperature and causes coagulative necrosis. Although being thermoablative technique, which includes need of (tumescent) anesthesia, it should in theory and in comparison to radiofrequency, provide more predictable and homogeneus ablation zone. We are conducting a study exploring efficacy/technical success of the modality. From March till end of December 2021, 25 normally ambulating adult patients with no severe systemic concomitant disease or coagulative disorder, and 25 limbs were treated in a pilot study. CEAP ranged from C2 to C5. All procedures were done in tumescent anesthesia. We used 70 cm probe with 2,5 cm active tip. Ablation protocol was 40 watts for 7 seconds per single section of ablation. There was no serious peri- or postprocedural complications. All patients were checked with ultrasound 6 to 8 weeks after procedure. In ongoing study, we intend to include in total of 60 treated patients/limbs.

Results

We included 11 women and 14 men, median age was 60.2 (ranging from 38 to 75) years for women, and 63.7 (from 43 to 85) years for men. Of 25 limbs, in 12 cases trunk of right vena saphena magna (VSM), in 9 cases left VSM, in 1 case right vena saphena parva (VSP) and in 3 cases left VSP was treated. On ultrasound control, we considered procedure technical success when insufficiency was abolished or retrograde flow was within

physiological range. After no less than six weeks after procedure, 11 of the treated vein trunks were completely occluded, with no detectable flow inside the lumen. Of those, 10 was VSM (6 on the right and 4 on the left) and 1 VSP (left). In 4 limbs, vessel (2 left VSP and 2 left VSM) was still patent, but with no detectable retrogarde flow. In 10 treated veins (7 right VSM, and 3 left VSM) ablation was unsuccesfull (pathological retrograde flow still present). Overall technical success was 60%.

Discussion

To our opinion, relatively low early technical succes rate was probably result of inadequate ablative protocol (too low energy applied per section of ablation). Accordingly, we currently use higher power per section (50 watts). Meanwhile, modality is very user-friendly, has excellent manouvrability and excellent safety profile.

Abstract N°: 932

Title: Unexpected seborrheic keratoses in a 21 year old female

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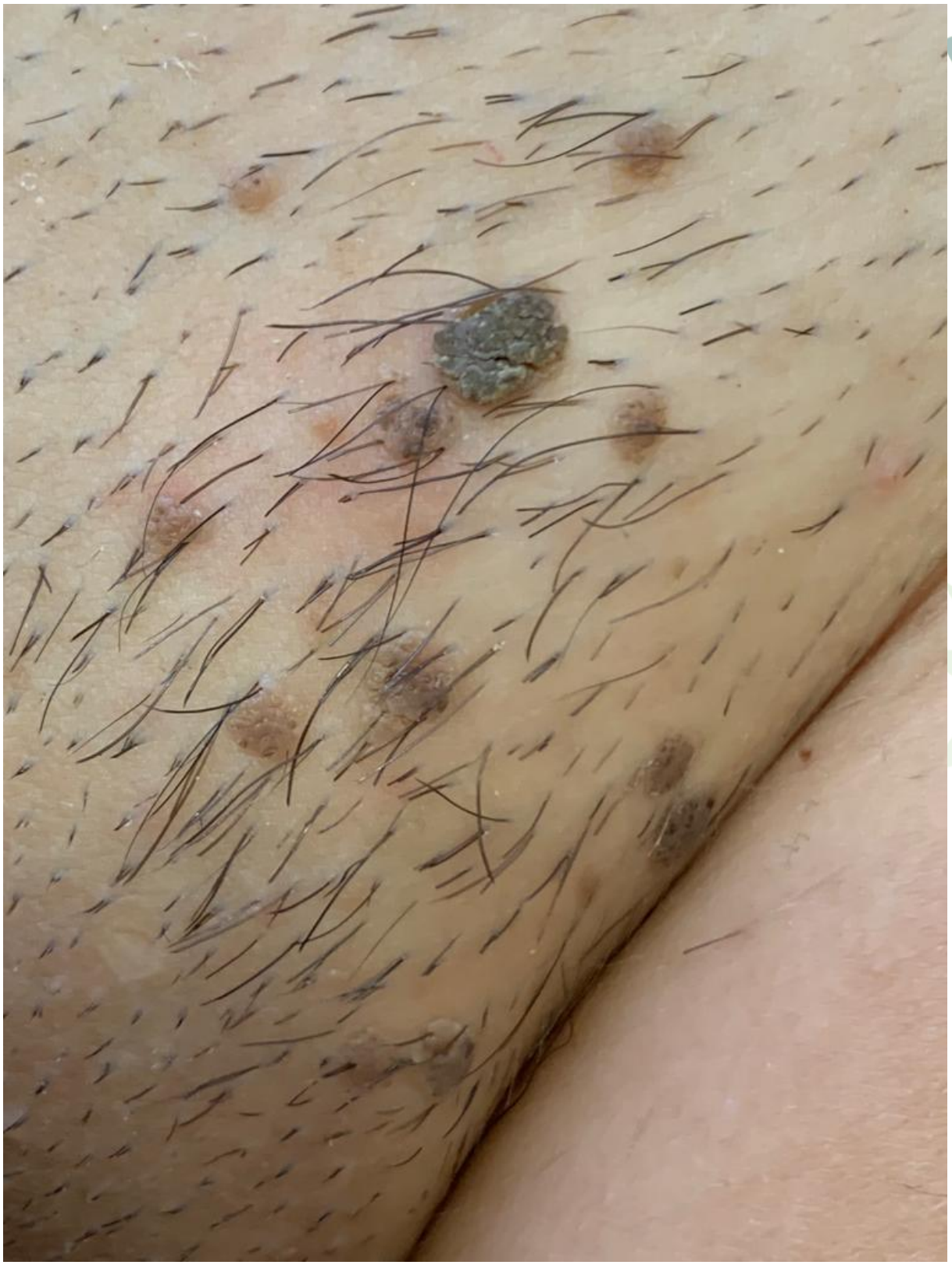
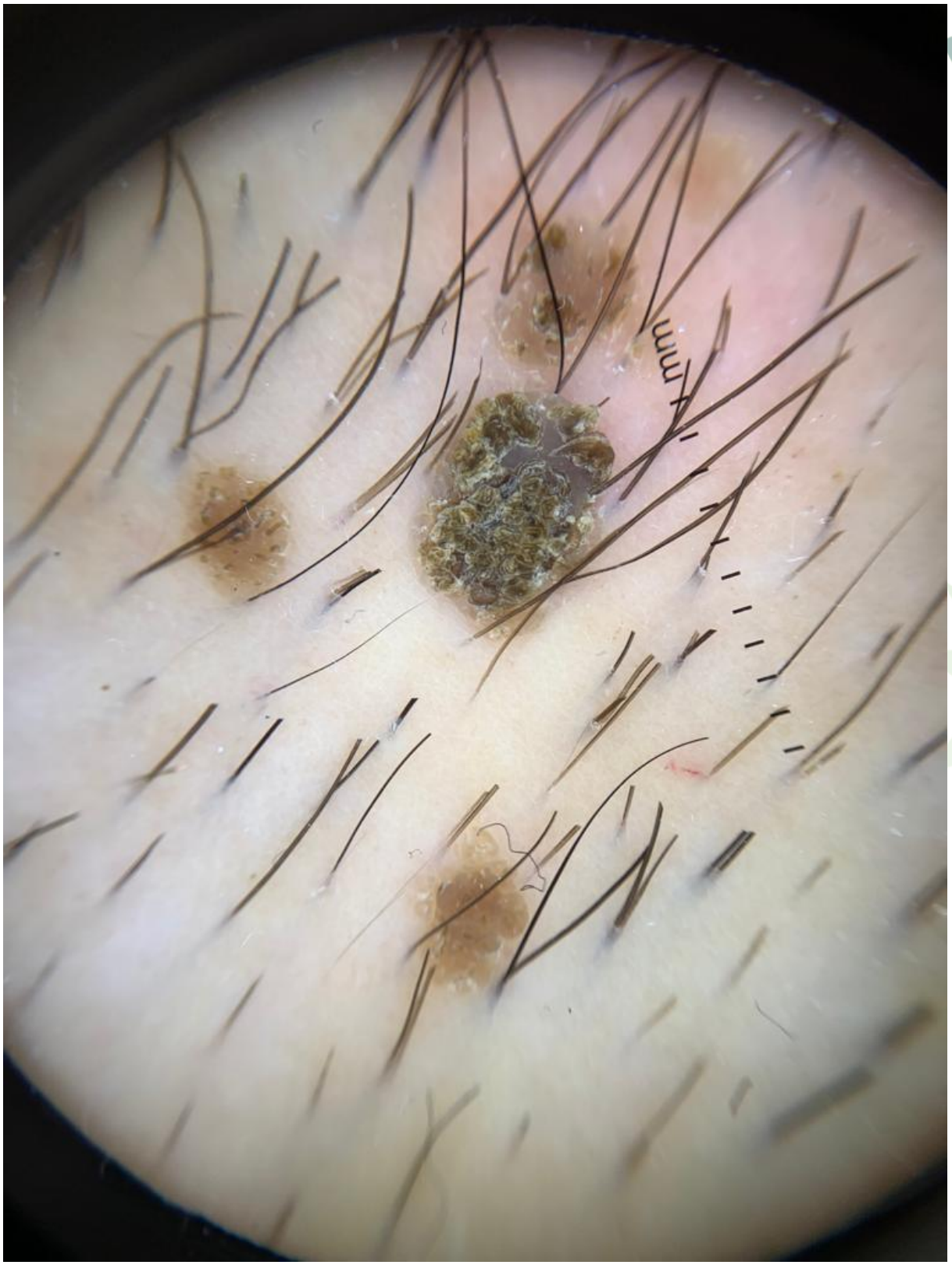
Introduction

- Seborrheic keratoses can resemble condyloma acuminata when located in the anogenital region. The former usually presents with a stuck-on appearance, a brown color and have a waxy, coarse scale that can be removed to show a moist base. Condylomas often present as a brown growth with a cauliflower appearance. Even though they are both benign conditions, it is important to establish the right diagnosis, especially because one of them is a contagious disease.

Materials and methods





Results

- We report the case of a 21 year old woman who presented in our clinic with an eruption consisting of multiple small, oval, brown verrucous growths, with coarse, waxy scale, localized in the right suprapubic region. The eruption debuted for about 3 months ago with no pruritus.
- We performed a shave-biopsy for one of the lesions in order to establish a correct diagnosis. The pathology examination revealed the diagnosis of seborrheic keratoses.

Discussion

- Seborrheic keratoses are extremely uncommon under the age of 25, but regardless it is worth considering this diagnosis when the clinical manifestation is evocative.

- Condyloma acuminata can resemble seborrheic keratosis clinically and even histopatologically, so more specific tests and patterns should be used for a more certain diagnosis

Abstract N°: 275

Title: Dermatoscopic and histopathological differentiation of psoriatic and non-specific balanoposthitis

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Introduction

It has been reported that in 2-5% of psoriasis cases genital lesions could be the only clinical manifestation of the disease. Non-specific balanoposthitis accounts for 23-60% of chronic, non-infectious balanoposthitis cases when all other etiological factors have been ruled out. It is sometimes referred to as a disease of a dysfunctional foreskin. Both psoriatic and non-specific balanoposthitis are clinically characterized by erythema of the glans penis and the prepuce that is sometimes accompanied by itch or a burning sensation. Therefore, clinical differentiation of psoriatic and non-specific balanoposthitis is nearly impossible. Dermatoscopy could provide additional information to diagnose psoriasis in such doubtful cases without performing a biopsy. The aim of this study is to compare dermatoscopic and histopathological features of psoriatic and non-specific balanoposthitis.

Materials and methods

Over a period of three years 12 cases of psoriatic and 14 cases of non-specific balanoposthitis were enrolled in this study from a single clinical center. A biopsy with histopathological confirmation of diagnosis was performed in all cases. Digital dermatoscopy (20x magnification) images of balanoposthitis were independently analyzed by two dermatologists. A consensus was afterwards reached in divergent cases.

Results

Histopathological features consistent with psoriasis were parakeratosis, intraepidermal neutrophil accumulation, hypogranulosis, tortuous vessels in the papillary dermis. Non-specific balanoposthitis was characterized by mild hyperkeratosis, spongiosis with neutrophil exocytosis, perivascular lymphocytic infiltrate in the papillary dermis.

Dermatoscopic features that were commonly observed in psoriatic balanoposthitis were regularly distributed dotted vessels (12/12), pustules were observed in two cases. In contrast non-specific balanoposthitis mostly displayed linear curved and branched vessels (14/14) that were commonly distributed in clusters (7/14).

Discussion

Although it is difficult differentiate psoriatic and non-specific balanoposthitis clinically, these entities are characterized by discrete dermatoscopic and histopathological features.

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Abstract N°: 894

Title: Analysis of glycemic profile indices and microcirculatory disorders in patients with onychomycosis associated with obesity

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Introduction. According to some authors, the prevalence of onychomycosis in the general population is 10-20%, it increases with age and is 31% in people aged over 60 years. This affects the quality of life of patients, the risk of infecting contact persons and social adaptation. The treatment of such patients is long-term and not always effective due to concomitant pathology, which should be taken into consideration and corrected by the complex therapy for patients with onychomycosis.

The aim of the work is to analyze the glycemic profile indices and microcirculatory disorders in patients with onychomycosis associated with obesity.

Materials and methods. We examined 36 patients with onychomycosis aged 45 to 70 years, including 16 women (44.4%) and 20 men (55.6%). All of them had a concomitant pathology: obesity. The control group included 20 healthy individuals of the same age (10 men and 10 women, by 50%). The signs of obesity were a waist circumference (WC) exceeding 80 cm in women and more than 94 cm in men, a body mass index (BMI = the ratio of body weight in kilograms to the square of the person's height in meters) exceeding 25.0 kg/m2. The blood sugar level was measured on an empty stomach using an automatic biochemical analyzer. Glycated hemoglobin (HbA1c) was determined by immune-turbidimetric method. The microcirculatory disorders were determined based on laser Doppler flowmetry.

Results. The dermatological examination and fungal culture in all patients confirmed onychomycosis (Trichophyton rubrum was seeded). All patients had an increased body weight, BMI was 37.78±0.15 kg/m2, which corresponds to general obesity, class 2 (BMI - 35.0 to 40.0 kg/m^2), and the waist circumference, as the main sign of abdominal obesity, was increased and was on average 127.6±8.6 cm. The biochemical analysis of blood revealed an increased blood sugar level to 7.94±0.07 mmol/l and HbA1c to 6.82±0.05% compared with a group of healthy individuals (blood sugar - 4.36±0.03 mmol/l, HbA1c - 4.55±0.09%) ($p<0.05$ for both indicators). Based on the results of the study of microcirculation, in 30 (83.3 %) patients with onychomycosis, the microcirculatory disorders in the skin of the affected toes was revealed, of which spastic type - 19 (63.3%), stagnant-static - 9 (30)%, hyperemic - 2 (6.7%), that is most likely due to the toxic effect of hyperglycemia on the endothelium of microcirculatory vessels. The microcirculatory disorders were not found in the control group.

Discussion. Thus, in patients with onychomycosis associated with obesity, the carbohydrate metabolism disorders with microcirculatory vessels lesions were also revealed, which may be a trigger factor for the development and progression of fungal infections. The results obtained indicate a high incidence of abnormal glycemic profile and microcirculatory disorders in patients with onychomycosis associated with obesity that should be taken into account during a comprehensive examination and further treatment of such

Abstract N°: 942

Title: Benign tumors determined by chronic medication

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Introduction Gingival tumors represents an abnormal overgrowth of gingival tissues. Often, this condition represents a diagnostic challenge because a large group of pathologic processes can produce such lesions. The most common are the reactive hyperplasias, which develop in response to a chronic tissue injury that stimulates an excessive tissue repair response.

Materials and methods The study was conducted as a one-year retrospective analysis, using the archives of the Oral and Maxillofacial Department Timisoara. The study included 28 cases, only which were microscopically diagnosed as benign gingival tumors, while those lacking information on clinical presentation were excluded. The pre-biopsy clinical differential diagnoses with which the biopsies were submitted were classified into reactive lesions or benign tumors. All of the patients undergo a treatment with Ca channel blockers for hypertension.

Results The size of benign tumors ranged between 5-50 mm in diameter for the study group. The vascular and fibroblastic tumors presented the lowest mean size (5 and 7 mm respectively). Almost all the benign tumors included in the study presented as non-ulcerated masses. Only two presented as ulcerated masses.

Most of the benign tumors were clinically classified correctly as non-malignant and did not raise any clinical suspicion for malignancy. The results of the present series emphasize that the ulceration rate of benign oral mucosal tumors is very low.

Discussion Dental prosthesis, due to a chronic irritation or to the nature of the alloys used, can cause gingival tumors, especially when the patient is under treatment with Ca channel blokers. The clinical ability to recognize benign mucosal tumors by visual inspection is relatively poor. Indication for biopsies from each gingival tumors is required. In addition to the medical condition, often an esthetic issue occurs, especially when the gingival tumor is located around the anterior maxillary teeth.

Abstract N°: 84

Title: A case of recessive dystrophic epidermolysis bullosa confirmed with whole exome sequencing

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Introduction

Inherited Epidermolysis Bullosa is a genetic disorder characterized by structural anomalies that reduce the resilience of skin and mucous membranes to mechanical stress. The four major classical Epidermolysis Bullosa (EB) types are Epidermolysis Bullosa Simplex (EBS), Junctional Epidermolysis Bullosa (JEB), Dystrophic Epidermolysis Bullosa (DEB) and Kindler Epidermolysis Bullosa (KEB). The structural protein affected in DEB is Collagen VII.

Materials and methods

A 2-year-old female born from non-consanguineous parents presented with multiple recurrent tense blisters over the elbows, knees, oral mucosa, trunk, extremities, as well as atrophic scars and milia on areas of previous blister formation, and anonychia on all finger and toe nails with moderate pseudosyndactyly were noted. Histopathology showed a subepidermal split and sparse lymphocytic infiltrates.

Results

Point mutation of c.5344 of COL7A1 was homozygous for the patient and heterogenous for both parents on whole exome sequencing (WES), confirming recessive dystrophic epidermolysis bullosa (RDEB)- intermediate.

Discussion

Early recognition of this condition will decrease possible systemic, infections, and death due to cutaneous squamous cell carcinoma (sSCC). Confirming the diagnosis of RDEB patients can help guide the patient and physician in monitoring for cSCC and family counseling

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Abstract N°: 95

Title: Characteristics of the composition of the urogenital micro-flora in girls with lichen sclerosis

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Introduction The variety of factors under the influence of which dystrophic diseases of the genitals are formed in women and girls brings the problem of their study beyond the scope of one specialty. Lichen sclerosis (LS) of the vulva is one of the main representatives of benign dystrophic diseases of the vulva, against which oncogenic transformation can occur. Of particular concern is the tendency towards a gradual rejuvenation of the disease, since LS in young girls and adolescents leads to thinning, resorption, and underdevelopment of the external genital organs. In this regard, the purpose of this investigation was a detailed study of the microflora of the urogenital tract of girls with LS.

Materials and methods Under our supervision there were 12 girls diagnosed with lichen sclerosis vulva aged 6 to 12 years. All girls underwent a detailed clinical and anamnestic observation and microbiological and PCR study of discharge and scrapings of the urogenital tract (UGT) for the most common sexually transmitted infections (STIs) and concomitant urogenital microflora.

Results The duration of the disease ranged from 2 months to 3 years. Before contacting us, the girls, accompanied by their mothers, repeatedly received treatment, mainly in the form of ointment therapy with corticosteroid and antifungal ointments and creams, or used products containing panthenol with a temporary effect. re contacting us, 7 patients have been erroneously diagnosed with dyschromia or vitiligo. Under our supervision, patients were treated after carefully conducted antihelminthic, antifungal treatment. The main concern was itching, which increased at night, 5 girls had a burning sensation and slight weeping, excreta from the genital tract was noted in 8 girls. Menarche occurred in 1 patient. The results of microbiological and PCR studies showed the presence of the following pathogens in the form of mono- or mixed infection: Ureaplasma Urealyticum - in 3 (25.0%), Mycoplasma genitalium - in 3 (25.0%), HPV (Human papillomavirus) 16/18 – 2 (16.7%), HSV 1 - in 4 (33.3%), St. Epidermidis - 4(33.3%), E. Coli –in 2 (16.7%), Candida - 3(25.0%), Enterobacter - 3(25.0%), Gardnerella vaginalis in 4(33.3%) girls. In 8 (66.7%) girls, infections occurred in a mixed variant. Concomitant disorders in the functioning of the thyroid gland (autoimmune thyroiditis, hypothyroidism) were noted in 5 girls.

Discussion All patients underwent complex treatment, including antibacterial, antiviral, anticandidal therapy, depending on the identified pathogen, enzyme preparations and low-intensity laser therapy with a photodynamic effect from 8 to 10 sessions. In the presence of mixed infection and irritating skin and mucous secretions, the genital tract was sanitized with a solution of chlorhexidine or povidone iodide, followed by lubrication with a solution of fucorcin. Patients with impaired thyroid function underwent appropriate correction after consultation with an endocrinologist. As a result of the therapy, a good clinical effect was noted (cessation of itching and burning, epithelialization of microcracks and erosions, restoration of skin texture, hyperemia in the area of whitened areas) and negativity of the identified pathogens. In the origin of LS in girls of preschool and primary

school age, infections of the urogenital tract (ureamycoplasmosis, gardnerellosis, HPV, etc.) can also play a role, which must be taken into account when prescribing treatment.

Abstract N°: 118

Title: Childhood acute urticaria and seasonal patterns presenting in the emergency department of a teaching Hospital in London, United Kingdom

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Introduction To characterize the clinical presentation, possible trigger factors and seasonality of acute urticaria (AU) in children referred to the emergency department in a teaching hospital in London, United Kingdom.

Materials and methods This was a retrospective descriptive study. One hundred and sixty-three consecutive patients younger than 18 years with the diagnosis of AU who attended accident and emergency department from January 2018 until January 2020 at Chelsea and Westminster Hospital in London, United Kingdom, were included in the study. Descriptive statistics were performed using IBM SPSS 25.

Results In total, 163 patients younger than 18 years, 82 (50.3%) boys and 81 (49.7%) girls. The median age of patients with AU was 4 years (interquartile range, 6 years). In 120 of (73.6%) 163 patients, there was no clear trigger of AU, in 17 (10.4%) of 163 patients, upper respiratory infection was considered as a potential trigger of AU, followed by food in 14 (8.6%) cases, medications in 9 (5.5%) cases, hymenoptera sting in 1 (0.6%) case, and contact urticaria 2 (1.2%) cases. Seventeen (10.4%) of the patients were admitted into the hospital as a result of their urticaria. The majority of AU urticaria cases were reported in autumn with 76 (46.6%) cases with most of AU cases occurring in November (34/163, 20.9%).

Discussion A total of 163 cases of AU were identified between January 2018 and January 2020. A seasonal trend of AU in autumn was observed. Respiratory infections were found to be the most commonly associated potential trigger of AU cases.

Abstract N°: 154

Title: Management of Juvenile-Onset Systemic Sclerosis with Systemic Immunosuppressive Therapies: An Evidence-Based Review

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Introduction

Juvenile-onset systemic sclerosis (JSSc) is a rare debilitating autoimmune condition resulting from inflammation, vascular abnormality, and progressive fibrosis. It affects connective tissue in multiple organ systems. This systematic review examines the use of systemic immunosuppressive therapies in JSSc, with a focus on efficacy for skin thickness.

Materials and methods

Following PRISMA criteria, a MEDLINE and Embase OVID search was conducted on November 12, 2021 using variations and synonyms of the keywords "scleroderma" and "pediatric" (Supplemental File 1). After independent screening of 232 articles by two reviewers, 95 patients from 42 studies were included. The mean patient age was 9.6 years (range: 2-17 years). There were 21 males (22.1%) and 71 females (74.7%); gender was not stated for 3 patients (3.2%).

Results

A total of 121 instances of systemic immunosuppressive therapy use with outcomes were documented in the 95 patients; treatments were categorized as monotherapy (78/121, 64.5%) or combination therapy (43/121, 35.5%). Corticosteroids (27/78, 34.6%), methotrexate (18/78, 23.1%), and D-penicillamine (15/78, 19.2%) were the most common monotherapies. Corticosteroids with methotrexate (24/43, 55.8%), corticosteroids with D-penicillamine and methotrexate (4/43, 9.3%), and corticosteroids with cyclophosphamide (3/43, 7%) were the most frequent combination therapies. Treatment duration was described in 30 instances (mean: 6.5 months; range: 0.25-18 months). Outcomes were reported as improved, stabilized (no improvement or worsening), and worsened in 76% (92/121), 13.2% (16/121), and 10.7% (13/121), respectively.

The Modified Rodnan Skin Score (mRSS) is a validated outcome measure for evaluating skin thickness severity in systemic sclerosis (SSc) (range: 0-52). Based on clinical trial data in adults with SSc, minimal clinically important differences (MCID) in mRSS are ≥20% improvement or a reduction by ≥3 points from baseline. mRSS was recorded in 51.6% of patients with JSSc (49/95). The mean change in mRSS from baseline across treatments was -5.6 points, with 73.5% (36/49) of patients achieving MCID. The most common treatment regimens resulting in MCID for mRSS were monotherapy with methotrexate (32.7%, 16/49), D- penicillamine (24.5%, 12/49), and corticosteroids (22.4%, 11/49). Treatment-related adverse events (AEs) were reported in 4 cases (4.2%), with none resulting in death; no patients discontinued treatment due to AEs.

Discussion

The SHARE (Single Hub and Access point for paediatric Rheumatology in Europe) initiative recently published recommendations for the management of JSSc suggesting systemic corticosteroids at the time of diagnosis, with subsequent use of methotrexate, then transitioning to mycophenolate mofetil within 6 months if symptoms do not improve. Unfortunately, due to lack of evidence, other contemporary treatments (e.g., tocilizumab) were omitted from the guidelines.

Limitations of our systematic review include a small sample size, lack of follow-up data/standardized outcome metrics, and potential selection bias for cases with reported outcomes. Delayed treatment in some patients with JSSc may also hinder systemic immunosuppressive therapy efficacy. Yet, we highlight evidence for systemic immunosuppressive therapy use in treating JSSc.

Abstract N°: 160

Title: Losartan as therapy for recessive dystrophic epidermolysis bullosa: report of three cases

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Introduction

Inherited epidermolysis bullosa is a rare heterogenous group of genetic disorders defined by cutaneous fragility. It comprises four major classical types (simplex, junctional, dystrophic and Kindler), which are caused by mutations in at least 16 distinct genes related with skin structural proteins.

Dystrophic epidermolysis bullosa (DEB) is characterized by cleavage at the superficial dermis, just beneath lamina densa. This corresponds to the level of the anchoring fibrils, which are mainly composed by type VII collagen, codified by COL7A1 gene. DEB subtypes arise from distinct mutations in COL7A1, which can be inherited as dominant or recessive, and translate into diverse clinical manifestations. Recessive DEB (RDEB) is usually the most severe subtype.

Besides the blisters and erosions, patients with RDEB demonstrate multiple milia cysts and extensive scarring in previous wound sites, which can lead to joint contracture and progressive fusion of the digits of the hands and feet. There is marked mucous involvement, with the occurrence of microstomia, ankyloglossia and esophagus strictures, as well as corneal erosions and scarring, symblepharon and reduced visual acuity.

One of the mechanisms involved in scar formation in RDEB is the enhanced TGF-β signaling driven by the associated inflammatory tissue environment, with some authors advocating that the condition should be viewed as a systemic and chronic inflammatory fibrotic disease.

Materials and methods

We report three children diagnosed with RDEB, confirmed by genetic testing, followed at our department since their first days of life, who are under therapy with losartan.

Results

The three children correspond to male patients with ages between 1 and 3 years old. All of them presented with widespread skin blistering, erosions and subsequent development of milia cysts and fibrotic scars. The oral mucosa was affected in all three, two had nail loss or dystrophy and one showed syndactyly. Eye involvement with corneal erosions occurred in two patients at some point of the disease. According to their parents, all of them had significant pruritus.

Losartan oral suspension was started at a dose of 1 mg/kg once a day. After 7 months of follow-up there was considerable improvement in skin and oral lesions, with fewer erosions and better healing. Additionally, all parents

reported progresses in sleep quality and/or feeding.

Discussion

Apart from its capacity of inhibiting excessive TGF-β signaling, losartan may have further anti-fibrotic properties through other parallel pathways, which all culminate in decrease of inflammation and downregulation of pro-fibrotic molecules. Its potential benefit in RDEB was first proven in mouse models and, currently, a clinical trial is underway. The fact that is a well-known drug used for many years for hypertension and cardiac remodelling, raises less concern regarding its safety, although its long-term impact and safety still need to be assessed in children.

Unlike other recent and promising gene-, cell- or protein-based therapies, which are still under development, losartan does not have a curative potential. Besides this, it presents as a good alternative for symptom control, providing a better quality of life in children suffering from RDEB.

Abstract N°: 243

Title: A case report: A 3-year old boy with severe atopic dermatitis successfully treated with dupilumab

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Introduction

In recent years, tremendous progress has been made in the treatment of atopic dermatitis (AD). However, new treatments are currently approved only for children over the age of six. Because AD usually begins very early in childhood and many children under the age of six have severe AD, it is important that we have available all possible medications to treat such children, including biologics.

Materials and methods

We present a case of a 3-year-old boy with a severe generalized AD. A boy has had severe AD since early childhood. Otherwise healthy boy has known allergies to wheat, eggs, poultry, nuts, peanuts, fish, citrus fruits and apples. His younger sister has also AD and his father has asthma, hay fever and an allergy to cat hair.

Results

At the age of 18 months due to lack of effectiveness of topical therapy and the severity of the disease, pediatric allergologists started systemic treatment with Cyclosporin (CyA), with adjusting the dose to the maximum of 6.5 mg/kg/day. No improvement in AD was achieved, so methotrexate (MTX) was added at 5 mg to 7.5 mg per week for 4 months, but without long-term success. Later, MTX was discontinued and only CyA was continued, but despite CyA frequent generalized exacerbations of AD and secondary bacterial and herpetic infections were observed.

Still receiving CyA, the severity of AD was assessed as EASI 23.6, BSA 70%, SCORAD 58.7, FDLQI 23, insomnia 10/10 and pruritus 7/10. Because no improvement of AD on systemic therapy was achieved, a boy was a candidate for biologic treatment. After prior consent of the parents and positive opinion of the council of dermatologists, dupilumab was introduced.

When we started dupilumab treatment in our patient, he was not yet 6 years old and there was no EMA approval of dupilumab for AD in children under 12. As he weighed 15.5 kg the dose of dupilumab was administered according to FDA recommendations. The only difference we made was that he received the initial dose in two separated applications, which was later approved also by EMA.

In our case dupilumab was started in an initial dose of 300 mg s.c. After 14 days he received a second dose of 300 mg s.c. and then 300 mg s.c. every 4 weeks was continued. We gradually reduced the dose of CyA, and discontinued it within 2,5 months.

Boy also continued with the advised local therapy, as we knew that combination of local and biologics could have lead to the best treatment results.

After the introduction of the biological therapy no local skin reaction or keratitis was noticed. After four weeks of the initiation of biologic therapy AD severity was assessed as: SCORAD 29, EASI 17.1, FDLQI 17. Boy continued with the treatment and after 16 weeks of the treatment with dupilumab SCORAD was 20, EASI 6.8 and FDLQI 14.

After 16 weeks of biological treatment he had minimal erythema of distal parts and flexures of the limbs, but a bit more prominent erythema of the face and neck. There was almost no infiltration and lichenification was seen only on distal parts of the limbs. He is still receiving dupilumab and topical therapy and parents notice rarer and less severe exacerbations of AD.

Conclusions

In our patient with severe AD many therapeutic options, also systemic therapy with cyclosporine, have been tried without long-term successful management of AD, so biologics were the next treatment option. Our case suggests that dupilumab is safe and effective in the treatment of severe forms of AD in children under six years of age, but further studies are needed to extend the use of dupilumab to the younger population.

Abstract N°: 253

Title: Management of Pediatric Atopic Dermatitis with Systemic Biologics: An Evidence-Based Review

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Introduction

Atopic dermatitis (AD) is a common chronic inflammatory skin disease characterized by eczematous morphology, intense pruritus, and a predominantly childhood-onset. It can have a significant negative impact on patient and family quality of life. This systematic review examines the available evidence for systemic biologic use in pediatric AD.

Materials and methods

Following PRISMA criteria, a MEDLINE and Embase OVID search was conducted on October 31, 2021 using variations of keywords “atopic dermatitis” and “pediatric”. After independent screening, 1095 cases from 32 studies were included. Mean patient age was 11.3 years (range: 6 months-17 years), with gender being male (366/1095, 33.4%), female (345/1095, 31.5%), or not stated (384/1095, 35.1%)

Results

A total of 1097 counts of systemic biologic usage with outcomes were documented in 32 studies, with dupilumab being the most frequently used (1006/1097, 92%), followed by omalizumab (56/1097, 5.1%), nemolizumab (30/1097, 2.7%), and etanercept (3/1097, 0.3%). Treatment outcome endpoints were reported in 1095 cases (mean: 16.2 weeks; range: 2-32 weeks). Investigator Global Assessment (IGA) scores were reported in 82.6% of cases (904/1095), with 29.1% (263/904) achieving IGA 0/1 (clear or almost clear). Eczema Area and Severity Index (EASI) scores were recorded in 86.8% of cases (951/1095), with 84.9% (807/951), 52.9% (504/951), and 18.2% (173/951) achieving ≥50% (EASI50), ≥75% (EASI75), and ≥90% (EASI90) reductions from baseline EASI, respectively; mean change in EASI from baseline was -22.6. Children's Dermatology Life Quality Index/Dermatology Life Quality Index scores were recorded in 24.1% of cases (264/1095), with mean change from baseline being -9 and 99.6% (263/264) meeting the minimal clinically important difference (MCID) of a 4-point reduction. Itch Numerical Rating Scale scores were recorded in 13.5% of cases (148/1095), with mean change from baseline being -3.1 and 13.5% (20/148) meeting the MCID of a 3-point reduction. Prior systemic non-biologic therapies included: corticosteroids (49.2%), cyclosporine (27.9%), methotrexate (10.4%), and azathioprine (10%). Concurrent use of topical therapies was noted in 274 cases (25%). Treatment-related adverse events

occurred in 208 cases (19%) with no mortalities.

Discussion

Systemic biologics approved for pediatric AD treatment remain limited in many countries. Dupilumab, an interleukin-4 receptor-alpha antagonist, is currently the only approved agent for patients aged 6-18 years.[4] The American Academy of Dermatology (AAD) guidelines suggest that topical therapies (e.g., corticosteroids and calcineurin inhibitors) plus non-pharmaceutical interventions remain a mainstay for pediatric AD; if ineffective, AAD recommends systemic non-biologic therapies (e.g. cyclosporine and mycophenolate mofetil). Unfortunately, these were published before dupilumab's approval.

Limitations of our systematic review include the novelty of systemic biologics for pediatric AD, short follow-up period, and lack of remission data, thereby making it difficult to generalize the findings. Despite this, we highlight evidence for systemic biologic use in managing pediatric AD with or without concomitant systemic non-biologic and topical therapies.

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LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 288

Title: Multiple enchondromas and Hobnail hemangiomas revealing a rare type of Ollier - Maffucci Syndrome.

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[1] Department Of Dermatology, Avicenne University Hospital, Ap-Hp, Sorbonne-Paris-Nord University, Bobigny, France, France, [2] Department Of Dermatology, Goyeneche Hospital, Arequipa, Peru, [3] Department Of Anatomic Pathology, National Hospital Carlos Alberto Seguin Escobedo, Arequipa, Peru, [4] Centro De Diagnostico Molecular, Lima, Peru, [5] Department Of Dermatology, Goyeneche Hospital, Arequipa, Peru, Department Of Dermatology, Avicenne University Hospital, Ap-Hp, Sorbonne-Paris-Nord University, Bobigny, France

Introduction

Materials and methods

Results

Ollier disease and Maffucci syndrome are both rare, nonhereditary, sporadic disorders characterized by multiple intraosseous cartilaginous tumors called enchondromas. In addition, patients with Maffucci syndrome present soft tissue or visceral hemangiomas. Both disorders feature asymmetric increase in the volume of upper extremities, deformity around the joints, pain, loss of function and pathological fractures appearing since the first year of life. A malignant transformation of enchondromas into chondrosarcomas was reported in 40% of patients. As far as the pathophysiology of this condition is concerned, mutations of the genes encoding isocitrate dehydrogenase 1 and 2 (*IDH1*, *IDH2*) and parathyroid hormone receptor 1 (*PTHR1m*) have been detected. Here, we report a rare case of Maffucci syndrome, clinically manifested with multiple enchondromas and small papules of the hands, histologically compatible with hobnail hemangiomas, misdiagnosed as finger warts for over a decade. Genetic testing revealed the presence of a pathogenic somatic mutation at codon 132 of the *IDH1* gene.

An 11-year-old boy from Arequipa - Peru, was referred to our dermatology clinic for swelling of the hands, associating multiple small, skin-colored papules of the fingers, many of them grouped in small plaques (Figure 1). Physical examination also revealed a café-au-lait spot of the right arm and pigmentary mosaicism lesions of the trunk and lower extremities. Given these deformities of the hands, further radiological and histological assessment was performed. Upper extremities' x-rays showed multiple voluminous osteolytic lesions with well-defined, sclerotic margins of the left hand, in favor of enchondromas (Figure 2), thus no other skeletal lesions were found. Furthermore, a skin biopsy of a finger papule, surprisingly revealed a biphasic growth pattern of dilated vascular structures in the superficial dermis lined by prominent hobnail endothelial cells (Figure 3). Immunohistochemistry showed positivity for D2-40 in hobnail endothelial cells. Maffucci syndrome was suspected and a genetic assessment by Sanger DNA sequencing in skin lesions was performed, revealing the presence of a pathogenic somatic mutation **c.394C>A (p.Arg132Ser)** at codon 132 of the *IDH1* gene, which confirmed our initial diagnosis (Figure 4). No other cases have been noticed in the family.

Maffucci syndrome is an extremely rare entity with approximately 200 cases reported to this day. To our knowledge, our case represents the first one to be associating multiple enchondromas with a special type of vascular tumors - hobnail lymphangiomas. The diagnosis of these lesions allowed a surgical correction in order to regain normal function of the hand and an early detection of malignant transformation of enchondromas. In addition, other cancers, particularly brain tumors (glioma and astrocytoma), have been reported in patients with

Maffucci Syndrome. Consequently, appropriate screening measures should be adopted for these patients. In conclusion, dermatologists must recognize this disorder and be able to identify the implicated mutation since it has diagnostic, prognostic and predictive utility.

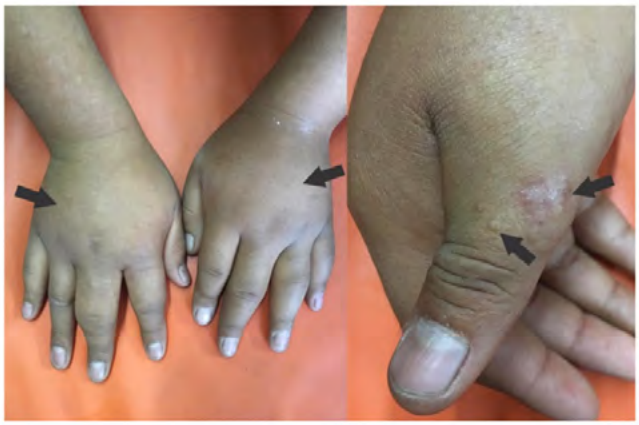

Figure 1: Clinical presentation including swelling of the hands and skin lesions.

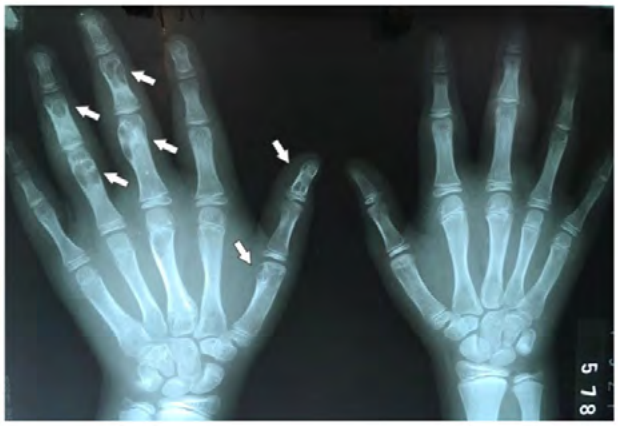

Figure 2: Hands x-ray revealing osteolytic lesions with well-defined, sclerotic margins in phalanges and metacarpals left hand.

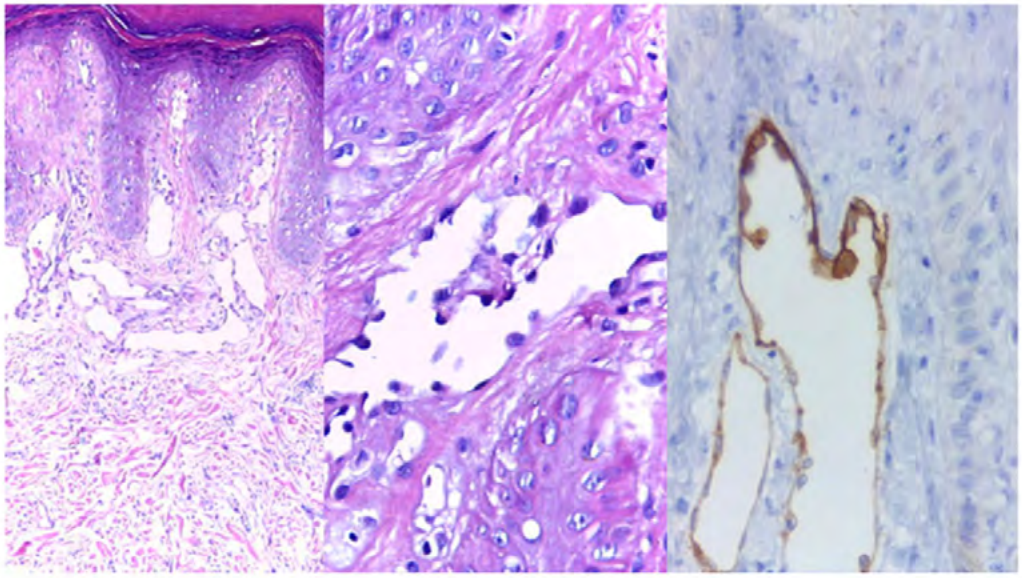

Figure 3: Anatomic pathology features in skin biopsy of a finger papule, including acanthosis and hyperkeratosis, collagen dissecting, mild fibroblastic hyperplasia, dermal mucinosis and a biphasic growth pattern of dilated vascular structures in the superficial dermis lined by prominent hobnail endothelial cells.

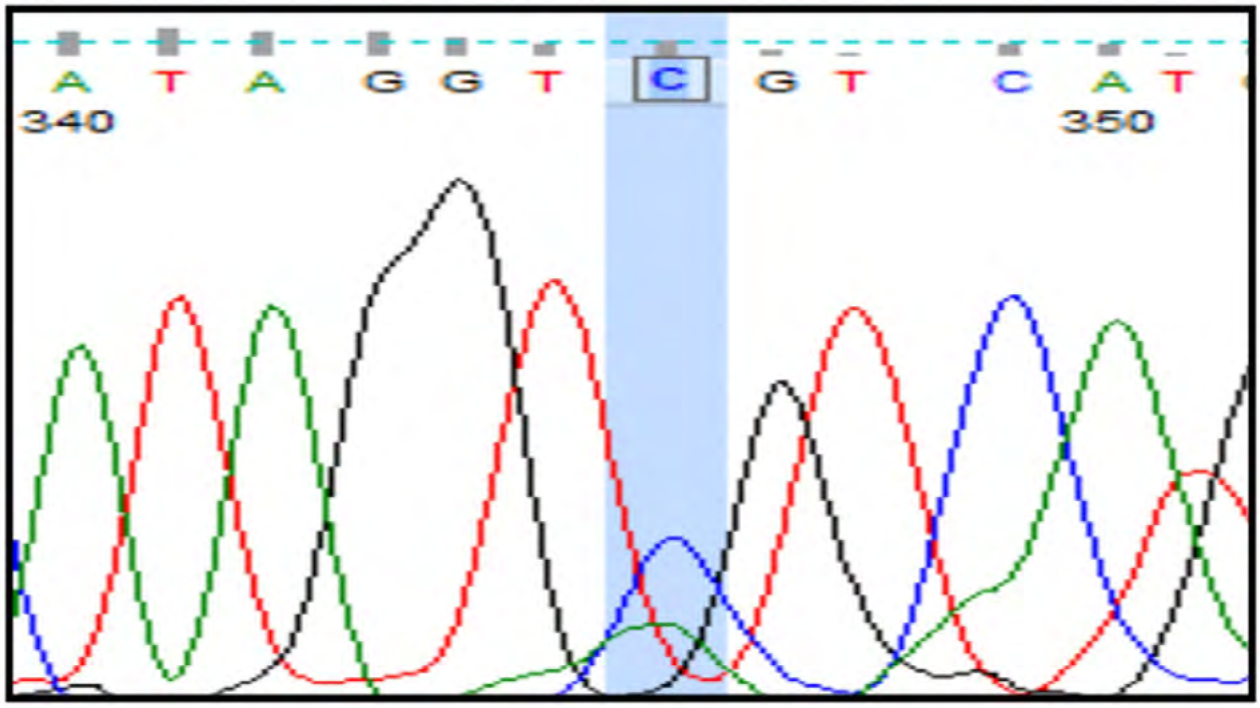

Figure 4: Genetic assessment – Sanger DNA sequencing reveals a mutated sequence **c.394C>A (p.Arg132Ser)** of the *IDH1* gene.

Discussion

Abstract N°: 303

Title: Juvenile localized scleroderma: Clinical, therapeutic and evolutionary profile

Linda Manaa[1], Yosra Soua[1], Mouna Korbi[2], Ines Lahouel[1], Mariem Mohamed[1], Monia Youssef[1], Hichem Belhadjali[1], Jameleddine Zili[1]

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Introduction

Morphea, also known as localized scleroderma (LS) is an uncommon inflammatory disorder characterized by sclerosis of the skin and subcutaneous tissues leading to functional impairment especially in children.

We sought to describe clinical characteristics, frequency of extracutaneous manifestations, treatment and evolution of pediatric patients with morphea.

Materials and methods

We conducted a retrospective study of patients with morphea, 1 to 16 years of age, who received care in our dermatology department between January 2009, and December 2020.

Results

In total, 14 patients with juvenile LS aged ≤ 16 years were identified. The female:male ratio was 3.6:1. Mean age at onset of LS symptoms was 8.3 years (age range 3–15 years), and mean age at diagnosis of LS was 9.5 years (age range 4–16 years). Mean duration of symptoms before first presentation to the dermatology department was 15 months (range1–60 months).

The most common subtype of LS was linear morphea (50%), followed by plaque-type morphea in 28.57%. The other forms of collected LS were generalized morphea in one case, atrophoderma of Pierini-Pasini in one case and mixed morphea in one case associating linear and plaque morphea.

A second autoimmune disorder was noted in 14.3% of patients' family history. These autoimmune disorders were autoimmune thyroiditis and were associated with linear morphea in all cases. Associated dermatoses, reported in 2 patients, consisted of psoriasis in a case of mixed morphea and urticaria in generalized morphea. Extracutaneous manifestations were reported in 64.3% of patients; the most common were: musculoskeletal (50%). with predominating arthralgias (42.85%) and joint contractures (14.3%). These manifestations were associated with linear morphea in 57%.

Fourteen percent (n = 2) of patients had neurological manifestations; the most common symptom was a headache. The antinuclear antibodies were positive in 3 cases (21.43%). This included one patient with generalized morphea (1:320, homogenous pattern) and 2 patients with linear morphea of an extremity (1:160, speckled and homogenous patterns). Anti-Scl 70 and anticentromere were negative in all cases. Overall, 50 % of patients were treated with only topical medications, 42.9% with only systemic medications and 7.1% with the combination of topical and systemic treatments. The clinical evolution was toward remission with no signs of activity in 10 patients (71.4%).

Discussion

Our study is consistent with the literature concerning the female predominance and the mean age at diagnosis. In accordance with data from the literature, linear morphea is the most common type in children, followed by plaque morphea. Musculoskeletal manifestations are the most frequent extracutaneous manifestations associated especially with linear morphea. Referring to the largest series of SL in children, the ANA level was positive in 42.3% . The correlation between the positivity of ANA and the subtype, the depth or the prognosis of morphea were debated. The increased prevalence of morphea in girls, the high frequency of AAN and family history of auto-immune diseases suggest an auto-immune mechanism. Psoriasis was associated in 16.3% of cases. The etiopathogenic links between psoriasis and morphea are not fully elucidated. Trauma, genetic factors, and autoimmunity are the main incriminated factors. A long-term follow-up and close monitoring are needed to detect disease activity, recurrence and growth disturbance.

Abstract N°: 427

Title: Rectal venous malformation mimicking hemorrhoids in a young child

Le Helloco Claire[1], Sophie Leducq[2], Annabel Maruani[3], Denis Herbreteau[1], Anne Le Touze[1]

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Introduction

A 6-year-old girl, with no medical history, presented a 4-year history of painful anal mass prolapse. The diagnosis of hemorrhoids was initially suspected, despite no constipation and no anal fissure. Oral laxatives and dietary modification were ineffective, with worsening and a constant discomfort during defecation.

Materials and methods

Physical examination revealed venous protrusion of the anal margin during pushing, which did not completely disappear during rest, without anal fissure or perianal abscess or any bleeding. The diagnosis was a venous malformation (VM) of the anal margin. MRI did not reveal any endo-canal extension. The lesion was treated under general anesthesia with colonoscopy control by sclerotherapy with lauromacrogol (aetoxisclerol). Sclerotherapy allowed for complete regression of the lesion as well as pain and discomfort during defecation.

Results NA

Discussion

VMs are congenital anomalies that might involve capillary, lymphatic, venous and arterial vessels (1). There present at birth although not always visible, tend to worsen with age and most often located on the head, neck and trunk, with an unifocal lesion. VMs can spontaneously thrombose and induce pain and swelling (2). The diagnosis is most often made on clinical examination, but imaging (MRI) is required for a definitive and extension diagnosis. Rectal localization of a VM, previously called a diffuse cavernous hemangioma of the rectum, is unusual and might be misdiagnosed as hemorrhoids (3). Management may include surgery or sclerotherapy, if the rectal VM is symptomatic (4). Treatment by sclerotherapy under general anesthesia is complex and requires a trained operator. Hemorrhoids are rare in young children, a very low incidence under age 20 years (5). Clinical presentation is painless rectal bleeding during defecation with or without prolapsing anal tissue (6). Because rectal VM is a rare condition and not well known, delayed diagnosis and treatment often occurs. Thus, the diagnosis of VM must be considered in cases of pseudo-like hemorrhoidal lesions in children.

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Abstract N°: 601

Title: Acute genital ulceration in a young adolescent

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Introduction

Acute genital ulceration (also known as *ulcer acutum vulvae* or Lipschütz ulcer) is an uncommon condition that affects mainly young, sexually inactive females. In about a third of the reported cases it appeared associated with Epstein-Barr infection or preceded by flu-like symptoms

Materials and methods

We report the case of a 15-year-old sexually inactive female who presented with an abrupt (3-day) onset of two extremely painful, large, symmetric, necrotic ulcers, localized on the labia minora and the vaginal vestibulum. The ulcers were sharply demarcated, with a purple halo and were partially covered by an adherent escharotic crust. The patient had bilateral inguinal lymphadenopathy. There was no vaginal discharge and the general clinical examination was within normal limits except for minor flu-like symptoms. Laboratory tests showed elevated erythrocyte sedimentation rate and C reactive protein. While most serological tests (herpes simplex virus, syphilis, cytomegalovirus, HIV) and bacterial cultures were negative, the Epstein-Barr virus (EBV) serology indicated recent infection.

Results

A diagnosis of acute genital ulcers was made and treatment with oral prednisone 1mg/kg/day and topical fluticasone propionate ointment 0.005% was initiated for 10 days. The escharotic crusts detached within a week and the ulcers healed completely within 22 days. There were no recurrences in the following 14 months of follow-up.

Discussion

The sudden onset of acute, painful, necrotic, genital ulcers in a young sexually inactive adolescent with a negative work-up for sexually transmitted infections is highly suggestive for the diagnosis of acute genital ulcers.

In our case, the episode was very likely associated with the recent EBV infection. Key aspects of managing this condition include patient education (offering reassurance about it not being sexually transmitted), information regarding wound care and considering the need for analgesia. While the use of corticosteroids is debated, we noted good response to treatment with a short course of topical and systemic corticosteroids.

In summary, acute genital ulcer is a rare clinical enitity which should be considered in the differential diagnoses for young female adolescents presenting with genital ulcerations. As this diagnosis is made clinically, awareness of it could result in fewer invasive investigations being performed.

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Abstract N°: 605

Title: Alopecia areata: features of the manifestation, epidemiology and course of the disease in children.

Denis Zaslavsky[1], Olga Mineeva[2], Kseniya Kovalenko[2], Daria Kozlova[3]

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Introduction

In recent years, the incidence of alopecia areata (AA) in the pediatric population has been growing, including the expansion of the range of recognized associated autoimmune conditions of the disease. The impact of AA on the quality of life has also increased due to the general trend of increasing the importance of the aesthetic component. This dictates the need to improve therapeutic options, which is possible only with a detailed understanding of the etiology, provoking factors, course and immunopathogenesis of the disease. The purpose of the study is to determine the features of the manifestation of alopecia areata in the pediatric population, to demonstrate new epidemiological data, and also to highlight the issues of the features of the onset and the presence of associated diseases in children.

Materials and methods

An analysis was made of the clinical data of 145 patients with AA who underwent examination and treatment at the Clinic of Skin Diseases of the St. Petersburg State Pediatric Medical University for the period from 2011 to 2021; analysis of data from literary sources of domestic and foreign authors.

Results

145 patients were enrolled, 95 girls (65.5%) and 50 boys (34.5%) aged from 1.5 to 17 years (mean age 11.4 years). The AA debut was in 68 children under the age of 5 (46,8%), in 52 patients (35,9%) – at the age from 5 to 10 years and in 25 children (17,2%) – after 10 years old. In 26 patients (17.9%), the debut coincided with the transferred stress, 13 children (8.9%) had flu before the onset of the disease. As an associated condition, a morphological pathology of the thyroid gland occurred in 50 patients (34.5%). There were hypoplasia (n=15, 30%), aplasia (n=1.2%), presence of macrofollicles (n=6, 12%), nodes (n=3, 6%). thyroid endocrinopathy35 (24.7%) in its structure. 21 patients had a celiac disease (14.5%),59 (40.7%) – dysbacteriosis, 44 (30.3%) – giardiasis. 12 patients had atopic dermatitis (8.3%), and 6 children had Ehlers-Danlos syndrome (4.1%) without atopic dermatitis; 1 patient suffered from psoriasis (0.69%).

Limitations: Small amount of children in our cohort doesn't allow make a reliable comparison with foreign multicenter investigations.

Discussion

At the Department of Skin Diseases of St. Petersburg State Pediatric Medical University prevail girls aged 11 years old with focal form of alopecia and the onset of the disease up to 5 years old, which reflects a lower average age of disease manifestation than the global one. One third (34.5%) of patients had pathological structural changes in the thyroid gland, and the fourth part of patients had endocrine dysfunction of the thyroid gland. It should be noted

that the pathology of the thyroid gland was noted in children with a later manifestation of alopecia in the worldwide literature. In 40.7% and 30.3% of the examined dysbacteriosis and giardiasis were found respectively. These conditions could have a negative impact on the course of autoimmune diseases or even become a trigger. A large number of children in our research had celiac disease, atopic dermatitis. Our data suggest that AA is a complex autoimmune disease, often accompanied by comorbid autoimmune conditions.

Abstract N°: 787

Title: nevus comedonicus: a rare case report

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Introduction

Nevus comedonicus (NC) is a rare hamartoma of the pilosebaceous unit, a subtype of epidermal nevus first described by Kofmann in 1895. Fewer than 200 cases have been described. Nevus comedonicus is one of the rarest forms of cutaneous nevus. NC usually occurs by itself but may be linked with a variety of systemic findings such as skeletal or ocular anomalies. We present a new case of a 6-year-old patient with a comedonal nevus.

Materials and methods

Results

A 6-year-old girl with no pathological history , She consulted for the presence of lesions in the right axilla since birth with progressive growth until the age of 5 years, extending along the left arm and forearm and the upper right quadrant of the thorax They had been occasionally inflamed for 6 months, causing discomfort 6 months ago causing discomfort, with no improvement despite topical treatment with fusidic acid. On examination, multiple papules centered by hyperkeratotic plugs, with dark colored reminiscent of hyperkeratotic , reminiscent of the open comedones of acne, presenting a linear distribution localized in the upper left quadrant of the thorax, left arm,the left axilla and left forearm. No other skin involvement was observed at any other level. General physical and neurological examination were normal. Histological examination of the skin biopsy showed an epidermis invaginated at one point, forming a cystic mass appended to the epidermis and filled with keratin, this lesion was connected in depth to atrophic hair follicles. Based on the history and typical features of the lesion, it was clinically diagnosed as nevus comedonicus. A topical treatment with methylprednisolone aceponate 0.1% for on week and urea 10% ointment twice a day as main-tenance therapy was prescribed, with fast improvement ofthe pruritus and slight decrease of keratotic component.

Discussion

The particularity of our observation related in the rarity of this a subtype of epidermal nevus.

Nevus comedonicus is a rare disease considered to be a type of epidermal nevus and diagnosis is made chiefly on clinical grounds. NC manifests with linear or grouped papules and dilated follicular openings with keratotic plugs (resembling comedones) particularly on the face, trunk, and neck; in 50% of cases, it is present at birth, but can also develop during childhood (most commonly before the age of 10 years). The rare presence of skeletal and neurological abnormalities describes the nevus comedonicus syndrome. Therapy of NC may be implemented for cosmetic concerns or for treatment of inflammation and superinfection. Localized lesions may be excised with good results.

Abstract N°: 855

Title: Infantile digital fibromatosis: a new case.

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Introduction

Infantile digital fibromatosis (IDF) is a rare benign fibroproliferative tumor of early childhood. IDF preferentially affects the fingers and the toes. With a tendency toward multiplicity and recurrence . We report a rare case of IDF associated to a finger joint dislocation.

Observation

A 30-month-old boy was seen in consultation for four reddish, confluent, small, painless, indurated, ill-circumscribed nodules on the fourth digit of the left hand, evolving since the age of 22 months which progressively increased in size .Previous medical history was unremarkable and there was no history of trauma or inflammation. No allergic history was reported. None of the family members had experienced similar lesions.There were two similar nodules on the second and third digit.The other hand and both feet were unremarkable. Hand x-ray showed a distal interphalangeal dislocation. A surgical resection with an orthopedic managment of the dislocation were proposed.

Discussion

Infantile digital fibroma is a rare benign lesion that usually occurs during the first 2 years of life. It can be multiple, but it is usually a single lesion. If it grows large enough it can cause joint deformities or interfere with everyday activities. Treatment for this entity is usually watchful waiting because of its ability to spontaneously regress, but excision is recommended if the lesion is symptomatic. More recently, fluorouracil or injectable steroids have shown great promise in inducing regression without the complications that accompany surgery. we report a rare case of digital fibromatosis occuring distal interphalangeal dislocation in a 30 month old boy.

Abstract N°: 866

Title: Symmetric Asymptomatic Plantar Nodule in an Infant

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Introduction:

The presence of one or more plantar nodules in children is an infrequent reason for consultation. This clinical pesentation can correspond to several entities with variable evolution and prognosis. we report the case of a precalcaneal congenital fibrolipomatous hamartomas in an infant

Observation:

A healthy 6-months-old boy presented with bilateral asymptomatic planter nodules that were noticed by her parents at 2 months of age. There was no family history of similar lesions. On examination, there were bilateral, soft, skin-colored, nontender, mobile nodules over the medial plantar surface of both feet measuring around 1.5 x 1 cm. Ultrasound examination of the plantar surfaces revealed increased focal subcutaneous fatty deposition at the site of the skin nodules. The lesions were hyperechoic without vascularization. Histologic examination found fibroadipose tissue in the dermis. The diagnosis of precalcaneal congenital fibrolipomatous hamartomas (PCFH) was retained.

Discussion:

Congenital precalcaneal fibrolipomatous hamartoma is an entity first described in 1990. Since then, a variety of names have been used to describe this condition such as: "bilateral congenital plantar adipose nodules, and bilateral congenital heel fat pads".

Clinically, they are subcutaneous, non-colored, bilateral and symmetrical nodules, not painful or pruritic, measuring 0.5-1 cm in diameter and located in the posterior medial region of the soles of the feet. . Its etiology and pathogenesis is unknown, but it does not seem to be associated with other abnormalities. Histological examination of the lesions reveals the presence, in the deep dermis and hypodermis, of mature adipocytes, surrounded by interstitial edema with abundant ground substance and surrounded by collagen fibers of variable thickness and elastic fibers of normal characteristics.

Children with asymptomatic HFPC and without functional repercussion must be clinically controlled and do not require diagnostic tests or treatment. When the diagnosis is uncertain or if the nodules become symptomatic, skin biopsy and surgical removal are warranted.

Abstract N°: 867

Title: Pityriasis Lichenoides et Varioliformis Acuta in 2-years-old girl

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Introduction:

Pityriasis lichenoides represents a unique group of inflammatory skin disorders that include : the acute variant also known as pityriasis lichenoides et varioliformis acuta (PLEVA); and the chronic variant or pityriasis lichenoides chronica (PLC).

Pityriasis lichenoides occurs predominantly in the second and third decades of life. Although seen in children, it is rare before the age of 3 years, as some retrospective analyses of pediatric cases confirms.

We report a rare case of pityriasis lichenoides et varioliformis acuta (PLEVA) occurring in very early childhood.

Observation:

A 24-month-old girl presented with erythematous macules and papules that had appeared 3 months earlier. The eruptions were disseminated all over the body, and some were necrotic. The child had no triggering episodes, including drug intake, infection or vaccination.

On cutaneous examination, multiple, erythematous papules, some with crusting, were seen bilaterally over the trunk, limbs and face. As well as some necrotic lesions on the thighs. There were a few erosions over the abdomen and legs. There were no mucosal lesions or lymphadenopathy. Systemic examination was normal. Routine blood investigations were normal. Histopathological examination showed pipillomatous normoacanthosic epidermis with parakeratosis containing some neutrophils, presence of apoptotic cells and a dermal perivascular lymphocytic infiltrate.

Based on the clinical and histopathological features we made a diagnosis of pityriasis lichenoides et varioliformis acuta. Oral azithromycin, topical corticosteroids, and antihistamines were prescribed. New lesions stopped appearing within 2–3 weeks of therapy and the child is always under close observation.

Discussion:

PLEVA is characterized by erythematous macules and papules that can become hemorrhagic, pustular, or necrotic. They usually occur on the trunk and flexural areas of the extremities, but generalized eruptions may occur. Varioliform scars and post inflammatory hyper and hypopigmentation may result. Symptoms include burning and pruritus. lesions exist in all stages of development, and successive crops of lesions can last indefinitely, from a few weeks to months or years.

The etiology of PLEVA remains unknown. It is speculated to be an inflammatory reaction triggered by certain infectious agents, an inflammatory response secondary to T-cell dyscrasia or an immune complex-mediated hypersensitivity.

Therapeutic management is not consensual. Frequent spontaneous remission of the disease makes it difficult to evaluate the efficacy of pharmacologic intervention. Systemic antibiotics such as erythromycin azithromycin have

shown good results. Topical corticosteroids and systemic antihistamines may be administered for the symptomatic relief of pruritus. Topical tacrolimus, may also be used. Ultraviolet A (PUVA) and ultraviolet B (UVB) can be used as second-line therapies. Third-line therapies, such as methotrexate, acitretin, dapsone, or cyclosporine, may be reserved for resistant or severe disease.

Abstract N°: 870

Title: Acute Facial Rash in 36-day-old Infant : Erysipelas

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Introduction

Erysipelas is an acute dermohypodermitis, most often caused by betahemolytic group A streptococcus. It usually affects either elderly patients or patients with predisposing factors. The lower limbs are affected in more than 80% of the cases being favored by the presence of an entryway more often cutaneous. Facial sites have become rare.

We report case of erysipelas of the face in a 36-day-old infant.

Observation

A 36-day-old infant initially hospitalized for an acute fever. Forty eight hours after admission, he developed a facial rash that started in his nose.

The examination finds a well-limited infiltrated inflammatory placard from the left cheek reaching the nose and right cheek. there wasn't any breaks in the skin explaining the development of the rash.

In the biological assessment: hyperleukocytosis with predominantly polynuclear neutrophils with high CRP.

The diagnosis of erysipelas was retained, and the infant received Amoxicillin-clavulanic acid at a dose of 50 mg / kg / day, with a good clinical and biological evolution after 48 hours of treatment.

Discussion

Erysipelas is a non-necrotizing acute bacterial dermohypodermitis, relatively common in adults but exceptional in infants. The classic findings include a rapidly expanding, well-demarcated, shiny, erythematous, painful plaque associated with swelling and peri- follicular edema. The onset is abrupt, with a sudden temperature of 39 to 40 °C, chills, malaise, and nausea.

The lower limbs are more often affected, although facial rash is possible. It is usually in a malar or butterfly pattern.

Lesions suggestive of portals of entry are often encountered: perleche in aged patients wearing dental prostheses, rhagades, post traumatic wounds, insect bites. However, In erysipelas of the face, In many cases, no local portal of entry is discovered.

Positive diagnosis is based on the clinical findings, but laboratory tests : blood count and C-reactive protein are available and should be performed to confirm the diagnosis.

Treatment in most cases is empirical, directed against Streptococci, using oral penicillin.

Abstract N°: 933

Title: Nonendemic pemphigus foliaceus in a 6-year-old girl: a case report

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Introduction

Pemphigus foliaceus (PF) is an acquired autoimmune blistering skin disease that rarely occurs in the pediatric population. The exception is endemic form observed predominantly in Brazilian children, known as Fogo selvagem. The sporadic form is typically characterized by crusted plaques, erosions, and flaccid vesiculobullae on the scalp, face and trunk mostly in middle-aged or elderly patients.

Materials and methods

A 6-year-old girl was admitted to our clinic due itchy, persistent rash she has had since the age of 2. She was initially seen by several outside providers at 3 years of age with erythema and scaling of the face, trunk and extremities thought to represent atopic dermatitis with secondary impetiginization. Before the hospitalization the patient was treated with oral antibiotics, topical corticosteroids and topical antibiotics, with temporary resolution of the skin lesions. Otherwise she was healthy, with no confirmed allergies and no medications. Parents and close relatives were all healthy too. Physical examination revealed erythematous annular and polycyclic plaques with central clearing and peripheral scaling on the face, trunk and proximal extremities. Mucous membranes were not involved.

Results

Basic laboratory results were all normal. Histopathological examination of the skin lesion showed upper epidermal acantholysis with neutrophilic and eosinophilic infiltrate. IgG and C3 deposition within the upper epidermis in direct immunofluorescence and positive desmoglein 1 autoantibodies in indirect immunofluorescence examination confirmed the diagnosis of PF.

After a diagnosis of PF was established, treatment with oral prednisone was started. Quantification of glucose-6-phosphate dehydrogenase levels was performed, and maintenance treatment with dapsone was added. She responded satisfactorily to treatment within a month, continued on a regimen with dapsone and gradual reduciton of prednisolone doses. Our patient showed complete remission and was disease-free at the follow up at 6 months.

Discussion

We present a case of sporadic form of pediatric PF. It is rarely described in the pediatric population with less than 40 cases reported in the literature. Patients usually present with annular and polycyclic scaly plaques, therefore it is commonly misdiagnosed as bacterial or fungal infection, seborrheic dermatitis, atopic dermatitis or psoriasis. It may led to a diagnostic conundrum ultimately resulting in delayed diagnosis. Approximate time from onset of cutaneous lesions to diagnosis of PF in literature ranged from 1 month to 6 years. In our patient, time from lesions onset to right diagnosis, made at our clinics, was 4 years. According to data from the literature, it seems that there is no relation between the prognosis and delay in the diagnosis. It also seems that juvenile PF often has a benign course but because of the rarity of the disease, evidence on the treatment and prognosis in children is lacking.

Systemic corticosteroids with dapsone, being the most commonly used adjuvant agent, are the treatment of choice, which was also successful therapy in our case.

We want to emphasize that erythematous, scaly plaques in children should not be missdiagnosed as they may represent the first sign of a rare blistering disease, like PF. We hope that our case can help identifying PF earlier and thus prevent delays in the diagnosis of PF in pediatric population.

Abstract N°: 934

Title: Cerebriform sebaceous nevus of Jadassohn : a rare presentation

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Introduction

Sebaceous nevus of Jadassohn is a benign hamartoma of the skin, characterized by hyperplasia of the epidermis, immature hair follicles and sebaceous and apocrine glands. It only occurs in about 0.3% of newborns with no sexual predilection. The cerebriform type is a very rare morphological variant. We report a case in a 5-year-old child.

Observation

5-year-old patient, with no particular pathological history, who presents since birth with a pink-colored alopecic patch on the scalp, gradually increasing in size and becoming nodular. Dermatological examination found a single nodular lesion measuring 3 cm long, brownish, soft, cerebriform and well demarcated on the scalp. Excision and histological study showed marked papillomatous epidermal hyperplasia with hyperkeratosis and a large number of mature sebaceous glands in the dermis as well as malformed hair follicles. Anatomo-clinical correlation made it possible to retain the diagnosis of a sebaceous nevus of Jadassohn in its cerebriform form.

Discussion:

Cerebriform skin lesions are unusual and can manifest as intradermal nevus, *cutis verticis gyrata*, *lipomatous nevus*, collagenoma, Proteus Syndrome, epidermal and sebaceous nevus. Most reports on cerebriform lesions include melanocytic nevus and Proteus Syndrome.

Sebaceous nevus of Jadassohn is usually present at birth as an alopecic patch of orange-yellow color with a smooth surface on the scalp. The lesion may become verrucous or nodular in adolescence. The cerebriform variant is characterized by large pink, alopecic, verrucous nodules with a cerebriform surface. The diagnosis is usually made by its clinical features, however a histopathological study is necessary in order to have a definitive diagnosis.

Although sebaceous nevus is a benign lesion, it can progress to basal cell carcinoma, sebaceous carcinoma, apocrine carcinoma, and malignant eccrine poroma. Therefore, wide excision remains the treatment of choice and should be done prophylactically during childhood. Regular clinical follow-up is therefore necessary.

Abstract N°: 959

Title: Our experience with outpatient initiation of propranolol in the treatment of complicated infantile haemangiomas

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Introduction

During the covid-19 pandemic, consensus expert opinion published guidelines on the outpatient initiation of propranolol in the treatment of complicated infantile haemangiomas (IH). We performed an audit from 2015-2019 which demonstrated that the establishment of a dedicated IH clinic improved access and resulted in earlier initiation of propranolol.

Materials and methods:

ll patients commenced on propranolol following referral to our IH clinic from January 2019 to September 2021 were identified from our dermatology database. Data from their charts was collected and analysed.

Results

This re-audit from 2019-2021 following updated guidelines on outpatient propranolol initiation demonstrated a 21-fold increase in outpatient initiation, with 57% (n=16/28) of patients commencing treatment as outpatients. In those patients who received inpatient initiation of propranolol, inpatient initiation was indicated in 88% (n=8/9).

Discussion

Our audit highlighted a delay in referrals from primary care. As early initiation of propranolol improves IH outcomes, our aim is now to focus on primary care education, highlighting the importance of early referral.

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Abstract N°: 965

Title: Multiple juvenile xanthogranuloma with ocular involvement

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Introduction

Juvenile xanthogranuloma (JXG) is a benign non-Langerhansian histiocytosis that classically presents as yellowish cutaneous nodules, by accumulation of lipid-laden macrophages. It is usually a solitary skin lesion but multiple or even disseminated forms have been described.

We report the observation of an infant with a multiple form of juvenile xanthogranuloma associated with ocular involvement.

Materials and methods

Results

An 8-month-old male baby with a history of prematurity and neonatal respiratory distress was admitted to the pediatric ophthalmology department for an irritated and red left eye. He was referred to dermatology for multiple asymptomatic skin lesions appearing progressively since he was 4 months old.

Dermatological examination revealed multiple well-limited, firm, round, yellowish-brown papulonodular lesions, each measuring on average 1 cm in length, located preferentially on the scalp but also on the face, trunk and limbs, sparing the palmoplantar region and without mucosal involvement.

Clinical examination suggested a diagnosis of multiple juvenile xanthogranuloma associated with hyphema of the left eye. There was no other systemic manifestation and no evidence of neurofibromatosis type 1.

Spontaneous regression for skin lesions is the rule justifying therapeutic abstention with close clinical monitoring. The child was referred to ophthalmology for further management.

Discussion

Our case is unique because it represents a multiple form of juvenile xanthogranuloma associated with hyphema in an infant since the age of 4 months.

In multiple JXG, extracutaneous manifestations are rare and the most common is ocular involvement, particularly hyphema, in children under 2 years of age. The other visceral disorders are pulmonary and hepatic, as well as a risk of chronic juvenile myelomonocytic leukaemia, which warrants close clinical monitoring.

Cases of fatal evolution in patients with multiple JXG locations have been reported in the literature. Therefore, an ophthalmological examination should be indicated every six months in children under 2 years of age and parents alerted of the ophthalmological signs that should lead to an emergency consultation.

However, aside from complications related to extracutaneous involvement, the prognosis is generally good with spontaneous healing of the skin lesions within a few months or years.

Abstract N°: 971

Title: Acrodermatitis enteropathica-like eruption in coeliac disease

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Introduction

Acrodermatitis enteropathica (AE) is a rare disease related to an inherited or acquired (AE-like) disorder in zinc intestinal absorption. We report a case of acrodermatitis enteropathica-like eruption associated with coeliac disease.

Materials and methods

Results

A 4-year-old female child from a non-consanguineous marriage, presumed born at term by vaginal delivery at home, poorly vaccinated according to the national immunization program and presenting a growth delay of -3 SD, had a history of chronic diarrhea associated with abdominal meteorism evolving since the age of 2 years in a context of apyrexia and malnutrition

She was initially admitted to the pediatric emergency department for severe dehydration, put on intravenous fluids restoration and hypercaloric supplement. Then, she was referred to the dermatology department for a persistent dermatitis, which had been progressively evolving for 1 month.

On general examination, the child was lethargic, apyretic with mood disorders and abdominal meteorism. The dermatological examination revealed pinkish eczematous scaly patches interesting the acral and periorificial areas, associated with erosive hyperpigmented lesions extending to the trunk and limbs, there was no alopecia nor involvement of the nails nor mucosa.

The diagnosis of an acquired acrodermatitis enteropathica due to zinc deficiency was suspected clinically and confirmed by a decreased zinc serum level. Malabsorption investigations revealed positive anti-transglutaminase antibodies >200 U/ml.

The child was treated with 10 mg/kg/d of oral zinc sulphate and the evolution was rapidly favorable with healing of all lesions within 10 days without relapse.

Discussion

Our observation is peculiar because it represents an acquired zinc deficiency condition by malabsorption due to a coeliac disease, which was revealed by the characteristic skin lesions of acrodermatitis enteropathica.

Abstract N°: 980

Title: Malherbe’s tumor in the thigh : rare location in children

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Introduction

Tumor de malherbe or Pilomatricomais a rare benign adnexal skin tumor , developed from the cells of the hair matrix. Tumor de malherbe occurs during the first two decades of life and is usually localized to the upper part of the body. We report the case of a 10-year-old girl who presented with a Malherbe's tumor in the thigh.

Materials and methods

Results

A 10-year-old girl, with no significant history, who consulted for a painful bluish nodular tumefaction which gradually increased in volume, treated surgically and then recurred. Examination found a bluish, hard, well-defined nodular lesion, 2cm long, with subcutaneous infiltration exceeding the visible swelling. Loco-regional examination finds no palpable satellite adenopathy. The tuberculosis test was negative. Ultrasound of the mass showed a granuloma of the subcutaneous tissue. The diagnosis of Tumor de malherbe was retained clinically and then the patient was sent to the plastic surgery department for complete excision of the tumor.

Discussion

The originality of our study lies in the rare location in the lower limb. The diagnosis of Malherbe's tumour, often overlooked because of its clinical polymorphism, is histological. Malherbe's tumor occurs during the first two decades of life and is usually located in the cervico-facial region and the upper part of the body, rarely in the lower limb. The diagnosis of Malherbe's tumor must remain clinical, confirmed by histology which makes it possible to eliminate certain differential diagnoses, mainly epidermoid and pilar cysts, but above all malignant Malherbe's tumor. Healing without recurrence is the rule after surgical excision.

Abstract N°: 991

Title: Angiomatous lesion of the face: think of Pilomatricoma

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Introduction

Pilomatricoma is a rare benign adnexal skin tumor developed from cells of the capillary matrix. Often overlooked and confused with other skin lesions. We report the case of a 6-year-old girl presenting with a pilomatricoma for 3 years.

Materials and methods

Results

This is a 6-year-old girl, with no particular pathological history, who consulted for swelling of the left cheek region evolving for 3 years with significant aesthetic discomfort. The dermatological examination found nodular angiomatous lesion, at the level of the left cheek, 3 cm in diameter, firm, painless and mobile in relation to the deep plane. The locoregional examination does not find any palpable satellite lymphadenopathy. An excisional biopsy was performed which shows an acanthotic epidermis with, in the middle and deep dermis, a nodule consisting of mummified squamous masses with squamous cells with acidophilic or basophilic cytoplasm impregnated with calcifications. These squamous masses were surrounded by a macrophage reaction made up of multinucleated giant cells within a fibro-inflammatory dermis. She concluded that there was a histological appearance of pilomatricoma.

Discussion

Pilomatricoma is the most common tumor of the hair follicle. Pilomatricoma occurs during the first two decades of life and then between 50 and 60 years with a female predominance. The typical clinical appearance is a single, painless, round nodule, with a bluish surface, adhered to the superficial level, on the cervico-facial area. Our patient presented with a disconcerting atypical angiomatous form of large size, ANGIO-MRI performed to eliminate especially the vascular origin. In the literature Carcinomatous degeneration remains controversial. Healing without recurrence is the rule after surgical excision. The diversity of its forms explains why, despite its frequency, pilomatricoma remains underdiagnosed before biopsy or surgery.

Abstract N°: 996

Title: Herpes zoster in children: about 18 cases

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Introduction

Herpes zoster is a viral dermatosis that occurs after the reactivation of varicella zoster virus (VZV) remaining dormant in the dorsal sensory ganglia after a primary varicella infection. Its occurrence in children is not frequent enough. The objective of this study is to illustrate the epidemiological, therapeutic clinical aspects and the complications of Herpes zoster in children in the light of a series of 18 pediatric cases.

Materials and methods

Our study is a retrospective study of a series of 18 children followed in pediatric dermatology consultations or hospitalized in the dermatology department for Herpes zoster.

Results

They were 11 boys and 7 girls. The average age was 8.05 years (3 –15 years). The topography was intercostal in 7 patients, upper or lower limbs in 4 patients, cervico-facial in 3 patients, ophthalmic in 2 patients and genital in 2 patients. all our patients were not vaccinated against varicella. One patient presented with a typical varicella rash and typical skin manifestations of herpes zoster. Eight patients were immunocompromised (4 followed for acute lymphoblastic leukaemia, two for lymphoma, two for primary immunodeficiency, 1 for HIV). The cutaneous lesions were typical vesiculo-erythematous in all cases, they were associated with oozing necrotic-hemorrhagic lesions in 4 cases and a suspicious content of the vesicles in 7 cases. The treatment of our patients was based on antivirals, analgesics, antiseptics and local and general antibiotics for the 7 infected patients. For the eight immunocompromised patients, an antiviral treatment by injection was recommended. The duration of treatment was 8 to 15 days. The evolution of all our patients was good without complications or sequelae.

Discussion

Herpes zoster remains rare in children and has no seasonal character. It mainly affects children over 5 years old although it can develop at any age. In our series, the age is between 3 years and 15 years, two patients were less than 5 years old, which is consistent with the data in the literature. The contagious risk of shingles is lower than that of chicken pox which is extremely contagious. The clinical presentation of shingles in children is identical to that of adults, with generally a benign course. The treatment consists mainly of antivirals associated with symptomatic treatment based on analgesics, local treatments and antiseptics. In immunocompromised children, the infection is usually severe and disseminated and can lead to high rates of morbidity and mortality, thus requiring specific intravenous antiviral treatment with antiviral drugs such as aciclovir.

Abstract N°: 1018

Title: Extra genital lichen sclerosus in children

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Introduction

Lichen sclerosus (LS) is a chronic inflammatory dermatosis, with a tropism for the genital mucosa. Isolated skin involvement is rare and a source of altered aesthetic damage. Its treatment not codified.

Materials and methods

Retrospective study collecting all cases of cutaneous LS (LSC) in our dermatology department, diagnosed between 2016 and 2010.

Results

Of 10 cases of LS, five children had LSC. The mean age of diagnosis was 7.5 years (6-9 years). The mean duration of progression was two years. All children were female. The pearly white, sclerotic appearance was present in all patients. The lesions presented as drops (60%) or plaques (20%). Only one patient had a banded lesion. The lesions were located on the back (4 cases), the trunk (1 case), and the legs (2 case). Pruritus described in two cases. Vulvar LS found in all girls. Skin biopsy confirmed the diagnosis in all cases. Treatment was strong dermocorticoids (DC) in all cases.

Discussion

LSC is uncommon (6-20%), very rare in children, occurs mostly in menopausal women. It may be isolated or associated with lichen sclerosus; in our series, all patients had associated genital involvement. Clinically, it manifests as whitish or pearly white, atrophic plaques, mainly involving the trunk, the roots of the limbs and the folds. Pruritus is inconstant. Diffuse forms are rare. Diagnosis based on skin histology. Treatment not codified. In children, it essentially based on dermocrticoids

EADV SYMPOSIUM 2022
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Abstract N°: 1027

Title: Juvenil pitiriasis rubra pilaris : Two cases reports

Ajaaouani Rokia[1], El Fatoiki Fatima Zehra[2], Marnissi Farida[3], Hali Fouzia[2], Chiheb Soumia[2]

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Introduction

Materials and methods

Results

Introduction:

Pityriasis rubra pilaris (PRP) is a papulo-squamous keratotic dermatosis, uncommon in juveniles and unknown origin. It has an equal sex predilection and bimodal distribution of age e onset concentrating in the first and fifth to sixth decades. We report two case of Pityriasis rubra pilaris in children .

Observation1:

A 14 year old boy with two years history of palmoplantar hyperkeratosis and erythematous eruption with skin keratosis .there was no known family history of (PRP), immune deficiency or symptoms of infection and no history of arthralgia. Physical examination showed on palmoplantar diffuse erythematous desquamative hyperkeratosis, extending beyond lateral border to back pf fingers and hands with multiple small follicular papules disseminated over the back and arms. A biopsy was performed and histopathological examination revealed, the epidermis is hyperkeratotic normoacanthosic with horny plugs in the dermis an inflammatory perifollicular and perivascular lymphocytic infiltrate with a follicle containing a keratotic plug. A diagnosis of PRP was made and a patient was treated with topical corticosteroid with local phototherapy.

Observation 2:

A 7-year-old girl, with no particular history, in particular no notion of familial dermatosis, who presented 10 days after an episode of oropharyngeal infection, pruritic erythematous plaques in the knees, back, face and genitals. Clinical examination found circumscribed patches and erythematous follicular papules on the knees, back, genital and diaper region, on dorsal hands and feet, with an orange palmoplantar keratoderma. Skin biopsy, performed, revealed histological features of pityriasis rubra pilaris. A patient was treated with retinoid with improvement.

Discussion:

PRP is a rare papulo-squamous skin disease, the diagnosis is made clinically and confirmed histologically. Based on the classification proposed by Griffiths six types of PRP can be distinguished: classic adult PRP (Type I), atypical adult (Type II), juvenile classic (Type III), juvenile circumscribed (Type IV), juvenile atypical (Type V), and human immunodeficiency virus-associated (Type VI). The palmoplantar hyperkeratosis is a cardinal feature of juvenile PRP. The origin of PRP remains unclear, Postulated causes are vitamin-A deficiency, trauma, infection, or an association with immunologic abnormalities, rheumatism, and malignancy. A universal standard treatment for PRP is lacking. Therapeutic options may include, retinoid, antimetabolites, immunosuppressive agents, ultraviolet

phototherapy, and biologic agents. Systemic retinoid have been demonstrated to yield excellent therapeutic results. The rarity of (PRP) especially in children underlines the originality of our observation.

Discussion

Abstract N°: 1035

Title: Lichen sclerosus and alopecia areata in a child : coincidence or consequence

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Introduction

Materials and methods

Results

Introduction:

Alopecia areata et lichen planus, two common autoimmune dermatologic disorders, are expected to coexist with each other and with other autoimmune conditions. There are enough literatures available for these associations. However, the association of lichen plan sclerosus and alopecia areata rarely reported. Keeping this in mind, we report a case of association of lichen plan sclerosus and alopecia areata.

Case report:

An 8-year-old girl with no particular pathological history presented to the consultation with vulvar pruritus that had been present for one year. Clinical examination showed demarcated white skin lesions, which have a characteristic shape the hourglass (lesions involving the labia minora, clitoral hood, and perianal region). The skin on the labia majora, clitoris, and in the anal area is atrophic, smooth and shiny. Associated on extra-genital with a pearly white papules in well-limited relief, located on the abdomen and trunk. There is also a patch of non-scarring alopecia about 5 × 4 cm in size over the occipital area of the scalp, with depilation of the eyelashes and eyebrows. Dermoscopic analysis of the scalp showed a disappearance of the hair holes with the presence of yellow and black dots in favour of alopecia areata. A skin biopsy of papules showed an appearance of lichen sclerosus. The thyroid assessment was normal. The diagnosis of lichen sclerosus associated with alopecia areata retained and the patient received local corticosteroid therapy with stabilisation of the skin lesions.

Discussion:

Lichen sclerosus is an inflammatory dermatosis of uncertain aetiology, there are autoimmune mechanisms involved in its pathogenesis, which suggests that it is often associated with other autoimmune diseases, in particular thyroid disease. In our case lichen sclerosus is associated with alopecia areata, the latter being an autoimmune disease whose association with lichen planus is frequently reported in the literature, and even with other autoimmune diseases. About 25% of patients with autoimmune disease tend to develop additional autoimmune diseases. Isolated cases of co-location of alopecia areata and vitiligo, alopecia areata and lichen planus have also reported in the literature. We report one case of association of lichen sclerosus and alopecia areata, which explained by the autoimmune mechanism involved in the pathogenesis of these two conditions. A review of the literature did not find any observation suggesting the association of the two pathologies; however, this observation seemed to us interesting to report.

Abstract N°: 1044

Title: pityriasis lichenoide in children

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Introduction

Pityriasis lichenoides (PL) is an uncommon cutaneous disorder, consisting of two variants acute: pityriasis lichenoides ET varioliformis acuta (PLEVA), and chronic: pityriasis lichenoides chronica (PLC). There are few studies of appropriate, efficacious therapy in children. Our objective is describe the clinical, epidemiological and therapeutic characteristics of Pityriasis lichenoides in children.

Materials and methods

We conducted a retrospective study between January 2018 and December 2020. Included all patients with a clinical and histopathological diagnosis of Pityriasis lichenoides. Recorded data included age, gender, disease duration, clinical variant, history of infection, drug intake, and type of treatment.

Results

7 cases of PL were identified, 6 patients with (PLC) and one with PLEVA, 5 female and one male child, the median age was 6.4 years. The median duration of the lesions was 12 months for the PLC group, and 2 months for the PLEVA group. For all patients, there were no similar cases in the family, no drug use and no infection. All patients had a winter or autumn onset of the disease. A clinical distribution generalized in three cases and central in three patients. For (PLC), erythematosquamous papules noted in three patients, hypopigmented plaques in one patient, necrotic and erythematous papules in the PLEVA in one patient. Histology confirmed the diagnosis in all patients. All patients in the PLC group had recurrent relapses; all patients in the PLEVA group had a single relapse. For treatment, one patient treated with emollients only. Topical corticosteroids prescribed in combination with macrolides in six patients. Phototherapy indicated in two patients in combination with antibiotic therapy. The evolution marked by complete remission in three patients and relapses-remissions in four patients.

Discussion

Pityriasis lichenoid is a disease of unknown origin. Recent studies suggest that PL is a lymphoproliferative disorder, probably triggered by an antigenic stimulus, such as a virus or other infectious agent. PL is characterized by a spectrum of manifestations with acute and chronic features that allow classification into PL et varioliformis acuta (PLEVA) and PL chronica (PLC). PLEVA tends to present with papulovesicules that may develop necrotic and ulcerative. PLC characterized by scaly papules. Therapeutic management is not consensual. Frequent spontaneous remission of the disease makes it difficult to evaluate the efficacy of pharmacologic intervention. Dermocorticoids indicated as first line treatment with or without systemic antibiotics, such as erythromycin and azithromycin, which have shown good results. Clarithromycin has shown to be effective in recalcitrant cases. Ultraviolet B (UVB) can used as a second line therapy. Third-line therapies, such as methotrexate, acitretin, dapsone or cyclosporine reserved for resistant or severe disease.

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Abstract N°: 1050

Title: Unusuel juvenil xanthogranuloma in child : report of four cases

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Introduction

Materials and methods

Results

Introduction:

Juvenile xanthogranuloma (JXG) belongs to the heterogeneous group of non-Langerhans cell histiocytosis and caused by an accumulation and proliferation of macrophages A typical presentation is a solitary reddish or yellowish skin papule or nodule with spontaneous regression and no need for treatment. We describe four cases of JXG with a rather unusual clinical presentation.

Cases reports:

Observation 1:

An 8-month-old child with a history of prematurity with notion of respiratory distress neonatal, follow-up in the ophthalmology department paediatric for hyphema. He presented asymptomatic eruptive papules on his body, the eruption began on his right shoulder, when he was 3 months old and progressively, spread to the head and upper trunk. Examination revealed multiple well-limited, yellowish-brown firm papulo-nodular (10mm à15mm), located preferentially on the scalp, face, trunk limbs, and without mucosal involvement. Darier's sign was negative, he nor have any cafe au lait spots as negative. We retained the diagnosis of eruptive diffuse JXG. The patient followed up due to the self-healing nature of JXG.

Observation 2:

A 5-month-old patient, with no particular pathological history, presented for three months a nodular lesion of the scalp, gradually increasing from waist, and becoming ulcerated since two months. A Physical exam found a well-defined firm pinkish nodule, with an ulcerated center, over the right parietal scalp, measuring 18 mm. A skin biopsy of the nodule showed a dermis is fibrous with a polymorphic dense inflammatory infiltrate, rich in histiocytes with foamy cytoplasm and presence of cells giants. Histiocytes are negative for the PS100 and the CD1a. Diagnosis of ulcerated JXG of the scalp retained. Therapeutic abstention proposed with a beginning of involution of the lesion after some months.

Observation 3:

A 3-month-old patient, with no particular pathological history, presented for asymptomatic solitary congenital nodular lesion on a left side of the right foot, gradually increasing from waist. Physical exam found a well-circumscribed pigmented firm nodule, on the left side of the right foot measuring 20 mm. Findings of a biopsy specimen were consistent with a diagnosis of JXG. We retained the diagnosis of pigmented JXG of the foot. The

patient followed up due to the self-healing nature of JXG.

Observation 4:

A 9-month-old patient, with no particular pathological history, presented for five months asymptomatic papular lesion on the trunk, gradually increasing from waist and becoming ulcerated since two months. Physical exam found a well-defined, yellowish-red indurated nodule with an erythematous peripheral edge and an ulcerated center, over the right side of the trunk. Measuring 30 mm. A diagnosis of giant JXG is made. Given the benign nature of JXG, an observation deemed appropriate.

Discussion:

Juvenile xanthogranuloma is a non-Langerhans histiocytosis of young children characterized by solitary or multiple yellowish cutaneous nodules. Atypical skin lesions such as lichenoid eruptions, and pedunculated, maculopapular, plaque-like or linear lesions have been described. We report four observations that illustrates the great variability clinical presentations of JXG. Indeed, this diagnosis should be considered in infants and children, especially that a skin lesion involve of the upper part of a body

Discussion

Abstract N°: 257

Title: Circadian oscillations of minimal erythema dose (MED) are influenced by diet in patients with psoriasis

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Introduction

Minimal erythema dose (MED) remains a parameter of paramount importance to orient narrow-band (NB)-UVB (phototherapy) in psoriatic (PsO) patients. Recently, circadian rhythm and diet were recognized as potential MED modulators, but their mutual interaction remains understudied.

Materials and methods

In the first phase, a case- control study was performed, comparing the potential MED oscillations (morning, afternoon and evening) among treated psoriatic, omnivores patients and healthy, omnivores controls, before and after a phototherapy cycle. The two groups were age-, gender-, skin-type-, MED- and diet-matched. Then in the second phase, another case-control study was carried out comparing MED oscillations 24 hours after the last phototherapeutic session only in psoriatic patients cleared with NB-UVB and undergoing different diets (vegan, vegetarian, PaleoDiet, ketogenic, intermittent circadian fasting and omnivore). Patients with different diets were age-, gender- and skin-type matched

Results

In the first phase, we enrolled 54 PsO patients and 54 healthy individuals. Their MED before and after NB-UVB therapy changed significantly among the three different time-points (morning, afternoon, and evening) ($F = 52.30$, $p < 0.001$ and $F = 163.08$, $p < 0.001$, respectively), mainly depending on skin type and time of the day, according to the multivariate tests of within-subjects effects. In the second phase, we enrolled 144 PsO patients. MED circadian oscillations preserved a significant difference also after clearance, mainly influenced by diet type ($F = 9.39$, $p < 0.001$). In particular, vegans displayed the lowest MED values, whilst Ramadan fasting, ketogenic diet and PaleoDiet patients had the highest values.

Discussion

Diet, as other ongoing therapies, should be reported in the medical records of patients with psoriasis undergoing NB-UVB and patients with lower MEDs should be preferentially treated in the morning when the MED is higher.

Abstract N°: 384

Title: Chronic actinic dermatitis : a study of clinical features for Tunisian patients

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Introduction

Chronic actinic dermatitis is a rare skin condition englobing a spectrum of multiples photodermatosis including persistent light reactivity, photosensitive eczema and actinic reticuloid. The aim our study is to evaluate this disease's characteristics for Tunisian patients.

Materials and methods

A retrospective study involving patients with chronic actinic dermatitis treated in the Dermatology Unit of La Rabta Hospital from 2004 to 2021.

Results

A total of 9 patients were included with an average age at the diagnosis of 67.6 years old. 77.7% were males. The average duration of the disease was 4.87 years [1-15]. All patients had a history of chronic sunlight exposure due to their profession. Clinically, skin lesions consisted of red and pruritic plaques with scales and lichenification affecting photo-exposed areas especially face, neck and upper chest for all patients. Forearms, backs of hands and feet were involved in five cases. Extension to photo-covered areas was noted in two cases. Nail dystrophy was observed in three cases. Phototests were not performed. Skin biopsy showed eczematous features. All patients were prescribed photoprotection and topical corticosteroids. One patient was treated with oral corticosteroids 1mg/kg/day and one patient was treated with narrow band UVB phototherapy. Clinical improvement was noticed in three cases.

Discussion

Chronic actinic dermatitis affects mostly men older than 50 years. It is due to a delayed-type hypersensitivity reaction against an endogenous photoinduced epidermal antigen. It is frequently associated with allergic contact dermatitis especially to plants. This was not noted for our patients. Clinically, the disease is characterized by a rash developed in photo-exposed areas made of erythematous and lichenified plaques. As the disease progresses, it can extend to non-exposed areas. Photo-testing can be used to confirm the diagnosis and show abnormal reactions to UVB, UVA and in severe cases to visible light. Skin biopsy also contributes and reveals in the early stages histological features comparable to contact dermatitis, whereas in the later stages they may be those of pseudolymphoma. Therapeutic management can be difficult with variable response. Photoprotection and allergen avoidance (if a contact allergen is involved) are essential measures to control the disease. However, sunlight eviction can be difficult in Tunisia due to weather conditions involving permanent sunshine all over the year that considerably complicates the support of patients with chronic actinic dermatitis. Treatment includes emollients, topical corticosteroids and topical tacrolimus. In severe cases, systemic treatment may be used such as systemic corticosteroids, azathioprine and ciclosporin. Several cases have been successfully treated by phototherapy.

Abstract N°: 419

Title: Chemotherapy-induced inflammation of actinic keratoses: Two case reports

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CHEMOTHERAPY-INDUCED INFLAMMATION OF ACTINIC KERATOSES: TWO CASE REPORTS

Introduction

Materials and methods

Results

Actinic keratoses (AK) are benign keratinocyte neoplasms occurring on skin chronically exposed to ultraviolet radiation (1). Inflammation of clinical and/or subclinical AK is a possible side effect of certain systemic chemotherapeutic drugs (2). Hereby, we present two interesting cases of inflammation of AK following combination therapy with carboplatin and paclitaxel.

Case 1

A 68-year-old woman presented with a 1-week history of slightly itchy skin lesions on her forearms. Carboplatin and paclitaxel in weekly intervals were started 1 month before noticing skin changes because of recently diagnosed ovarian cancer. On examination, there were erythematous slightly scaly macules and flat plaques scattered on the extensor surfaces of the hands and forearms (Fig. 1). Histopathological examination revealed AK with an intensive interface inflammatory reaction. Methylprednisolone aceponate cream was prescribed. On check-up 2 months later, while the patient was still receiving the same chemotherapy, no new AK could be observed and the existing ones were less inflamed.

Case 2

A 78-year-old woman with a history of simultaneous breast carcinoma and adenocarcinoma of the lung was referred to the Dermatology department due to a burning face eruption, which appeared 2 days after she began the first cycle of chemotherapy with carboplatin, paclitaxel and trastuzumab. Physical examination revealed numerous bright erythematous maculo-papules with slight scaling and hyperkeratosis located on the face. The diagnosis of inflamed AK was made. We prescribed topical methylprednisolone aceponate, which provided symptomatic relief. Few weeks after the last dose of chemotherapy, AK completely disappeared.

Discussion

To date, 5-fluorouracil, cisplatin, doxorubicin, vincristine, dactinomycin, decarbazine, cyclophosphamide, capecitabine, cytarabine, 6-thioguanine, doxorubicin, cytosine arabinoside, sorafenib, panitumumab, paclitaxel, carboplatin and docetaxel have been causally related to inflammation of AK (3-11). Our two cases of AK inflammation possibly occurred with a combination therapy with carboplatin and paclitaxel. Selective inflammation of AK during chemotherapy may occur due to abnormal and increased deoxyribonucleic acid synthesis in the cells of lesional skin (4). Inflammation of clinical and/or subclinical AK starts after the introduction of chemotherapeutics and manifests as erythematous scaly macules or papules characteristically located on

photoexposed areas and can be itchy or cause a burning sensation (2-4,11). The diagnosis of inflamed AK is clinical. A histopathological examination shows dyskeratotic keratinocytes, nuclear polymorphism of basal keratinocytes and a band-like lymphocytic infiltrate (interface dermatitis) consistent with a lichenoid inflammation of AK (12,13). The discontinuation of the chemotherapy is not necessary as inflammation caused by it usually leads to complete disappearance of AK (2,3). However, topical corticosteroids can be prescribed to achieve symptomatic relief (6). In conclusion, oncologists and dermatologists should be familiar with this potential side effect of systemic therapy with antineoplastic agents as unrecognition of inflammation of AK may lead to unnecessary diagnostics and even cessation of vital chemotherapy out of concern of a drug reaction.

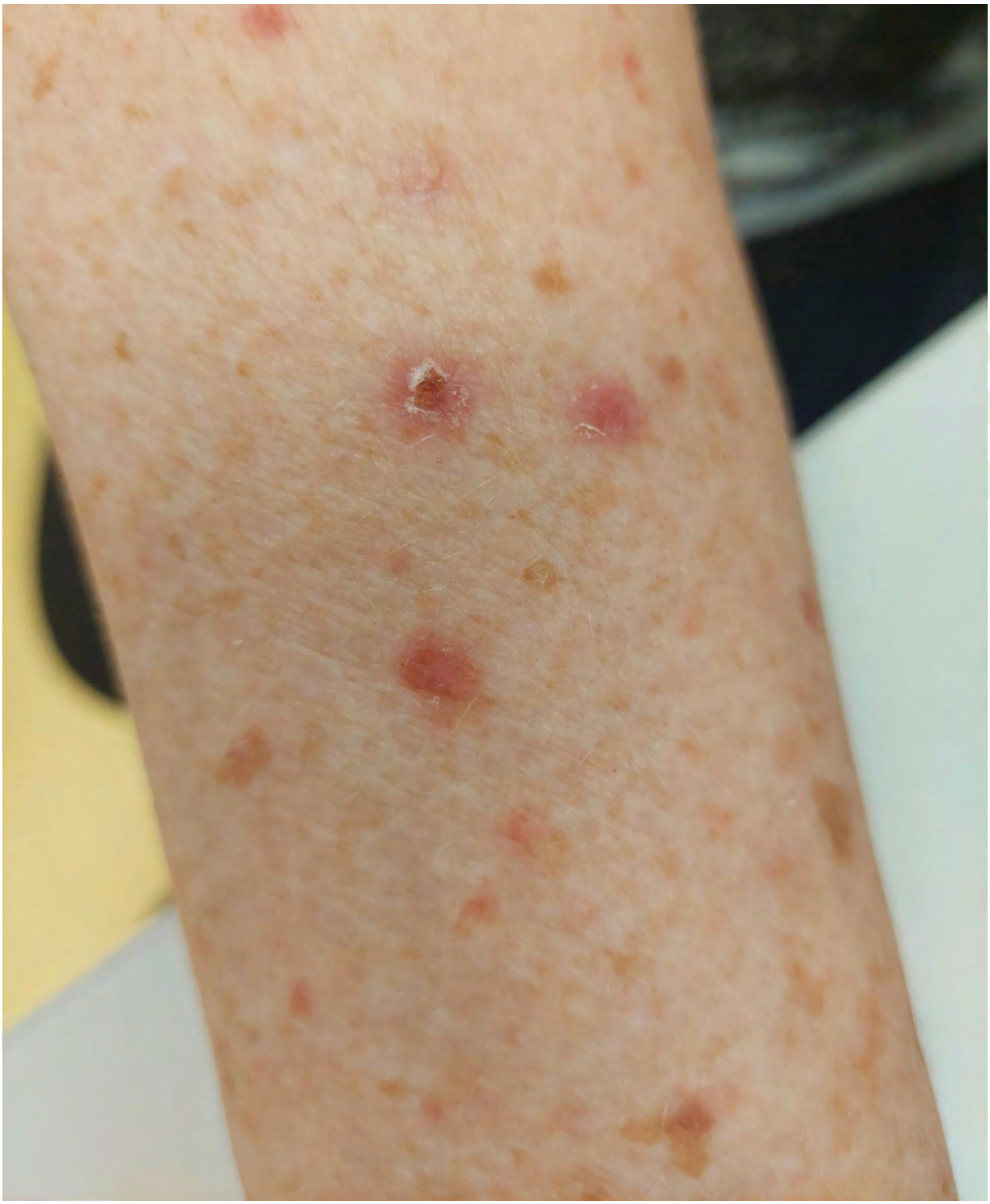

Figure 1

Discussion

Abstract N°: 531

Title: Skin barrier function after photodynamic therapy

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Skin barrier function after photodynamic therapy

Introduction

Photodynamic therapy (PDT) is an effective treatment for actinic keratoses (AK) but it is unknown how this treatment affect skin barrier function.

Materials and methods

A prospective observational study was conducted including patients that had at least three AKs on the head and that were candidates to receive PDT. Skin barrier function parameters, including transepidermal water loss (TEWL), stratum corneum hydration (SCH), temperature, pH, erythema and elasticity, were measured before and after PDT on a head region

Results

Twenty-one patients, with a mean age of 75.86 years, were included. Most of them were males (81%, 17/21) and had a photothype III. Only 14.3% (3/21) were smokers and 19% (4/21) were drinkers. The mean number of AK was 14.62. After PDT, TEWL, SCH, temperature, erythema and elasticity increased by 1.45 $g \cdot m^{-2} \cdot h^{-1}$, 4.40 arbitrary units (AU), 0.32ºC, 9.60 AU and 0.08%, respectively on the head region measured. pH decreased by 0.37 after the follow-up

Discussion

PDT could modify skin barrier function. Further research is needed to evaluate differences in epidermal barrier function after different types of PDT.

Abstract N°: 104

Title: Innovative method of vitiligo therapy in Uzbekistan

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Introduction

Innovative method of vitiligo therapy in Uzbekistan.

Materials and methods

According to our observation, there were 65 patients aged 15 to 57 years with NSV who received mini pulse therapy with oral dexamethasone in the stage of progression of vitiligo. Against this background, narrow-band NB-UVB therapy was performed in the mode of 3 sessions per week. Patients were divided into 2 groups matched by sex and age. Group 1 included 35 patients receiving standard therapy using UVB in the mode of 3 sessions per week in the amount of 30 procedures. Group 2 included 30 patients who received NB-UVB in the mode of 3 sessions per week in the amount of 30 procedures and used «Provitilin» cream. For auxiliary topical therapy, PROVITILIN cream was used, which contains glauconite, antioxidants and domestically produced microelements. The cream was applied 2 times a day for a course of 30 days.

Results

Efficacy was evaluated using the VES calculator after 3 months. In the first group, the decrease in BSA reached 40-43%, in the second - up to 50-52%.

Discussion

The results of a clinical study showed that the use of «Provitilin» cream helps to increase the therapeutic efficacy of external therapy for non-segmental forms of vitiligo. It is recommended for wide use in dermatological practice of regional branches. During external therapy, side effects in the form of progression of the skin process were not observed.

Abstract N°: 521

Title: Innovations in Non-Cultured Epidermal Cell Suspension Grafting for Stable Vitiligo Patches

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Introduction

Non-cultured Epidermal cell Suspension Grafting techniques (NCES) are currently the preferred treatment modality for stable resistant patches of vitiligo surgery. This technique has undergone several modifications, making it easier to perform.

Materials and methods

Different steps of NCES involves preparing the donor area, recipient area and cell suspension. Each of these steps has innovations. All publications on innovations in NCES from the year 2000 were identified on PUBMED (n=30). These were divided into categories of donor area selection, donor area harvesting, incubation and trypsinization, cell separation, recipient area preparation, transplantation of cell suspension, and dressing of the recipient site. Each innovation was described and assessed for its salient features.

Results

Innovations in the donor area included using:

a. hair follicles as the donor

b. dermis to create a suspension

c. reusing the older donor site for repeat surgery

d. higher donor to recipient ratio

e. trypsinised epidermal brushings as a donor

Innovation in incubation included:

a. Using a Do-It-Yourself incubator

b. Room temperature trypsinization

c. Using the axilla as an incubator.

Innovations in cell separation method included:

a. Using phosphate buffered saline or Platelet Rich Platelet instead of sophisticated media

b. 4 Compartment method

c. Invitro cell separation

Innovation in recipient area preparation include:

a. Dermarolling,

b. Dermastamping

c. Needling

d. Sand paper dermabrasion

e. Chemical dermabrasion

f. Electrofulguration assisted dermabrasion

Innovations in cell suspension application:

a. Hyaluronic gel suspension

b. Nylon mesh to prevent flow of the suspension

Innovations is dressing:

a. Using dermal threads

b. Using mould dressings for curved areas

Discussion

These innovations have made non-cultured epidermal cell suspension simple, cost-effective and efficacious.

Abstract N°: 778

Title: Melanoma associated Leukoderma: Report of 15 cases

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Introduction

The presence of melanoma and vitiligo simultaneously in the same patient is considered a medical paradox, giving the fact that the first is characterized by a massive irregular proliferation of atypical melanocytes within the epidermis, while the latter is the result of progressive loss of functional epidermal melanocytes. This article provides an approach of the clinical features of Melanoma associated vitiligo (MAL) for a better understanding of this entity

Materials and methods

we retrospectively analysed the clinical characteristics of 15 patients having MAL, at the Dermatology Department of IBN ROCHD University Hospital in Casablanca, from 2016-2021.

Results

In the period of the study, 130 patients with melanoma were hospitalized and 15 patients with MAL were identified which gives us a roughly prevalence of 11,5 % . All of our patients were of phototype IV; the median age was 68 years. The bilateral and symmetrical pattern was found in Ten patients and the distribution was mostly generalized to the face, trunk , back and legs, but in one patient with acral melanoma on his right foot. 13 patients had their MAL located on photo-exposed areas, and Two on the back. None of them had a positive family history of vitiligo. The clinical presentation consisted mostly of well-demarcated achromic patches. Lesions were generally refractory to topical steroids and UV phototherapy. Out of the 15 patients, Six had MAL prior to melanoma, Six after the onset of melanoma, one following interferon treatment, and in Two patient both diseases appeared concomitantly. Eleven patients out of Fifteen had a stage IV melanoma, Four of which had MAL after the malignant diagnosis. Extreme latency periods going from 10 years prior to 10 years after the melanoma diagnosis were noted. In the setting where MAL preceded melanoma, none of our patients consultation was motivated by the appearance of the vitiligo-like lesions except for one, she was diagnosed by her dermatologist while consulting for vitiligo. Two patients consulted after their melanoma got ulcerated and enlarged, and the last patient reported that she became esthetically bothered and worried about the pigmented lesion on her face, which proved later to be lentigo maligna melanoma (LMM). Histological analysis was performed in Eleven patients showing a total absence of functioning melanocytes in the lesions, in keeping with Vitiligo

Discussion

Our series illustrates different situations where vitiligo is linked to melanoma .The lack of family history of vitiligo or atopy, advanced age of onset, predominance in photo-exposed areas and generalized distribution are found to be discriminative features. The pathogenesis of this association may result from an immune response directed against melanoma-associated antigens expressed by normal melanocytes. Literature series, considered MAL as a side effect linked to treatment good response, however in our patients, all but one had their MAL appear independently of any treatment, which may suggest that MAL, besides being a therapeutic goal, is also an

independent indicator of the autoimmunity effectiveness against melanoma.

Clinicians should be aware of the differential diagnosis of MAL when diagnosing vitiligo, which may enable an early diagnosis of melanoma by thoroughly examining patients with leukoderma for other suspected pigmented lesions.

Abstract N°: 895

Title: New methods of treatment for secondary hyperpigmentation spots in dermatology

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Introduction. Today, platelet-rich plasma is most frequently used in dermatology as an additional method of treatment for different types of alopecia, post-acne, acne, angioneurosis, acute and chronic ulcers with different etiology (diabetic, venous, traumatic, etc.), secondary hyperpigmentation spots and various cosmetic skin defects.

The blood plasma is able to provide a large amount of growth factors and various proteins that can stimulate the healing process. Plasma therapy accelerates neovascularization, increases blood supply and supply of nutrients necessary for cell regeneration in damaged tissue. Plasma therapy stimulates the proliferation and differentiation of cells involved in the healing process.

We used the intradermal injections of platelet-rich plasma (due to its potential in regenerative medicine) simultaneously with conventional treatment in patients with acute and chronic ulcers and secondary hyperpigmentation spots.

The objective. To study the clinical effectiveness of plasma therapy in patients with different types of alopecia, post-acne, acne, angioneurosis, acute and chronic ulcers with different etiology (diabetic, venous, traumatic, etc.), secondary hyperpigmentation spots and various cosmetic skin defects.

Materials and methods. We examined 12 patients with chronic ulcers (8 - main group, 4 - control group) and 10 patients with secondary hyperpigmentation spots (6 - main group, 4 - control group). The control group consisted of patients receiving conventional treatment. The patients in the main group received intradermal injections of their plasma. The plasma injections were administered up to 5 times with an interval of 10-14 days. Where necessary, the conventional treatment was additionally provided.

Results. A clinical improvement in regeneration processes, acceleration of epithelialization and healing of chronic ulcers, as well as lightening of hyperpigmentation spots were observed in all patients of the main group during treatment.

Discussion. Plasma therapy has a prominent place in regenerative medicine and is an effective and additional option of treatment for chronic ulcers and secondary hyperpigmentation spots. Platelet-rich blood plasma in treatment of patients with chronic ulcers and secondary hyperpigmentation spots can be considered as valuable adjuvant treatment.

Abstract N°: 821

Title: Chronic pruritus: a common symptom of various underlying diseases

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Introduction

Chronic pruritus is a frequent reason for dermatological consultation, which can be responsible for a major deterioration in the quality of life. It's a symptom often indicative of multiple underlying pathologies. The etiological investigation is complex, hence the importance of a systematic and careful approach.

Materials and methods

This is a retrospective and descriptive study conducted by the department of the University hospital of Oujda, including all patients hospitalized for chronic pruritus over a period of 7 years. Epidemiological, clinical, therapeutic and evolutionary data were collected from patients' medical records.

Results

This is a set of 35 patients hospitalized for chronic pruritus. A female predominance was noted (Sex ratio: 0.66). The average age of onset was 56 years (20-94 years). The patients had a history of high blood pressure (22%), diabetes (17%), atopy (9%) and thyroid pathology (6%). Drug intake preceding pruritus was found in 17.14% of cases. A history of familial pruritus was noted in 4 patients. The mean duration was 5.18 years. The average DLQI score was 9.94.

Dermatological examination mainly objectified excoriations or scratching lesions (43%), xerosis cutis (31%), hyperpigmented scars (28%) and lichenification (11%). Complete blood count test revealed anemia in 20% of patients, hypereosinophilia (11%) hyperleukocytosis (20%). Kidney failure was found in 6% of cases. Abnormal liver function tests were noted in 11% of cases. The O&P test was positive in 3% of cases. The investigations revealed a hidden pathology in 31 patients (88%). A neoplastic disease was revealed in 7 patients (20%): Lung cancer in 2 cases, endometrial neoplasia in 2 cases, a mammary tumor and esophageal cancer in 1 case each. The hepatobiliary disease was found in 5 patients (14%) including 1 hydatid cyst and 1 viral hepatitis C. Infectious pathology represented 8.57% of cases: Pulmonary tuberculosis, Helicobacter Pylori gastritis and intestinal parasitosis. Skin biopsy revealed 2 cases of chronic eczema, 3 cases of pigmentogenic lichen and 2 papular amyloidosis. The other causes were: Iron deficiency anemia in 3 patients, dysthyroidism, Biermer's disease, Gougerot-Sjögren syndrome in 2 patients each. Emollients and antihistamines were suggested to all our patients, in addition to treating the underlying cause. The evolution was favorable in almost all cases.

Discussion

Our results confirm the literature findings in terms of epidemiological data.

In our study, an etiology was revealed in 88% of cases, with more than 20 various pathologies, which confirms the

frequency of chronic pruritus as a symptom revealing multiple underlying causes.

Through our study, we noted a predominance of neoplastic and infectious diseases, which confirms the results of several series. Medication should also be systematically sought. In our serie, it preceded pruritus in 17%.

Usually, chronic pruritus occurs in a pathological context or is suspected through clinical examination or paraclinical tests. An organic cause should be eliminated before retaining the diagnosis of senile or psychogenic pruritus.

Thus confirming the need, for any dermatologist, to carry out an exhaustive etiological investigation in order to correctly treat the patient. Nevertheless, because of the major deterioration in the quality of life of patients, symptomatic treatment is also important.

Abstract N°: 25

Title: Recurrent psoriatic arthritis involving the temporomandibular joint, successfully treated by adalimumab

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Introduction

Psoriatic arthritis has an estimated prevalence of 5-30% in patients with psoriasis. Temporomandibular join (TMJ) involvement is a rare atypical condition and even more as disease relapsing. We present the clinical case of a female patient with exacerbation of psoriatic arthritis manifested solely in TMJs

Materials and methods

A 53 years old Caucasian woman presented with unusual sharp pain in the jaw area, restriction in mouth opening even under the slightest movement with intense, daily worsening. Patient was suffering last 3 years by nail psoriasis and axial psoriatic arthritis,treated by certolizumab pegol due to secondary failure to brodalumab treatment. Clinical oral examination of TMJs detected crepitation during jaw opening and limitation of jaw lateral movements leading to remarkable chewing difficulty. The panoramic radiograph revealed bilaterally decreased join spaces and erosion on condylar heads.

Results

Diagnosis of exacerbation of affected both TMJs was concluded by patient's history, clinical, radiological findings along with rheumatological examination. The first aim of management was to relieve pain achieved with soft diet and non- steroidal anti-inflammatory drugs for the first two weeks while also modifying the treatment of psoriatic arthritis. Patient underwent complementary treatment with methotrexate 15mg weekly combined with adalimumab in the dosing regimen of 40mg every second week, after the starting dose. Clinical improvement was achieved one month later and patient is under 3 months follow-up since then, without symptoms.

Discussion

The TMJ is a synovial joint and is connected to the strongest muscle in the body, the masseter one, a very hard working joint and therefore at a high risk for involvement in psoriatic arthritis. The TMJ symptoms include pain, psychological discomfort, physical disability and limitation of mandibular movements and in its chronic form affects seriously the quality of life. Hence collaboration between dermatologist and rheumatologist is very important for early diagnosis of psoriatic arthritis and its exacerbation that can occur with involvement of TMJ. Early biological treatment initiation can both improve the underlying disease and prevent the recurrence such as TMJ involvement, as well.

Abstract N°: 57

Title: Long term impact of adalimumab therapy on atherosclerotic biomarkers in psoriasis: Results of a 2 year study

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Introduction

Psoriasis patients are at increased risk of atherosclerosis, characterized by endothelial dysfunction, linked through systemic inflammation. Anti-TNF-a therapy seems to decrease this risk. The purpose of this study was to measure the levels of serum markers associated with systemic inflammation in psoriasis patients, compared to healthy individuals and to investigate the change in their levels after 3 months and 2 years of adalimumab therapy.

Materials and methods

We investigated four biomarkers: high-sensitivity C- reactive protein (hsCRP), oxidized low-density lipoproteins (OxLDL), E-selectin, and Interleukin 22 (IL-22). These markers were measured in healthy volunteers and in 28 patients with moderate/severe psoriasis before and after 3 and 24 months of treatment with adalimumab

Results

Psoriasis patients had increased levels of markers in comparison to the control group. After 3 months of therapy, E-selectin decreased sig- nificantly ($P < .001$), as well as IL-22 ($P < .001$). hsCRP also decreased but did not show a statistical significance, OxLDL were slightly higher than initially. After 24 months, 17 patients were still being treated with adalimumab. In these patients, hsCRP ($P < .05$), E-selectin ($P < .001$) and IL-22 ($P < .001$) were significantly decreased. OxLDL remained at a higher level.

Discussion

The stable decrease of E-selectin, hsCRP, and IL-22 after 24 months supports our hypothersis that adalimumab suppresses systemic inflammation. Psoriatic patients are at a higher risk of atherosclerosis, so systemic therapy, ideally biologic, should be indicated as soon as possible in patients with moderate to severe psoriasis.

Abstract N°: 61

Title: Association Between the Disease Severity and Quality of Life of Psoriasis Vulgaris Patients in a Tertiary Government Hospital in Pasig, Metro Manila, Philippines: A Retrospective Cross-Sectional Study

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Introduction

Psoriasis vulgaris results to physical, psychological, social, and economic impact to patients. Psoriasis causes itchiness, scaling, and painful lesions, where visual disfigurement often leads to problems on patients' self-esteem, stigmatization, embarrassment, and shame. Anxiety and depression are commonly diagnosed with psoriasis patients. There is also an economic burden to patients due to high and permanent cost of treatment. Currently, no study has been done on the relationship between severity of the disease and quality of life among adult Filipino patients with psoriasis.

Materials and methods

An analytical cross-sectional study was conducted involving psoriasis vulgaris patients on their initial consult from the Dermatology out-patient clinic at Rizal Medical Center between January 1, 2019, and December 31, 2019. Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index (DLQI) scores along with demographic and clinical characteristics were collected. Multiple linear regression was done to identify the predictor variables of PASI and DLQI; while Pearson chi-square test was used to test the level of significance.

Results

A total of 155 psoriasis patients' records were analyzed in the study. 57.4% had moderate to severe psoriasis, while 42.6% were mild cases. There is a significant association between disease severity and quality of life among patients. There is a strong association between joint involvement and disease severity ($p = 0.001$). There is also a significant association between quality of life and presence of hypertension ($p = 0.004$), dyslipidemia ($p = 0.015$), cardiovascular disease/stroke ($p < 0.001$), depression ($p = 0.032$), family history of psoriasis ($p < 0.001$), and joint involvement ($p = 0.004$).

Discussion

Significant association between disease severity and quality of life among psoriasis patients was found. Age, cardiovascular comorbidities, depression, family history and joint involvement were associated with worse quality of life among patients with psoriasis. It is recommended that clinicians take a holistic approach when managing patients with psoriasis and address their needs to improve their quality of life. More so, initiatives and measures to strengthen the country's health programs and to raise awareness on the diagnosis, management, and treatment of psoriasis vulgaris are recommended.

Abstract N°: 64

Title: Psoriasis duration associated with bone erosion in psoriatic arthritis patients

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Introduction: Psoriasis is a chronic, multisystem inflammatory disease with predominantly skin and joint involvement. Psoriasis precedes arthritis by an average of 7 years. Psoriatic arthritis **(**PsA) is heterogeneous in its clinical presentation and disease course, but many patients (pts) develop a destructive form of arthritis. Theory of transition from psoriasis to PsA has been proposed recently.

Objective: to evaluate association between bone erosion with psoriasis duration in PsA pts based on data from clinical practice (RU-PsART cohort).

Materials and methods: 737 (M/F=350/387) PsA pts fulfilling the CASPAR criteria were included. Mean age 47.4±12.7 years (yrs), psoriasis duration 165[74.5;292] mos, PsA duration 55[17;120] mos. Mild disease was defined as body surface area (BSA)≤10%, moderate to severe as BSA>10%. X-ray of feet and hand were done in 622 out of 737 pts. The one-factor model of logistic regression was used to identify a group of features that are associated with achievement MDA. M±SD, Me [Q25; Q75], Min-Max, %, t-test, Pierson-χ2, Manna-Whitney tests, ORs with 95% CI were performed. All $p<0.05$ were considered to indicate statistical significance.

Results: Psoriasis precedes of PsA by an average of 9.2 years. BSA≤10% was found in 615 out of 672 pts (91.5%), BSA>10% - in 57 out of 672 pts (8.5%). Bone erosion was found in 237 out of 622 of pts (38.1%). Enthesitis found in 236 out of 737 pts (42.1%), dactylitis – in 197 out 731 pts (27%), axial PsA – in 315 out of 731 pts (43.1%). Bone erosion significantly associated with psoriasis duration more than 5 yrs.

Discussion: In our cohort the majority of PsA pts had mild psoriasis preceded PsA on average of 9.2 yrs. Bone erosion was found in 30% of PsA pts which associated with psoriasis duration. Early diagnosis and therapeutic intervention within a "window of opportunity" are very important for improving outcomes and prevent structural damage in PsA.

Abstract N°: 91

Title: Text messages as a reminder and educational tool in patients with psoriasis: A pilot study

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Introduction

Psoriasis is a chronic inflammatory disease of the skin with subsequent systemic comorbidities significantly affecting quality of life. Successful management requires consistent treatment adherence, yet treatment dissatisfaction and suboptimal adherence to medication is a common and complex problem among people living with this chronic illness. This study was conducted *to* evaluate the use of text messages (TM) in improving treatment adherence and several patient outcomes such as disease severity, quality of life, and the patient–physician relationship.

Materials and methods

A randomized, controlled, observer-blinded, pilot study was conducted among patients with psoriasis. Patients actively seen via telemedicine at least every two weeks were invited to join the study. After randomization, patients assigned to the TM group received 7 TM per week whereas patients assigned to the control group received none all throughout the study. Research participants were assessed in four study visits, one at the beginning and every two weeks thereafter until the eighth week. Assessment of disease severity was done using Psoriasis Area and Severity Index (PASI), Body Surface area (BSA), and Physicians Global Assessment (PGA). After the evaluation, participants were asked to answer self-administered questionnaires that measured Dermatology Life Quality Index (DLQI) and treatment adherence. An evaluation of the patient–physician relationship was also assessed during the first visit as baseline. After eight weeks of receiving daily TM, participants returned for a final evaluation and were asked to answer the same surveys, with added survey forms on evaluation of the patient–physician relationship and usability and satisfaction with TM interventions.

Results

A total of 33 patients were enrolled in this study, divided into 16 and 17 patients for the treatment arm and control arm, respectively. All patients had chronic plaque type psoriasis and were mostly on topical corticosteroids at the very least. Among all the treatment outcomes, only DLQI was found to be statistically different overall and between groups, with daily TM improving the patients' quality of life ($p<0.001$). All patients in the TM group were satisfied with the intervention and would like to avail of the service in the future. Although treatment adherence improved in patients receiving daily TM, the increased adherence was not significantly different between both groups. Other treatment outcomes such as PASI, BSA, PGA, and patient-physician relationship were consistently improving across time but were not statistically significant overall and between groups.

Discussion

Despite the limited evidence, this study illustrates the potential of text messages as an inexpensive and widely available intervention to increase treatment adherence and improve overall disease severity, quality of life, and physician-patient relationship in patients with psoriasis.

Abstract N°: 113

Title: Deucravacitinib Long-term Efficacy and Safety in Plaque Psoriasis: 2-Year Results From the Phase 3 POETYK PSO Program

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Introduction

The efficacy and safety of deucravacitinib were assessed in patients enrolled in the phase 3, double-blind POETYK PSO-1 and PSO-2 trials and the open-label long-term extension (LTE) trial.

Materials and methods

The 52-week PSO-1 and PSO-2 trials randomized patients with moderate to severe plaque psoriasis 2:1:1 to receive deucravacitinib 6 mg once daily, placebo, or apremilast 30 mg twice daily. Patients could then enroll in the LTE trial and receive open-label deucravacitinib 6 mg once daily.

Results

A total of 1221 patients were enrolled in the LTE trial and received ≥1 dose of deucravacitinib. Cumulative exposures in person-years from randomization in PSO-1 or PSO-2 and the LTE trial were 2166.9 and 2482.0 for efficacy and safety analyses, respectively. At enrollment in the LTE trial, PASI 75 and sPGA 0/1 response rates were 65.1% and 50.9%, respectively, and were maintained for up to 2 years after initial randomization (Week 48 of LTE; PASI 75: 75.7%; sPGA 0/1: 56.4% [as observed]). Exposure-adjusted incidence rates per 100 person-years for adverse events were similar in the controlled period (Weeks 0–52) of PSO-1 and PSO-2 and during the cumulative PSO-1, PSO-2, and LTE trial period (229.2 [controlled period] vs 154.4 [cumulative period]), serious adverse events (5.7 vs 6.1), discontinuations (4.4 vs 2.8), deaths (0.2 vs 0.4), herpes zoster (0.9 vs 0.7), malignancies (1.0 vs 0.9), major adverse cardiovascular events (0.3 vs 0.4), and venous thromboembolism (0.1 vs 0.1).

Discussion

Deucravacitinib demonstrated persistent efficacy and consistent safety profiles for up to 2 years after initial randomization in the POETYK PSO-1, PSO-2, and LTE trials.

Abstract N°: 133

Title: Deucravacitinib, an Oral, Selective Tyrosine Kinase 2 (TYK2) Inhibitor, Versus Placebo and Apremilast in Moderate to Severe Plaque Psoriasis: Safety by Prespecified Baseline Demographic Characteristics in the Phase 3 POETYK PSO-1 and PSO-2 Trials

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Introduction

Deucravacitinib is an oral selective inhibitor of TYK2 that mediates signaling of key cytokines in psoriasis pathogenesis. This analysis evaluated the safety of deucravacitinib in psoriasis patients stratified by prespecified baseline demographic characteristics.

Materials and methods

POETYK PSO-1 (NCT03624127) and POETYK PSO-2 (NCT03611751) were double-blind, 52-week trials that randomized patients with moderate to severe plaque psoriasis 2:1:1 to deucravacitinib 6 mg once daily, placebo, or apremilast 30 mg twice daily. Effects of baseline age (<40, 40–<65, ≥65 y), sex (male vs female), race (White, Black or African American, Asian, other), and body weight (<90 vs ≥90 kg) on incidence of adverse events (AEs), serious AEs (SAEs), and AEs leading to discontinuation were evaluated using pooled data from PSO-1 and PSO-2.

Results

The overall incidence of AEs over Weeks 0–16 was similar overall in each subgroup by age (<40 y: deucravacitinib 58.9%, placebo 48.8%, apremilast 61.5%; 40–<65 y: 54.9%, 49.0%, 55.5%; ≥65 y: 50.0%, 54.9%, 55.3%, respectively), sex (males: 52.5%, 48.6%, 55.1%; females: 62.3%, 52.0%, 61.9%), race (White: 54.7%, 47.1%, 57.3%; Black or African American: 30.0%, 58.3%, 30.0%; Asian: 66.3%, 63.4%, 67.5%; other: 66.7%, 85.7%, 50.0%), and body weight (<90 kg: 54.9%, 48.9%, 61.2%; ≥90 kg: 56.6%, 50.5%, 53.7%). SAEs and AEs leading to discontinuation were low and balanced across subgroups. Similar trends were observed over Weeks 0–52.

Discussion

AEs, SAEs, and AEs leading to discontinuation in each baseline subgroup were generally consistent with those observed in the overall population[2] and no clinically relevant differences were identified in any subgroup.

Abstract N°: 136

Title: PON1 and PTX3 as potential cardiometabolic diagnostic predictors in psoriasis with relation to systemic treatment.

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Introduction

Psoriasis is a common systemic disease, linked to cardiometabolic complications. Paraoxonase 1 (PON1) protects low density proteins (LDL) from oxidation and is therefore believed to act against the development of the coronary heart disease. Pentraxin 3 (PTX3) is an acute-phase reactant and has been linked to the heart failure and atherosclerosis. We aimed to evaluate the serum pentraxin 3 (PTX3) and paraoxonase 1 (PON1) levels in psoriatic patients and explore possible relations with disease activity, metabolic or inflammatory parameters and systemic treatment. We intended to elucidate whether the proteins might be cardiometabolic diagnostic predictors in psoriasis.

Materials and methods

33 patients with plaque-type psoriasis and 11 healthy controls were enrolled to the study. Blood samples were collected before and after three months systemic treatment with acitretin or methotrexate. Serum proteins levels were evaluated using Bio-Plex 200 System immuno-assays system. Morphological and biochemical parameters were evaluated using routine laboratory techniques.

Results

15 women and 18 men with the mean age of 54.2 and 11 healthy individuals of the mean age of 54.4, matched for age, weight, and BMI, participated in the study. Before treatment severity of psoriasis expressed by PASI score was 17.12±7.23 and after therapy it decreased to 4.22±2.88 ($p<0.001$). The mean serum pentraxin 3 level was significantly higher in patients with psoriasis compared to the controls ($p<0.01$). As for the relations of pentraxin 3 and laboratory parameters, we noted a significant positive correlation with CRP. The highest level of PTX3 was noted among overweight patients with significance compared to the controls ($p<0.05$). Further, significant negative correlations between PTX3 with triglycerides in overweight patients and with glucose, cholesterol and triglycerides in obese and with cholesterol and triglycerides in severe psoriatics were noted (all $p<0.05$). After the three-months treatment a significant decrease in serum PTX3 concentration was noted ($p<0.05$). We observed the highest level of PON1 in patients with the most severe psoriasis compared to the healthy individuals and other PASI subgroups ($p<0.05$). PON1 level did not change significantly after treatment with both drugs in total and separately, however after MTX it increased.

Discussion

The highest levels of PTX3 and PON1 in obese patients point to their role in the interplay between adipose tissue and chronic inflammation intensifying within the psoriasis severity. In overweight and obese psoriatics PTX3 might exert a divergent protective role in terms of cardiometabolic disorders development. Statistically higher PTX3 level in short-term psoriasis might reflect such greater protective impact of the protein in these patients. Antipsoriatic systemic therapy in relation to the evaluated proteins does not seem to be enough cardioprotective however

methotrexate might be more beneficial.

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Abstract N°: 179

Title: Matching-adjusted indirect comparison of long-term efficacy and safety outcomes for calcipotriol plus betamethasone dipropionate foam and halobetasol proprionate plus tazarotene lotion in the treatment of plaque psoriasis

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Introduction

Multiple topical agents are available for the treatment of plaque psoriasis, including fixed-combination calcipotriol 0.005% plus betamethasone dipropionate 0.064% (Cal/BD) aerosol foam and halobetasol propionate 0.01% plus tazarotene 0.045% lotion (HB/Taz). In the absence of head-to-head data, indirect comparison methods adjusting for cross-trial differences can be used to compare therapies. A previous matching-adjusted indirect comparison (MAIC) analysis has compared the short-term efficacy of Cal/BD foam and HB/Taz. Here, we use MAIC to compare the efficacy and safety of Cal/BD foam and HP/Taz for up to 52 weeks.

Materials and methods

An unanchored MAIC was conducted using individual patient data (IPD) from the PSO-LONG trial, in which patients with Physician's Global Assessment (PGA) success (PGA 0/1 with ≥ 2-point improvement) after 4 weeks of open-label, daily Cal/BD foam use were randomized to 52 weeks of proactive or reactive treatment with twice weekly Cal/BD foam. Cal/BD foam IPD were compared with a 52-week, open-label study of HP/Taz (NCT02462083), in which patients received 8 weeks of once-daily HP/Taz, followed by 4-week cycles of intermittent treatment as needed (defined as PGA ≥ 2).

IPD were selected by applying the HP/Taz trial inclusion criteria, then weighted to match the mean baseline characteristics – age, sex, ethnicity, body surface area affected (BSA), and PGA – of patients treated with HP/Taz. Efficacy outcomes were the proportions of patients with week 4/8 PGA success and with BSA ≤ 3 or ≤ 5 maintained from week 4/8 to weeks 26 and 52. Safety was compared among matched patients over the entire study period.

Results

The baseline characteristics of the matched PSO-LONG Cal/BD foam arms were well balanced with the HP/Taz arms. Effective sample sizes after matching were 40.9–45.7% of the original Cal/BD foam populations.

Significantly more patients had PGA success after 4 weeks of Cal/BD foam treatment (84.5%) than after 4 or 8 weeks of HP/Taz (37.5% and 54.4%, respectively; odds ratios [ORs] [95% confidence intervals], 9.1 [6.1–13.4] and 4.6 [3.1–6.7]; both $p < 0.01$).

At week 52, 92.5% and 92.4% of patients receiving proactive and reactive Cal/BD foam, respectively, maintained BSA ≤ 3, compared with 49.3% of those treated with HP/Taz (ORs, 12.7 [4.3–37.8] and 12.6 [5.7–27.6]; both $p < 0.01$). BSA ≤ 5 was maintained by 97.2% and 97.1% of patients receiving proactive and reactive Cal/BD foam, respectively, at week 52 (HP/Taz, 77.5%; ORs, 10.2 [1.8–57.6] and 9.7 [3.1–30.4]; both $p < 0.01$). Similar results were seen at week 26.

Adverse events (AEs) of interest, treatment-related AEs and AEs leading to withdrawal were rarer with Cal/BD foam than with HP/Taz (proactive/reactive Cal/BD foam vs HP/Taz: dermatitis, 1.5%/0.8% vs 10.2%; application site pain, 0.3%/0.2% vs 5.1%; pruritus, 0.7%/0.6% vs 6.0%; treatment-related AEs, 1.3%/1.5% vs 29.3%; AEs leading to withdrawal, 0.8%/0.1% vs 7.4%; all $p < 0.01$). Overall AE rates were similar or lower with Cal/BD foam than with HP/Taz (45.9%/57.2% vs 57.1% [$p = 0.04$ and $p = 0.98$, respectively]).

Discussion

In this MAIC analysis, Cal/BD aerosol foam demonstrates greater efficacy than HP/Taz lotion, with patients maintaining BSA improvements for up to 52 weeks of treatment, proactively or reactively following relapse. Cal/BD aerosol foam has a favourable safety profile, compared with HP/Taz lotion, for up to 52 weeks. These results are consistent with the previous MAIC of short-term treatment outcomes.

Abstract N°: 188

Title: Unmet Needs in Skin and Joint Symptoms: Control and Impact on Quality of Life in Actively Treated Patients with Psoriasis

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Introduction

Symptoms may persist and impact quality of life (QoL) in psoriasis (PsO) patients despite systemic treatment. Symptom burden in actively treated PsO patients and comorbid psoriatic arthritis (PsA) was evaluated.

Materials and methods

Patients in CorEvitas' Psoriasis Registry who had started a systemic therapy ≥6 months prior (2015–2021) were categorized as having clinically meaningful: itch (visual analog scale [VAS]-100≥30) only; skin pain (VAS-100≥45) only; both; or neither. Those with comorbid PsA were categorized as having: joint pain (VAS-100≥45) only; itch/skin pain only; both; or neither. In patients with body surface area (BSA)≤1, proportions with itch and skin pain were calculated. Linear regression was used to calculate mean (95%CI) EQ-VAS (VAS-100) for symptom groups, adjusting for demographic and disease characteristics.

Results

Among 7260 patients, mean age and disease duration were 52.3 and 19.2 years, respectively; mean BSA was 3.7%; 46.3% were female; 28% reported itch only, 13% skin pain only, and 11% both. Among those with BSA≤1 (n=4388), 12% and 4% reported itch and skin pain, respectively. Patients with skin pain only and both itch/skin pain reported worse EQ-VAS (mean=68.6 [95%CI=65.1, 72.1], mean=66.2 [95%CI=64.9, 67.5], respectively) than patients with itch only (mean=73.7 [95%CI=72.7, 74.8]); and those with any symptom reported worse EQ-VAS than those with neither (mean=80.2 [95%CI=79.7, 80.7]). Among the PsA subgroup (n=2428), 36% reported joint pain only, 36% skin symptoms only, and 22% both. PsA patients with skin symptoms, joint pain, or both reported worse EQ-VAS than those with neither (mean [95%CI]: 72.1 [70.1, 74.1], 65.2 [63.3, 67.1], 63.6 [62.0, 65.2], 80.0 [78.9, 81.0], respectively).

Discussion

Findings suggest significant unmet need for symptom control in PsO patients receiving systemic treatment.

Abstract N°: 192

Title: Effect of Apremilast on QoL and Other Patient-Reported Outcomes in Patients With Plaque Psoriasis in Special Areas and Impaired QoL: 16-Week Results From EMBRACE

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Introduction and objectives

Patients with chronic plaque psoriasis, as indicated by body surface area or Psoriasis Area and Severity Index score (PASI: ≥3 to ≤10 at baseline), who present with disease manifestations in special areas not adequately controlled by topical therapy alone may experience a significant impairment to their quality of life (QoL). Given that the presence of such manifestations may alter the psoriasis classification towards higher disease severity requiring systemic therapies, it is essential to assess the clinical profile of apremilast in this population. EMBRACE (NCT03774875) was a phase 4, randomized, placebo (PBO)-controlled study in Western European countries that evaluated QoL, patient-reported outcomes (PROs), patient-relevant treatment benefits, and safety with apremilast 30 mg BID (APR) in patients with psoriasis in special areas with limited skin involvement and impaired QoL.

The objective of EMBRACE was to evaluate improvements in QoL, PROs (improvements in itch and skin discomfort/pain), and safety with APR vs PBO in patients with plaque psoriasis in ≥1 special area, limited skin involvement, and impaired QoL.

Materials and methods

Enrolled patients had plaque psoriasis (at least 6 months prior to enrollment) not controlled by topicals; lack of response, contraindication, or intolerance to conventional first-line systemics; ≥1 special area (including visible locations, scalp, nails, genital areas, or palmoplantar area); PASI ≥3 to ≤10; and Dermatology Life Quality Index (DLQI) >10. The primary endpoint was Week 16 DLQI response (≥4-point reduction). Analyses included Cochran-Mantel-Haenszel test or analysis of covariance.

Results

Of 277 randomized patients (APR: n=185; PBO: n=92), 221 completed 16 weeks of treatment (APR: n=152; PBO: n=69). For APR and PBO groups, mean psoriasis duration (16.3, 18.4 years), DLQI (18.1, 18.5), Itch Numeric Rating Scale (NRS; 7.5, 7.4), and Skin Discomfort/Pain visual analog scale (VAS; 61.3, 61.8) were similar at baseline. Week 16 DLQI response rate was statistically significantly greater with APR vs PBO (73.3% vs 41.3%; P<0.0001). APR also showed statistically significantly greater improvements versus PBO in Itch NRS (−2.5 vs −0.9; P<0.0001) and Skin Discomfort/Pain VAS (−21.5 vs −5.4; P=0.0003) and greater achievement of Patient Benefit Index ≥1 (76.6% vs 39.9%; P<0.0001). No new safety signals were observed.

Conclusions

APR improved QoL, itch, and skin discomfort/pain in patients with chronic plaque psoriasis in special areas, limited skin involvement, and impaired QoL. The safety profile was consistent with prior APR studies.

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Abstract N°: 217

Title: Real-world disease control, quality of life and systemic treatment patterns in moderate to severe psoriasis: results of an observational study in Central Eastern Europe countries (CRYSTAL)

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Introduction

Psoriasis has a prevalence of 2-4% across Central Eastern Europe (CEE) countries, but limited country-level data are available to inform on the rate of disease control and therapies used in real-life setting. To fill this knowledge gap, this study aimed to characterize the real-world disease severity, clinical management and health-related quality of life (QoL) in patients (pts) with moderate to severe psoriasis in CEE.

Materials and methods

This was an epidemiological multi-center medical chart review with a cross-sectional component conducted in 7 CEE countries (EUPAS36459). Adult pts with confirmed moderate to severe plaque psoriasis receiving continuous systemic treatment in real-life practice for minimum 24 weeks were eligible to enrol. Assessments included Psoriasis Area and Severity Index (PASI) to describe the disease severity, and Dermatology Life Quality Index (DLQI) to evaluate the QoL. Patient reported outcomes were collected at the time of the single study visit. Mainly descriptive statistical methods were used.

Results

Patient characteristics: 690 pts were enrolled, 64.9% males, median (IQR) age 49.7 (39.4-60.2) years, 64.1% employed, 80.1% with psoriatic plaques, and median (IQR) systemic treatment duration 27.7 (14.3-59.6) months at study visit. Median (IQR) absolute PASI score was 20.0 (14.0-25.0) at the start of current systemic treatment.

Treatments at study visit: monotherapy with biologics (BIO) 88.4%, monotherapy with non-biologics (NON-BIO) 7.2%, combination (COMBI) therapy 4.3%. BIO group included tumor necrosis factor inhibitors (inh.) 48.6%, interleukin (IL)-17 inh. 24.2%, IL-12/23 inh. 12.9%, IL-23 inh. 2.8%.

Clinical and patient reported outcomes at study visit: see Table. DLQI scores of 0-1, 2-5, >5 had 35.6%, 33.6% and 30.8% of pts with absolute PASI score >1 (n=398), and 20.4%, 33.6% and 46.0% of pts with absolute PASI score >3 (n=213), respectively. DLQI total score and absolute PASI score at study visit correlated positively (Spearman

rho=0.591, p<0.001).

	OVERALL N=690	BIO N=610	NON-BIO N=50	COMBI N=30
Absolute PASI score, median (IQR)	1.4 (0.4-4.2)	1.2 (0.4-3.6)	6.1 (1.8-13.5)	1.6 (0.2-3.9)
PASI response rates, n(%)				
≤1	292 (42.3)	269 (44.1)	10 (20.0)	13 (43.3)
≤3	477 (69.1)	439 (72.0)	16 (32.0)	22 (73.3)
≤5	552 (80.0)	504 (82.6)	24 (48.0)	24 (80.0)
DLQI total score, median (IQR)	1.0 (0.0-4.0)	1.0 (0.0-4.0)	4.5 (1.0-13.0)	2.0 (0.0-7.0)
DLQI total score categories, n (%)				
0-1	375 (54.3)	350 (57.4)	13 (26.0)	12 (40.0)
2-5	175 (25.4)	150 (24.6)	17 (34.0)	8 (26.7)
>5	138 (20.0)	108 (17.7)	20 (40.0)	10 (33.3)

Note: 2 (0.3%) pts from the BIO group had no DLQI data available.

Discussion

This study provides useful insights about disease severity and treatment patterns across CEE. The overall improved results here are driven by the group of pts receiving biologics, showing a better disease control compared with pts receiving non-biologics. Yet, even in the biologics group, around half of pts did not reach a clear skin status and reported an impact of the disease on their QoL. These findings emphasize that improved treatment strategies are needed to optimize outcomes.

Abstract N°: 234

Title: Epicutaneous and mucosal Staphylococcus aureus colonization aggravate cutaneous inflammation in psoriasis vulgaris patients

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Introduction : Skin microbiota may augment psoriatic skin inflammation via induction of interleukin-36 alpha (IL36α). We evaluated prevalence of *Staphylococcus aureus* colonization in psoriasis vulgaris patients and its relation to serum expression levels of inflammatory markers IL-36α and IL-17A genes.

Materials and methods: This study included 24 psoriasis vulgaris patients and 24 healthy control subjects. History taking, clinical examination and psoriasis clinical severity assessment was performed. Expression of IL36α and IL-17A were determined by real-time quantitative polymerase chain reaction for all subjects. Epicutaneous Staphylococcus aureus colonization was assessed in patients and controls by routine microbiological techniques.

Results:

Psoriatic lesional skin was positive for Staphylococcus aureus colonization in 6 patients (25%) versus none of the controls (p=0.022). The nasal mucosa was positive for staph colonization in 7 psoriatic patients (29.2%) versus only one control subject (4.2%) (p=0.048). Lesional skin was not different from non-lesional skin regarding Staphylococcus aureus colonization (p =0.267). Mean IL-36α and IL-17A expression levels were significantly higher in Staphylococcus aureus colonized patients versus non colonized patients (p <0.001). Results of the linear regression analysis revealed that IL-36 α was independently affected by lesional skin Staphylococcus aureus colonization (p=0.009), and that IL-17 A expression (p=0.005) was significantly associated with IL-36α expression after controlling for other factors.

Discussion

We suggest that psoriatic skin and nasal mucous membranes are at higher risk of S. aureus colonization most likely secondary to the impaired epidermal barrier function. Moreover, IL-36α dependent IL-17 T cell responses in response to increased epicutaneous *S. aureus* colonization might play a role in augmenting skin inflammation and hence severity of psoriasis vulgaris. Our findings are supportive of the hypothesis that bacterial skin and nasal mucosal colonization of the skin promotes cutaneous immune responses, which is likely relevant to the disease pathogenesis. Finally, we suggest that modulation of S. aureus colonization and IL-36α could serve as a useful therapeutic targets to reduce skin inflammation and severity of psoriasis vulgaris patients.

Abstract N°: 274

Title: A Rare Coexistence of Psoriasis and Hansen's Disease Managed Through Teledermatology

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Introduction

Psoriasis and leprosy, or Hansen's disease, have long been part of our history. Studies done showed that only 1.4 in 10,000 leprosy cases developed psoriasis. Since then, a handful of cases have also been reported on the coexistence of these two diseases. In this report, a case of leprosy was diagnosed after an immunosuppressive therapy for psoriasis was initiated. The different hypotheses on the rarity of this coexistence is also explored. Additionally, we highlight how teledermatology was instrumental in the care of this patient.

Materials and methods

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Results

A 51-year-old male from a remote island presented through teledermatology with a 25-year history of erythematous scaly plaques on the knees, legs, trunk, elbows, and scalp. He self-medicated with clobetasol ointment daily for months with partial resolution. The patient also developed an annular nonpruritic non-scaly erythematous plaque at the right arm four months prior with no resolution with clobetasol or terbinafine cream.

He was treated as psoriasis vulgaris and tinea corporis for the right arm plaque and was started on methotrexate, folic acid, calcipotriol with betamethasone ointment over the psoriatic lesions, and terbinafine cream for the annular plaque. There was partial resolution of the psoriatic plaques but an increase in size of the annular plaque was noted, which developed claw-like extensions. The patient was referred to a private dermatologist in their island with a consideration of Hansen's Disease. On examination, there was anesthesia over the annular plaque, no neuritis or motor deficits. A biopsy sent to our institution of the annular plaque revealed Hansen's Disease, Borderline-Tuberculoid, while that of an erythematous plaque showed psoriasis.

The patient was started on a 6-month paucibacillary regimen for Hansen's Disease consisting of moxifloxacin, rifampicin, and clofazimine. Methotrexate was temporarily discontinued and the patient was maintained on topical corticosteroids. After 6 months of treatment, there is complete resolution of the annular plaque with hyperpigmentation.

Discussion

In the Philippines, out of the recorded 30,130 cases of psoriasis and 7,461 cases of leprosy from 2011-2021, only 1 was a confirmed case of lepromatous leprosy and psoriasis. Some authors suggest that psoriasis developed as an evolutionary advantage to resist leprosy infection based on genetic studies showing an opposing association. The two diseases also generate polar immune responses and signaling. Neurogenic inflammation, which plays a role in psoriasis, is impaired in leprosy due to consequent neuropathy.

Epidemiologic patterns also favor this theory. There was an increased prevalence of psoriasis in areas where there

were leprosy epidemics. As of 2019, areas with a high burden of leprosy also have a low burden of psoriasis, and vice versa. Other factors that contributed to the decline of leprosy include separation from society, decrease in reproductive capability, and worsening of the disease during pregnancy.

The case presented shows a rare coinfection of two diseases that seem to be polar opposites of each other. It demonstrated how the immunosuppressive treatment for psoriasis caused the exacerbation of a peculiar lesion that was revealed to be leprosy. The case also highlights how teledermatology was utilized to manage this patient entirely remotely.

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Abstract N°: 316

Title: Oral and topical probiotics in psoriasis - changing the disease with microbiome modulation

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Introduction

The topic of skin and gut microbiome, affecting the course of various dermatological diseases, including psoriasis, is raising interest. A bacterial dysbiosis in the gut lumen, with skin dysbiosis stimulating proinflammatory effects, seems to become one of current elements in psoriasis pathogenesis. Probiotics are microorganisms introduced into the body for its beneficial qualities. The authors investigated the influence of oral and topical probiotic supplementation on the course of psoriasis.

Materials and methods

A search of PubMed (MEDLINE) and EMBASE databases was conducted, using a combination of keywords such as: "microbiome"; "modulation"; "probiotic"; "skin"; "skin disease", "psoriasis" using MeSH and Emtree methods. The total number of records considered into analysis was 188 records on psoriasis, after the duplicates were removed 101 on psoriasis were further analyzed with 3 original studies on oral probiotic administration in humans and 4 original studies on topical and oral probiotics administration in animals.

Results

A case report by Vijayashankar, Raghunath showed that *L. sporogene,* administred as one sachet thrice daily to a patient with generalised pustular psoriasis showed significant improvement in 15 days, with present lesions involuting and no new lesions. *B. infantis* 35264 administred daily for 8 weeks in randomized, double-blind, placebo-controlled trial by Groeger et al. resulted in significant decrease in CRP and TNF-α levels in psoriatic patients. A mixture of 3 probiotic strains in 1:1:1 ratio (*B. longum* CECT 7347, *B. lactis CEC*T 8145 and *L. rhamnosus* CECT 8361), given for 12 weeks to 90 patients with plaque psoriasis in a randomized, double-blind, placebo-controlled by Navarro-Lopez et al. Brought lower risk of relapse following the administration of probiotic bacteria, which reduced PASI75 in 66.7% of the patients. In mice, *L. pentosus* GMNL-77 administration resulted in improvement of skin symptoms, decreased TNF-α, IL-6, IL-23, IL-17A/F, and IL-22 levels in the skin, and reduced number of IL-17- and IL-22-producing CD4+ T cells. Ethanolic extract of *L. sakei Probio65,* applied topically in mice with imiquimod-induced psoriasis-like skin inflammation, caused a significant reduction in the inflammatory changes. CCFM667 *B. adolescentis,* CCFM1078 *B. breve,* CCFM1148 *B. animalis*, CCFM1147 and CCFM1074 *L. paracasei,* CCFM1032 and CCFM1040 *L. reuteri* ameliorated psoriasis-like pathological characteristics and suppressed the release of IL-23/T helper cell 17 axis-related inflammatory cytokines in female BALB/c mice. In the study by Ogawa et al., topica application of *L. mesenteroides* suppressed erythema, scaling, upregulated IL-17 production, increased levels of plasma deoxycholic acid, positively altered the faecal microbiota composition. No

significant side effects were observed.

Discussion

All of the original studies on probiotics oral supplementation or topical application, both in human and animal model, showed a positive influence on the disease course. Yet, the number of studies is not sufficient, with a strong need for further investigations, especially randomized, double-blind, placebo-controlled trials.

Abstract N°: 331

Title: Comparative study of gastrointestinal symptoms between patients with psoriasis and seborrheic dermatitis

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Introduction: Psoriasis is a common and recurrent disease, with a significant negative impact on the physical, emotional and psychosocial well-being of patients. Characterized by the appearance of scaly erythematous plaques of varying sizes, it is an immune-mediated disease by cytokines and lymphocytes that present the Th1, Th 17 and Th 22 immune response pattern. Seborrheic dermatitis is a disease that has several similarities with psoriasis, including its inflammatory etiopathogenesis. Currently, psoriasis is considered a multisystem disease, proof of this is its well-established association with the metabolic syndrome. It is possible that its inflammatory character influences the presence of gastrointestinal symptoms, since the recurrent association of psoriasis with inflammatory bowel diseases has been reported. The aim was to identify gastrointestinal and psychosocial symptoms in patients with psoriasis and seborrheic dermatitis, comparing the prevalence of these symptoms in both diseases.

Materials and methods: Descriptive and observational cross-sectional study by non-probability sampling of patients diagnosed with psoriasis and seborrheic dermatitis, submitted to evaluation using the following questionnaires: Gastrointestinal Symptom Rating Scale (GSRS) Questionnaire of symptoms in Gastroesophageal Reflux Disease (QS-GERD) and Patient Assessment Of Upper Gastrointestinal Disorders-Quality Of Life (PAGI-QOL), as a way of measuring gastrointestinal symptoms in both groups.

Results: 86 patients were studied, 43 with a clinical/histopathological diagnosis of psoriasis and 43 with a diagnosis of seborrheic dermatitis. The arithmetic means of the values obtained by the 43 patients with psoriasis and 43 patients with seborrheic dermatitis were performed, from the three questionnaires used in the research. Thus, the following mean scores were for patients with psoriasis: GSRS- 33,23 (standard deviation: 15,07), QS-GERD – 9,023 (standard deviation: 10,64) and PAGI-QOL- 12,60 (standard deviation: 17,21); and, for patients with seborrheic dermatitis: GSRS- 27,72 (standard deviation: 10,94), QS-GERD- 5,34 (standard deviation: 9,61) and PAGI-QOL- 14,86 (standard deviation: 25,7).

Discussion: The similarity between the measured scores of patients with psoriasis and seborrheic dermatitis establishes one more factor in common between both, in addition to their inflammatory etiopathogenesis and similarity between their skin lesions.
The detection of gastrointestinal symptoms contributes to the multisystem character of psoriasis, and the possibility that seborrheic dermatitis is also considered in this way , after further research on the topic.

Abstract N°: 354

Title: Improving Biologic Treatment Access for Moderate-to-severe Psoriasis in Malaysia

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Introduction

According to the Malaysian Psoriasis Registry, approximately 24% of the patient population have moderate-to-severe psoriasis. Despite being candidates for biologics, only a small fraction (1.7%) of these patients in the Malaysian public healthcare system have access to biologic therapy due to limited annual health budget allocation by the Ministry of Health. This situation warrants a dialogue with the health system leaders and financial controllers for improvement. It is imperative to highlight the benefits of improved biologics access for the health system and the broader society. Hence, we opted for a cost-benefit analysis, which assessed both the anticipated medical cost and resulting productivity & health-related quality of life (HRQoL) benefits in monetary value.

Materials and methods

We implemented a deterministic, prevalence-based mathematical model to project and compare the annual medical cost (in Malaysian Ringgit, MYR) and monetary value of productivity and HRQoL gain for a scenario with improved access vs. a scenario of status quo over a 5-year period. The perspective of the Malaysian society (Ministry of Health and society) was used. Medical costs considered were costs of medications, outpatient visits & hospitalization, disease monitoring, treatment-related adverse events, and psoriasis-associated systemic comorbidities/complications. Model inputs were sourced from published literature and official reports, including the Malaysian Psoriasis Registry. Inputs from a panel of local dermatologists were used to inform parameters unavailable from other sources.

Results

The total medical costs under the status quo scenario was projected at MYR 539.8 million, MYR 543.0 million, MYR 546.3 million, MYR 549.6 million and MYR 552.9 million for 2022, 2023, 2024, 2025 and 2026 respectively. For the improved access scenario (improved biologics from 100 patients in the first year to 306 in the fifth year), it was projected at MYR 540.5 million, MYR 544.6 million, MYR 548.9 million, MYR 553.5 million and MYR 558.3 million for 2022, 2023, 2024, 2025 and 2026 respectively. Hence, the incremental medical cost was expected to be MYR 1.0 million in 2022, MYR 2.3 million in 2023, MYR 3.9 million in 2024, MYR 5.8 million in 2025, and MYR 8.1 million in 2026. When productivity and quality of life benefits were accounted for, our model suggested a net benefit gain of around MYR 115,006 for 2022, MYR 254,531 for 2023, MYR 428,980 for 2024, MYR 645,659 for 2025 and MYR 901,269 for 2026. The 5-year cumulative net benefit gain was about MYR 2.3 million.

Discussion

Our study signifies the meaningful benefits potentiated by a gradual improvement of biologics access among psoriasis patients treated in the Malaysian public healthcare system. An 11% of net benefit gain was projected. This is driven by the inherent effectiveness of biologic therapy in reducing systemic inflammations underlying the psoriasis pathophysiology, thereby improving not only the dermatological outcomes and other related comorbidities such as psoriatic arthritis and cardiometabolic diseases, but also the productivity and HRQoL.

Abstract N°: 367

Title: Improvements in anxiety and depression among patients with moderate to severe plaque psoriasis treated with certolizumab pegol: Three-year results from two phase 3 trials (CIMPASI-1 and CIMPASI-2)

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Introduction

We report 3-year Hospital Anxiety and Depression Scale (HADS) data in patients with moderate to severe plaque psoriasis, and moderate to severe anxiety or depression, treated with certolizumab pegol (CZP).[1]

Materials and methods

Data were pooled from the CIMPASI-1 (NCT02326298) and CIMPASI-2 (NCT02326272) phase 3 trials; full study designs have been reported previously.[1] Patients were randomised to CZP dosed at 200 mg or 400 mg every 2 weeks, or placebo. All patients received open-label CZP from Week 48.

The HADS questionnaire comprises 2 scores: HADS-Anxiety and HADS-Depression. Scoring 15–21 indicates severe anxiety or depression, 11–14 moderate, 8–10 mild, and ≤7 none.[2] We report change from baseline in HADS-Anxiety or HADS-Depression for CZP-randomised patients with HADS-Anxiety or HADS-Depression ≥11 at baseline, and the proportion who achieved HADS-Anxiety or HADS-Depression ≤7, to Week 144. Missing data were imputed as last observation carried forward.

Results

At baseline, 48 of the 361 patients randomised to CZP scored HADS-Anxiety ≥11; the mean HADS-Anxiety among these patients was 13.1 (standard deviation [SD]: 2.3). At Week 48 and Week 144, mean change from baseline in HADS-Anxiety in these 48 patients was −3.6 (SD: 4.4) and −4.1 (SD: 4.1), and HADS-Anxiety ≤7 was achieved by 29.2% and 31.3%, respectively.

At baseline, 35 of the 361 patients randomised to CZP scored HADS-Depression ≥11; the mean HADS-Depression among these patients was 12.7 (SD: 2.3). At Week 48 and Week 144, mean change from baseline in HADS-Depression in these 35 patients was −5.8 (SD: 3.8) and −5.1 (SD: 4.8), and HADS-Depression ≤7 was achieved by 55.9% and 47.1%, respectively.

Discussion

CZP treatment was associated with improvement in HADS-Anxiety and HADS-Depression scores at Week 48 and

Week 144 for patients with moderate to severe anxiety or depression at baseline. These analyses are limited by the small number of patients enrolled with moderate to severe anxiety or depression.

References

1. Gordon KB et al. Br J Dermatol 2021;184:652–62.
2. Stern AF. Occup Med 2014;64:393–4.

Funding

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EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 370

Title: Cost-per-responder analysis of calcipotriol plus betamethasone dipropionate foam and cream formulations for the treatment of plaque psoriasis

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Introduction

Once-daily, fixed-dose combination calcipotriol 50 µg/g (Cal) plus betamethasone dipropionate 0.5 mg/g (BD) aerosol foam is used in the treatment of mild–severe plaque psoriasis. Recently, a new Cal/BD cream formulation has been developed. In the absence of a head-to-head comparison of the efficacy of these formulations, which has not to date been performed, a matching-adjusted indirect comparison (MAIC) has been conducted. Here, we use MAIC results to assess the cost per responder (CPR) for Cal/BD foam and cream in Germany, Spain and the UK.

Materials and methods

The cost per pack was based on the pharmacy selling price in Germany and the wholesale purchasing price in Spain and the UK. The cost per pack was incl. value added tax and excl. mandatory rebates in Germany and in Spain.

Consumption was based on the recommended once-daily treatment periods (foam, 4 weeks; cream, up to 8 weeks) and the mean weekly dose reported in clinical trials (foam, 29.3 g; cream, 33.8 g); sensitivity analyses explored Cal/BD foam consumption only on patients with mild–moderate psoriasis (as in the Cal/BD cream trials) and rounding up consumption to full tubes.

The response definitions were proportion of patients with Physician's Global Assessment (PGA) success (PGA 0/1 with ≥ 2-point improvement). The proportions were (1) taken from the pooled 8-week data for the US and EU trials of Cal/BD cream; and (2) derived from odds ratios (ORs) from a comparison, anchored by Cal/BD gel, between 4-week data in the PSO-ABLE phase 3 trial Cal/BD foam arm and the pooled 8-week data for the US and EU trials of Cal/BD cream. The proportion of patients achieving PGA success for Cal/BD foam was derived as the product of the OR and the odds of achieving PGA success for Cal/BD cream at week 8.

The cost-per-responder was estimated for each comparator as the ratio of the total treatment cost and the proportion of patients with PGA success. The incremental cost per responder (ICPR) was estimated as the ratio of the differences between the two comparators for full treatment cost and proportion of patients with PGA success.

Results

The cost per gram of Cal/BD foam vs cream was €1.22 vs €1.16 in Germany, €0.55 vs €0.50 in Spain and £0.66 vs £0.59 in the UK. The total treatment cost for a 4- or 8-week course of Cal/BD foam vs Cal/BD cream was €143 vs €314, €64 vs €134 and £77 vs £161 in Germany, Spain and the UK, respectively.

The OR for PGA success was numerically in favour of Cal/BD foam (OR, 1.55; p = 0.18) in the anchored analysis. The derived proportions for PGA success were numerically higher for Cal/BD foam than for Cal/BD cream (54.1% vs 43.2%).

The cost-per-responder was €264 vs €728 in Germany (ICPR, −€1,574), €118 vs €311 in Spain (ICPR, −€645) and

£143 vs £372 in the UK (ICPR, −£764).

Neither of the sensitivity analyses changed the overall trend.

Discussion

Aerosol foam was the dominant Cal/BD formulation in all three countries, with more patients having a response to Cal/BD foam at a lower cost and after a shorter treatment period (4 vs 8 weeks) than with Cal/BD cream, suggesting that Cal/BD foam is the more cost-effective option in clinical practice.

EADV SYMPOSIUM 2022
INNOVATION BLOSSOMS IN DERMATOLOGY—VENEREOLOGY
LJUBLJANA
12 – 14 MAY 2022

Abstract N°: 371

Title: DLQI 0/1 Association with Absolute PASI in Patients with Moderate to Severe Plaque Psoriasis Treated with Certolizumab Pegol: Three-Year Results from Two Phase 3 Trials (CIMPASI-1 and CIMPASI-2)

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Introduction

Further to physical manifestations, plaque psoriasis is associated with psychological distress and social stigmatisation which can negatively impact quality of life (QoL).[1] Therefore, it is important to understand whether clinical responses translate into long-term improvements in health related (HR)QoL. Here, we explore the relationship between skin clearance and HRQoL over time, using Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index (DLQI) analyses over three years of certolizumab pegol (CZP) treatment.

Materials and methods

Data were pooled from CIMPASI-1 (NCT02326298) and CIMPASI-2 (NCT02326272), two phase 3 trials of CZP in adults with moderate to severe plaque psoriasis; full study designs have been reported previously.[2] Patients were randomised 2:2:1 to receive CZP dosed at 200 mg or 400 mg every two weeks, or placebo, for up to 48 weeks of double-blinded treatment; from Week 48 all patients received open-label CZP. We report DLQI 0/1 (no impact of skin disease on QoL) for patients grouped by absolute PASI scores at Weeks 48 and 144, as observed, pooled across all patients.

Results

At baseline, mean PASI and total DLQI across all 461 randomised patients were 19.2 and 13.8, respectively (standard deviation: 7.1 and 7.3).

At Week 48, 91 out of 118 (77.1%) patients who achieved PASI=0 also achieved DLQI 0/1. Among patients achieving PASI >0–≤2, 98 out of 154 (63.6%) also achieved DLQI 0/1. A similar trend was observed at Week 144, with 80 out of 101 (79.2%) who achieved PASI=0 and 54 out of 89 (60.7%) who achieved PASI >0–≤2 also achieving DLQI 0/1. Furthermore, a numerically higher proportion of patients who achieved PASI >2–≤3 also achieved DLQI 0/1, compared with those who achieved PASI >3–≤5, at both Weeks 48 and 144.

Discussion

Increased skin clearance with CZP treatment conferred a higher likelihood of achieving DLQI 0/1 at Week 48 and Week 144.

References

1. Bhosle MJ. et al. Health Qual Life Outcomes 2006;4:35
2. Gordon KB et al. Br J Dermatol 2021;184:652–62

Funding

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Previously presented at the International Congress of Dermatology (ICD) 2021.

Abstract N°: 383

Title: Filling the gap in psoriasis care: a qualitative study about patients' needs & expectations and exploring the role of a psoriasis nurse specialist

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Introduction

Psoriasis is a chronic skin disease with large impact on quality of life, caused by the visibility and the symptoms of the disease. Patients experience psycho-social difficulties and several comorbidities such as depression and cardio-vascular disease are linked. A holistic approach of this disease, for which there is no cure, is needed. A nurse specialist (NS) could play an valuable role in psoriasis care but until now, not much is known about psoriasis patients their needs and expectations towards such specialized nurses.

Materials and methods

Data was collected through semi-structured interviews with as topics experiences related to psoriasis care, treatment selection and nurse consultations. The data collection and analysis took place through a cyclical process.

Results

Fourteen interviews were conducted (October2020-April2021) in nine men and five women. The majority (n = 9) received standard care, the remaining participants (n = 5) received specialized care in a tertiary hospital. Many patients experienced frustrations with care, lacked psychological support and didn't felt understood by their HCP. Treatments were considered time-consuming, with often inadequate results. Patients concluded they should learn to live with the disease and took up a passive role in their management. In a subgroup we identified a turning point: after receiving information about the available treatments, they experienced hope and increased self-management. These patients perceived shared-decision making (SDM) as a crucial aspect in care. Aspects of SDM were mainly implemented in specialized care. Although most patients did not encounter specialized nurses, they showed a neutral to positive attitude towards them. Patients who visited a psoriasis nurse at least once (n=5) described the nurse consultations as holistic and with attention for emotional well-being. Within the nurse consultation the patients experienced more time, an informal atmosphere and lower thresholds.

Discussion

Although the benefits of SDM are known and confirmed in this study, there is still a gap with clinical practice. NS could be in the right position to inform patients about treatment options. At the same time NS could address psychosocial and lifestyle issues. Patients showed a neutral to positive attitude towards NS. The perceived aspects in psoriasis nursing care, such as a low threshold and a holistic approach might be an important addition to current care.

Abstract N°: 402

Title: Risk of Suicidality and Psoriasis: A Nationwide Population-Based Cohort Study in Korea

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Introduction

Psoriasis not only increases the risk of systemic diseases such as cardiovascular disease, but also impairs the quality of life of patients. Although increased rates of various psychiatric disorders have been reported in patients with psoriasis, the relationship between psoriasis and suicidality still remains unestablished. Accordingly, through a nationwide population-based cohort study, we aimed to analyze psoriasis as an independent risk factor for suicidality using the claim data from the National Health Insurance Service (NHIS) from 2005 to 2018.

Materials and methods

A total of 365,819 patients with psoriasis were included in the study, consisting of 39,298 patients with psoriatic arthritis and 326,521 patients with psoriasis alone.

Results

It was found that the risk of suicidality was significantly higher in patients with psoriasis compared with age- and gender-matched controls (adjusted HR 1.13, 95% 1.10-1.17). Also, the psoriatic arthritis group (adjusted HR 1.36, 95% 1.29-1.42) showed a higher risk of suicidality than the psoriasis alone (adjusted HR 1.10, 95% 1.06-1.13) and the control group. No significant correlation was found between the risk of suicidality and disease severity (mild group: adjusted HR 1.14, 95% 1.11-17; moderate to severe group: adjusted HR 1.10, 95% 1.04-1.17). In this study, there was an increased risk of suicidality in patients with psoriasis and in particular, patients with psoriatic arthritis had a higher risk than patients with psoriasis alone and the general population.

Discussion

In a clinical setting, the risk of suicidality in patients with psoriasis should not be underestimated and proper psychological management should be provided in a timely manner.

Abstract N°: 409

Title: The level of IL B and IL10 gene expression are asscoited with moderate-to-severe and severe psoriasis apremilast therapy outcome

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Introduction

One of the modern drugs for the treatment of psoriasis is the selective inhibitor of cellular phosphorylation 'apremilast', the use of which has shown high efficacy and safety in the treatment of psoriasis. At the same time, a possible inefficiency of the use of such therapy was found, as well as the development of individual adverse reactions of the patient, which determines the relevance of the search for predictors that allow reasonable personalization of the use of this drug. Since the immune response is a mainstream of psoriasis pathogenesis, the cytokine network studies may reveals association with psoriasis drug therapy outcome. The aim of the research is the evaluation of immune gene expression level changes in severe psoriasis patients with different apremilast therapy outcome.

Materials and methods

The expression levels of *IFNγ, TNF, ICAM1* cytokine and *IL1A, IL1B, IL4, IL6, IL10, IL11, IL12B, IL17A, IL17F, IL18, IL20, IL21, IL22, IL23A, IL25, IL31, IL33* interleukin genes have been assessed in severe psoriasis patient groups with different clinical outcome of apremilast therapy. The skin lesion biopsy was obtained from the patients prior to, as well at 14 and 26 weeks of apremilast therapy. Total mRNA extraction was made with RNAeasy kit (QIAGEN, Germany) from AllProtectTissue (QIAGEN, Germany) treated biopsy specimens. Raw gene expression levels were assessed using real-time PCR equipment (StepOne 5, Applied Biosystems, USA) in one-step mRNA reaction with TaqPath reaction mix and target gene TaqMan probes (Thermo Fisher Scientific, USA). The levels of gene expression calculated on delta Ct using endogenous control. Gene expression rates were calculated according to delta delta Ct approach. The clinical outcome assessed with delta PASI resulting two groups, namely patients with an efficient outcome (PASI ≥75) and others

Results

It was shown that changes in the expression level of immune system genes after 14 weeks of therapy with apremilast occur for cytokines *IL1A, IL1B, IL11, IL12B, IL17A, IL17F, IL18, IL20, IL21, IL22, IL31*; and after 26 weeks of therapy occur for cytokines *IL1A, IL1B, IL4, IL10, IL11, IL12B, IL17A, IL22, IL23A, IL25*. A statistically significant association between therapy outcome and the expression of the *IL1B* and *IL10* genes was revealed after 26 weeks of apremilast therapy. In the group of patients with high efficiency of therapy, there was a decrease in the expression level of *IL1B* gene by 15 times, and a decrease in the expression level of *IL10* by 5 times.

Discussion

Comparison of results obtained with genomic SNP association study and proteomic analysis of cytokines in patient biopsies, carried out earlier in the same sample of patients, revealed the overall predictive value of IL1B for apremilast therapy outcome. However, the prognostic value of IL10 was found only in proteomic and gene expression analyses. The data obtained are the base for the development of a predictive model to personalize the

use of apremilast for severe psoriasis treatment.

Abstract N°: 434

Title: Cardiovascular risk assessment in patients with psoriasis.

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Introduction

Psoriasis is a systemic, genetically predisposed, immune-mediated disease characterized by red, itchy scaly patches which occur predominantly on the knees, elbows, trunk and scalp.

There is a vast variety of comorbidities in patients with psoriasis. According to the literature, psoriasis is commonly associated with an increased risk of cardiovascular diseases (CVDs). Thus, new treatment modalities should be considered for these patients to prevent major cardiovascular events (MACE) such as myocardial infarction (MI) and stroke. The aim of the study is to determine the impact of psoriasis on cardiovascular risk.

Materials and methods

Open prospective observational clinical study.

We are recruiting 200 patients; 160 patients with mild, moderate, and severe psoriasis and 40 controls. The levels of total cholesterol, glucose, creatinine, estimated glomerular filtration rate, C-reactive protein are determined in all the patients. Body mass index (BMI), blood pressure (BP), Psoriasis Area Severity Index (PASI), Dermatology Life Quality Index (DLQI), levels of anxiety and depression on the HADS scale are also assessed. Cardiovascular risk is calculated with the SCORE 2 and SCORE 2OP scales. Patients with PASI score >10 and/or with a DLQI score >10 are considered to have severe psoriasis. Depending on psoriasis severity, all the participants received topical therapy, phototherapy, or systemic (biologic agents, etc.) treatment. In case of high cardiovascular risk and/or previously undiagnosed cardiovascular diseases, patients are going to undergo a detailed evaluation in our hospital. The patient's mean age was 50.3 ± 2.5 years, ranging from 29 to 74 years; 23 patients with psoriasis were men (77 %) and 7 women (23%). The average PASI index and DLQI were 31.7 ± 4.2 and 9.5 ± 1.3 points respectively. There was a prevalence of patients with severe psoriasis. 17% of participants, had psoriatic arthritis (PA). The mean BMI was 17.10 ± 17.3 kg/m^2. The average level of cholesterol, glucose and CRP was 5.8 ± 0.19 mmol/l, 5.1 ± 0.2 mmol/l, and 12 ± 4.2 mg/l respectively. 37% of these patients are current smokers, 17% smoked in the past and 46% are non-smokers. 27% of patients had subclinical anxiety and 3% - severe anxiety. 17% and 3% of patients suffered from subclinical and clinical depression, respectively.

Results

According to the SCORE2 and SCORE2OP scales a high cardiovascular risk was observed in 57% of cases. 13% received methotrexate, 10% - biologicals (netakimab), 77% of volunteers used topical treatment and phototherapy. 47% of patients had a hypertension and some of them reported about MI (n=3%) and stroke (n=3%).

Discussion

We identified a high cardiovascular risk in patients with severe psoriasis and psoriatic arthritis (PA). Patients with

hypertension, stroke and MI developed severe psoriasis. Moreover, a direct relationship between the severity of psoriasis and cardiovascular risk was observed.

However, further prospective randomized trials as well as a multidisciplinary therapeutic approach and biobanking will help assess the probability of CVD development in patients with psoriasis.

Abstract N°: 455

Title: Four-year stability of type D personality in patients with moderate to severe psoriasis and its implications for psychological decline. Study of 130 patients.

Paula Aguayo Carreras[1], Jose Antonio Llamas[1], Irene Lopez Riquelme[1], Ricardo Ruiz-Villaverde[2], Alejandro Molina-Leyva[3]

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Introduction

Personality type D (ptD) has been related to poorer physical and psychological health in various diseases. It has been postulated that it is a stable personality trait in healthy subjects, however there are no data on its stability in patients with moderate-severe psoriasis, who may experience changes in the presence or absence of their disease over time. The objective of this study is to evaluate the stability of PTD in patients with moderate to severe psoriasis, as well as its influence on anxiety and depression in these patients.

Materials and methods

Prospective cohort study. Forty psoriasis patients with ptD and sixty-six psoriasis patients without ptD were included. Participants completed the DS14 and HADS questionnaires at the start of the study and four years later.

Results At the beginning of the study, the prevalence of ptD was 37.7% and at week 208 it was 27.3%. 47.5% of patients have ptD. The stability of ptD was higher in patients with incomplete education and in those who were separated, divorced, or widowed. During follow-up, 15% of patients developed ptD. Male sex, topical treatment, the presence of depression, anxiety, and high levels of prior negative affectivity increased the risk of developing ptD. ptD was associated with an increased risk of developing anxiety, and rates of anxiety and depression were consistently higher in patients with ptD.

Discussion

The presence of ptD varies over time in patients with psoriasis. Therefore, it is possibly more a state than a characteristic phenomenon of the trait, modified by environmental factors. Type D personality may represent a frequent personality profile in patients with psoriasis that could identify subjects more vulnerable to psychological comorbidities and could worsen a multidisciplinary approach that includes cognitive-behavioral therapy.

Abstract N°: 474

Title: A model-based approach to support individualized dosing of secukinumab in patients with plaque psoriasis

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Introduction and objectives

Secukinumab 300 mg once every 4 weeks (q4w) was approved in patients with moderate to severe plaque psoriasis. Recently, an increased dosing frequency of secukinumab 300 mg once every 2 weeks (q2w) was approved in the European Union for patients weighing ≥90 kg. This approval was based on a Phase III study (NCT03504852) which showed superior Psoriasis Activity and Severity Index (PASI) 90 response following treatment with secukinumab 300 mg q2w versus q4w in patients weighing ≥90 kg (Augustin M, et al. Br J Dermatol. 2022 Jan 4. doi: 10.1111/bjd.20971. Epub ahead of print). The benefit of up titrating from q4w to q2w dosing in patients <90 kg was only evaluated in a small subset of patients in the OPTIMISE study (Reich K, et al. Br J Dermatol. 2020;182(2):304–315). For a more robust evaluation of the beneficial effect of q2w versus q4w in patients with moderate to severe plaque psoriasis in two weight groups (<90 kg and ≥90 kg), the pharmacometric analysis described here was conducted to support the results of the NCT03504852 study and to predict the PASI 90 response at Week 52 following treatment with secukinumab 300 mg q4w or secukinumab 300 mg q2w.

Methods

A pharmacokinetic (PK)-PASI model describing secukinumab concentration and PASI score was developed based on a large pool of data (>4,500 patients from 11 Phase I–III studies). The data pool did not include the new study (i.e., NCT03504852), and the model was validated by predicting the outcome of the new study. Additionally, the model predicted PASI 90 response in patients weighing <90 kg and patients weighing ≥90 kg.

Results

The model could predict the study outcome reasonably well, including PASI 90 response in patients receiving q4w and q2w dosing regimens for 52 weeks and after up titration to q2w in patients who did not adequately respond to q4w dosing at Week 16 (PASI 90 nonresponders). At Week 52, irrespective of body weight, the model predicted an improvement in the proportion of patients with PASI 90 responses with q2w versus q4w in patients weighing ≥90 kg (~15%) and <90 kg (~10%). In PASI 90 nonresponders at Week 16, the model predicted an improvement in the proportion of patients with PASI 90 responses at Week 52 when uptitrated to q2w in patients weighing ≥90 kg (~20%) and <90 kg (~15%) vs remaining on secukinumab 300 mg q4w.

Conclusion

The PK-PASI model predicted a benefit of uptitrating to secukinumab 300 mg q2w, irrespective of weight, in

patients who do not achieve PASI 90 response with the q4w dosing regimen.

Abstract N°: 599

Title: Reflectance confocal microscopy for genital psoriasis or how to avoid penile biopsy

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Introduction

Psoriasis is an erythematous-squamous dermatosis distributed mainly on the extension areas and commonly encountered in developed countries. Although involvement of the genital area is common, psoriasis with exclusively genital localization is a rare manifestation (2-3% of cases), being difficult to diagnose. Confocal microscopy is a non-invasive diagnostic method with a resolution comparable in assessing skin layers to that of histopathological examination, being especially useful for diagnosing lesions in areas difficult to biopsy.

Materials and methods

Results

We present the case of a 45- year-old male who presented to our clinic with erythematous, slightly scaling, non-pruritic, moderately delimited plaques, variable in diameter, an aspect highly suggestive for irritative chronic eczema. The plaques were located at the glans level and were evolving for approximately one year. The lesion began as an erythematous, shiny plaque that raised the clinical suspicion of Queyrat erythroplasia for which the patient received topical treatment with imiquimod with no clinical improvement. Dermatoscopic examination revealed the presence of spot-like vessels and areas covered with whitish scales. Due to the clinical aspect that mimicked several pathologies but also the special location, we decided to perform a confocal reflectance microscopy examination that revealed characteristic aspects of psoriatic dermatitis: parakeratosis and increase in the number of dermal papillae at the dermo-epidermal junction. Thus, the diagnosis of penile psoriasis was established. The patient was instructed to mind the stress levels in his life and received treatment with dermatocorticoids and emollients with a rapidly favorable evolution of the lesion, which completely resolved in about 2 weeks.

Discussion

In conclusion, penile psoriasis is a form of psoriasis difficult to diagnose due to the multitude of differential diagnoses that can be considered, but also to the special location that leads in many cases to the refusal of diagnostic biopsy. Confocal microscopy is thus an effective diagnostic tool, being characterized in the hands of an experienced user by a sensitivity and specificity close to the classical histopathological examination.

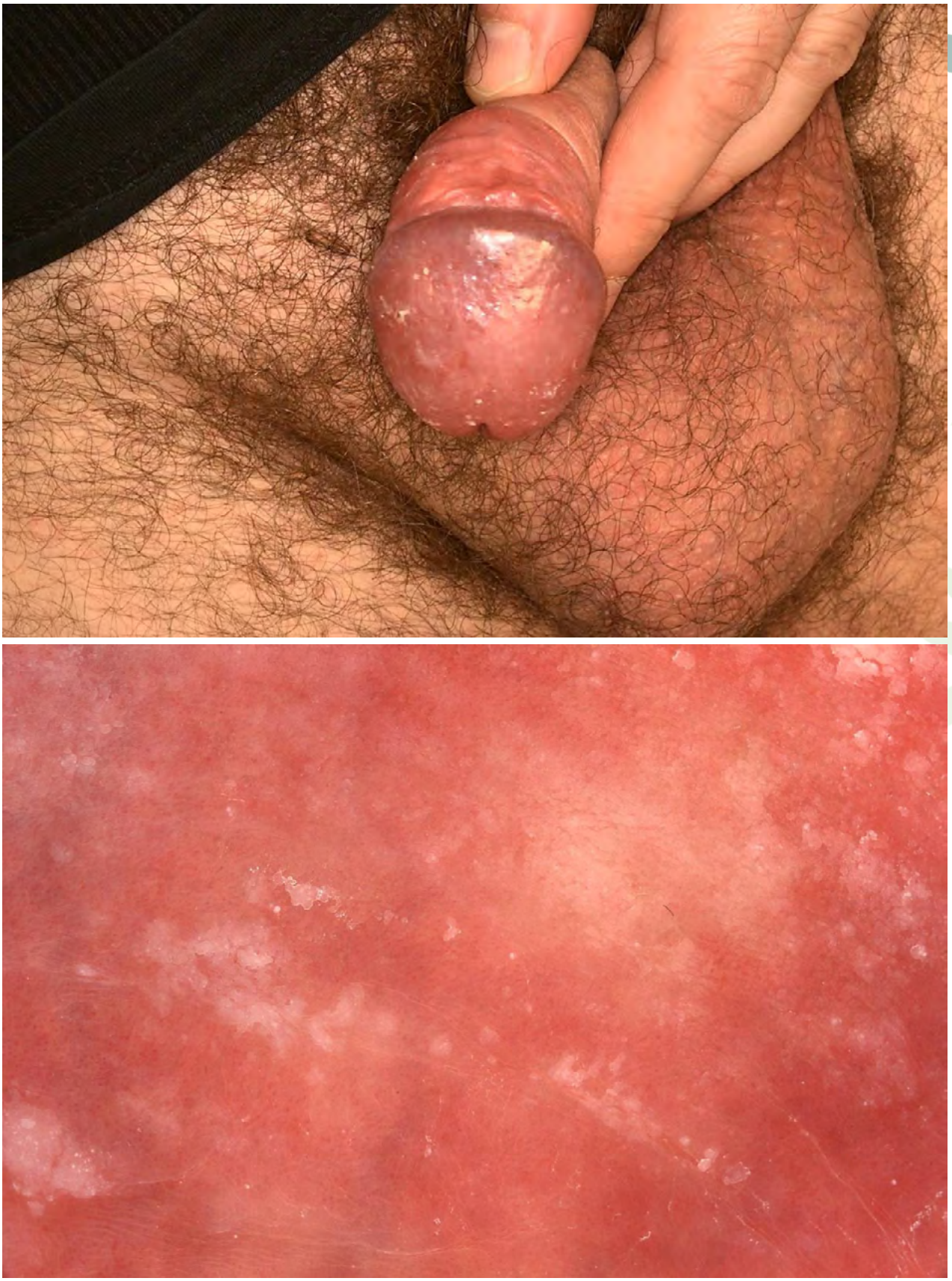
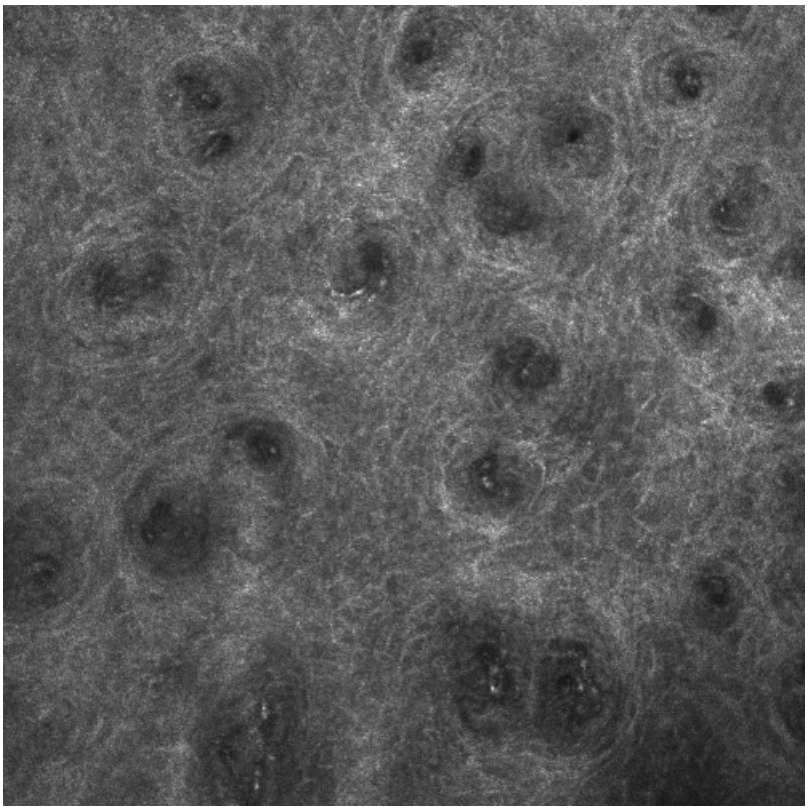
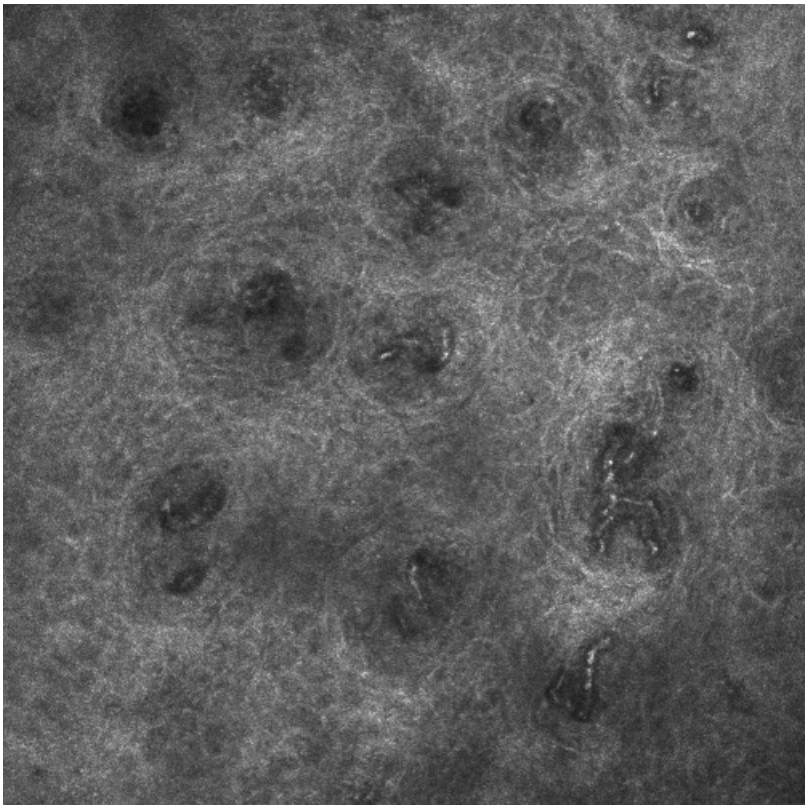


Fig 1, 2. Clinical and dermatoscopic aspects of the lesion: punctate blood vessels and white scales at the dermscopopic examination.





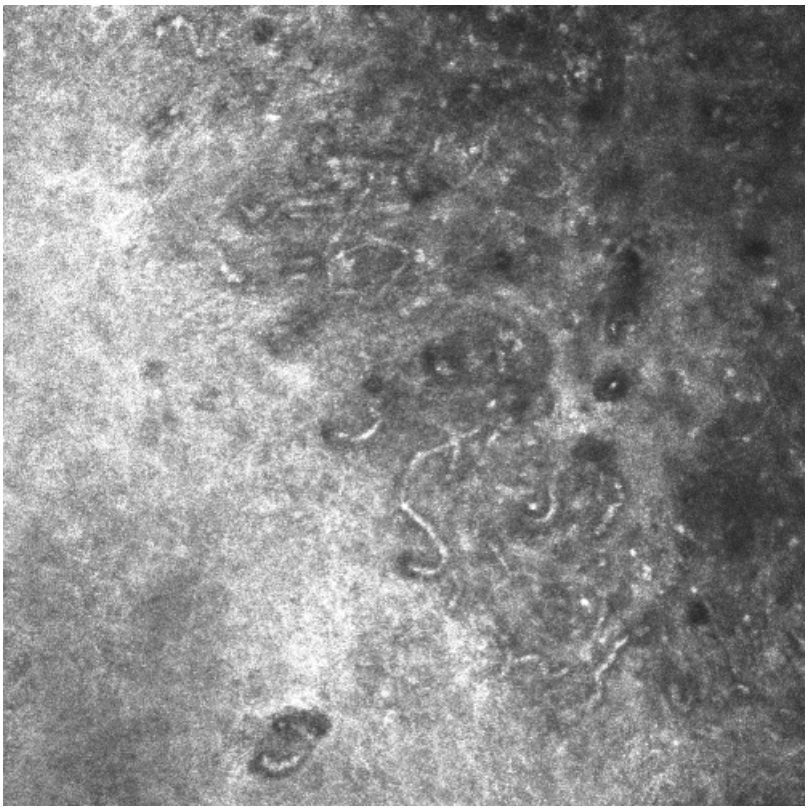


Fig 3,4. Reflectance confocal microscopy aspects: visualisation of dermal papillae with blood vessels in the epidermis.

Abstract N°: 629

Title: Development of a machine learning tool for early diagnosis of psoriatic arthritis in the primary care setting: A population based study

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Introduction

Psoriatic Arthritis (PsA) is an immune mediated inflammatory disease characterized by heterogeneous clinical manifestations. Timely diagnosis is challenging due to non-specific and overlapping symptoms, and delayed diagnosis may lead to irreversible joint damage and disability. Machine learning decision support tools can alert physicians to patients who would otherwise be misdiagnosed, thus improving patient outcomes. A proprietary machine learning algorithm, PredictAI™, was developed with the aim of identifying undiagnosed PsA in the primary care setting.

Materials and methods

This retrospective study included electronic medical records (EMR) from approximately 2.5 million patients aged 21-85 belonging to Maccabi Healthcare Services, Israel's 2nd largest Health Maintenance Organization, between 2008 and 2019. Inclusion criteria were: (i) at least 2 PsA diagnoses by a Rheumatologist, OR at least 1 PsA diagnosis by a Rheumatologist and 1 Psoriasis diagnosis by a Dermatologist, (ii) at least 6 years of data antedating first ever PsA diagnosis recorded.

Results

2,020 patients the inclusion criteria. 86% were used for model training and the rest for validation. PredictAI™ identified 100 (45%) patients with discriminatory area under the curve (AUC) of 89%, 1 year prior to first ever recorded PsA diagnosis by any physician. It identified 88 (40%) patients 2 years prior and 76 (35%) patients 3 years prior to the diagnosis with AUC of 88% and 86% respectively (*figure 1*). Specificity was set to 99%.

Discussion

PredictAI™ accurately identified 35-45% of PsA patients presenting to primary care, 1 or more years prior to first ever PsA diagnosis recorded by any physician. PredictAI™ can potentially substantially reduce time to diagnosis.

Abstract N°: 666

Title: Biologic multi-failure psoriasic patients: definition and carachteristics of a population

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Introduction

No consensus in the definition of multi-failure patient in the biological treatment of psoriasis has been reached. 10 biologic agents are available for the treatment of psoriasis vulgaris, which act by inhibiting different interleukins (i.e., IL17, IL23, IL12, and TNF-alpha), for a total of 4 generations of biologics. According to these considerations and in the absence of clear guidelines' definition, it is our opinion that patients failing at least four biologics should fall into the category of multi-failure patients

Materials and methods

We report the experience of the Dermatologic Clinic of the University of Turin. On 783 patients treated from November 2020 to November 2021 we identified 10 multi-failure patients.

Results

No significant differences between multi-failure and general psoriatic population were observed as for sex, age of psoriasis onset, arthropathic psoriasis, BMI, cardiovascular disease, diabetes mellitus, and initial PASI. The age at analysis was significantly different, respectively 52.25 (ds 15.2) years in the former and 63.3 (ds 4) in the latter group (p= 0.022). Six out of ten patients are taking risankizumab, 2 brodalumab, 1 guselkumab, and 1 secukinumab. The mean PASI at baseline of the last biologic therapy was 10.2, at 16 weeks PASI dropped to 3. At 28, 40, and 52 weeks the mean PASI was 2.8, 4, and 3 respectively. No safety concern arose during treatment. The mean follow-up since the beginning of the biological therapy for the 10 multifailure patients is 102 months.

Discussion

As for possible predictive factors on the causes of failure and subsequent therapeutic switch, studies in the literature identify smoking, BMI, and female sex as causes. In our population, no statistically significant demographic and disease characteristics were identified, yet the low sample size limits the value of our observations. Multi-failure patients represent an increasing challenge for the clinician. In our experience, the introduction of modern IL23 inhibitors has proved to be a valid therapeutic option.

Abstract N°: 903

Title: Epidermal microbiota in patients with psoriasis

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Introduction. Increasing incidence of dermatosis at the background of reduced immunological response to the impact of exo- and endogenous pathogenic agents dictate the necessity of a more profound research of the problem. In addition, antibiotic and immunosuppressive therapy led to activation of saprobic and conventionally pathogenic microflora which is believed to play a prevalent role in the development of dermatosis and, in particular, psoriasis.

Purpose of the research was to study profile of epidermal microflora on the skin of psoriatic patients and especially on the affected areas in order to determine its impact on the development and course of psoriasis.

Materials and methods. The research recruited 39 patients aged 21 to 57 years (22 males and 17 females). Duration of psoriatic process ranged between 7 months and 24 years. Progressive stage of dermatosis was diagnosed in 24 patinets, stationary – in 15, and specific onychopathy – in all the cases. All of the assessed previously received conventional therapy. Mean PASI was 21.8 (±2.1). Psoriatic scales and segments for the bacteriological and microbiological investigations were taken from the nail-plates and inoculated on the plain agar and Sabourand's medium (with the addition of chloramphenicol). Prior to inoculation local therapy was discontinued. Material for inoculation was obtained from the foci of psoriasis outside prevalent topographic zones for the location of fungal infection, from the areas of intact skin not adjacent to the plagues, and from the areas of prevalent localization of the mycotic process (feet, large folds of skin, nails).

Results. According to the findings of conducted investigations, prevalent components of the profile of epidermal microflora in psoriatic patients were *Staphylococcus aureus* and *Staphylococus epidermidis*.

Discussion. Data of the reported research have shown that surface of psoriatic efflorescence serves a favourable medium for epidermal microflora. The course of psoriasis in the assessed patients was mostly progradient by character, so bacterial microflora is likely to be a factor of triggering effect on the structure-functional status of the affected and visually intact skin in psoriasis.

Abstract N°: 958

Title: Three patients with moderate to severe plaque psoriasis who lost the for at least one year sustained absolute PASI:0 after switching from an IL-17 inhibitor to an IL-23 inhibitor for the purpose of dose convenience

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Introduction Recent research has illuminated many aspects of the pathophysiology of psoriasis with a prominent role of the IL23/IL17 axis. IL23 is a "regulatory" cytokine driving Th17 lymphocytes to produce IL17, a crucial "effector" cytokine. Novel agents that block IL23 have demonstrated excellent efficacy and safety with favorable dosing regime. Nevertheless, in some patients who responded well to IL17-inhibitors but switched to IL23-inhibitors for reasons , among others, of dosing convenience, we observed relapse of psoriasis. Increasing understanding of the complex pathophysiological processes reveal that Th17 are not the only source of IL17. For example, it also produced independently from IL23 by so called "unconventional" T cells, resident skin cells, neutrophils. Moreover, moving towards chronicity of the disease different cells intricacies may dominate the immune interactions suggesting lack of response to IL23 inhibitors. Herein we present three patients with moderate to severe plaque psoriasis who lost absolute PASI:0 after switching from an IL-17 inhibitor to an IL-23 inhibitor due to dose-convenience reasons.

Materials and methods. A 28 year old female patient and two 32 and 48 year old male patients with moderate to severe plaque psoriasis for 3, 6, 15 years respectively, switched from an IL-17 inhibitor to an anti-IL23 due to dose convenience reasons. The former patient, prior to switch, was receiving Secukinumab for 15 months while other two were receiving Brodalumab for 14 and 16 months respectively. All three patients prior to the initiation of the IL-17 inhibitor had moderate to severe psoriasis with an absolute PASI>15 while all three prior to switch had achieved an absolute PASI:0 and had sustained it for at least 1 year. First two patients switched to Guselkumab while third to Risankizumab for dose convenience reasons.

Results All three patients had progressively lost absolute PASI:0 by week 12 when presented with an absolute PASI: 0,6-1,2-1,2 respectively. Currently patients are on the 8, 10 and 11 month of therapy with the IL-23 inhibitor respectively and sustain a stable absolute PASI<1 but not so far regained the initial absolute PASI:0.

Discussion The complexity of the IL23/IL17 pathway remains to be elucidated. Theoretically, "downstream" regulation of IL17 may be both IL23-dependent and IL23-indipendent. Therefore switching an IL-17 inhibitor to an anti-IL-23 to patients who had excellent responded to the former for the purpose of dose convenience may not be adequate. More data are needed.

Abstract N°: 998

Title: Correlation of MMP-9 marker expression and amplification of the severity of psoriasis course

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Introduction. Taking into account actuality of psoriasis morbidity problem, specialists point out differentiated individual approach to diagnostic and therapeutic stages as a key aspect in the management of patients. Investigation of main points of etiopathogenesis and elaboration of target influence on its key aspects will enable to achieve a set goal. Both rapid epidermal proliferation and dermal inflammatory infiltration are accompanied by numerous formations of new blood vessels, which start during the early changes of psoriasis and vanish after skin lesion clearance. These observations highlighted that angiogenesis is the chief distinguishing feature during the pathogenesis of psoriasis. Among non-specific stimulants of angiogenesis, matrix metalloproteinase (MMP) should be singled out, which is a group of matrix-destructing enzymes, the source of which are fibroblasts, macrophages, neutrophils and other cells that play an important role in tissue remodelling, including neoangiogenesis processes.

Materials and methods. The aim of our research was to determine morphological peculiarities of skin lesions in patients with common psoriasis, investigation of the levels of MMP-9, depending on psoriasis form and severity of the course of pathological processes. 93 patients with psoriasis aged from 24 to 58, among which 56 women (60,2 %) and 37 men (39,8 %) were observed. The control group consisted of 34 practically healthy people (donors) of the same age. For estimation of immunohistochemical reaction with MMP-9 marker, intensity of cytoplasmic staining was evaluated by means of comparison with control group.

Results. On investigation of distribution of meanings of MMP-9 marker expression depending on the severity of common psoriasis course according to recommendations of Aronson Peter J. (2008), a significant increase in expression of this marker in comparison with control group was established, especially in psoriasis of moderate degree of severity in regions of intracorneal abscesses Munro-Sabouraud, areas of Kogoj pustulosis and perivascular dermal infiltrates having numerous neutrophil infiltration.

According to Fisher's exact test, distribution of monitoring of intensity of cytoplasmic staining with MMP-9 marker in all groups between them had a reliable difference ($p<0.05$); a moderate correlation connection between increased intensity of MMP-9 marker expression and amplification of the severity of psoriasis course was detected ($r=+0.532$).

Discussion. The results of conducted clinical, morphological and immunohistochemical investigations enable to consider importance of neoangiogenesis processes in pathogenesis of this dermatosis and need in elaboration of therapeutic measures with direct influence on this aspect of pathogenesis. For substantiation of possible effective target therapy, it is expedient to use matrix metalloproteinase MMP-9 on investigation of skin biopsy materials of patients with psoriasis, taking into consideration existence of inhibitors of matrix metalloproteinase, which as a component of combined therapy will lead to a significant decrease in severity of psoriasis course.

Abstract N°: 1054

Title: A case of psoriasis limited strictly to vitiligo patches

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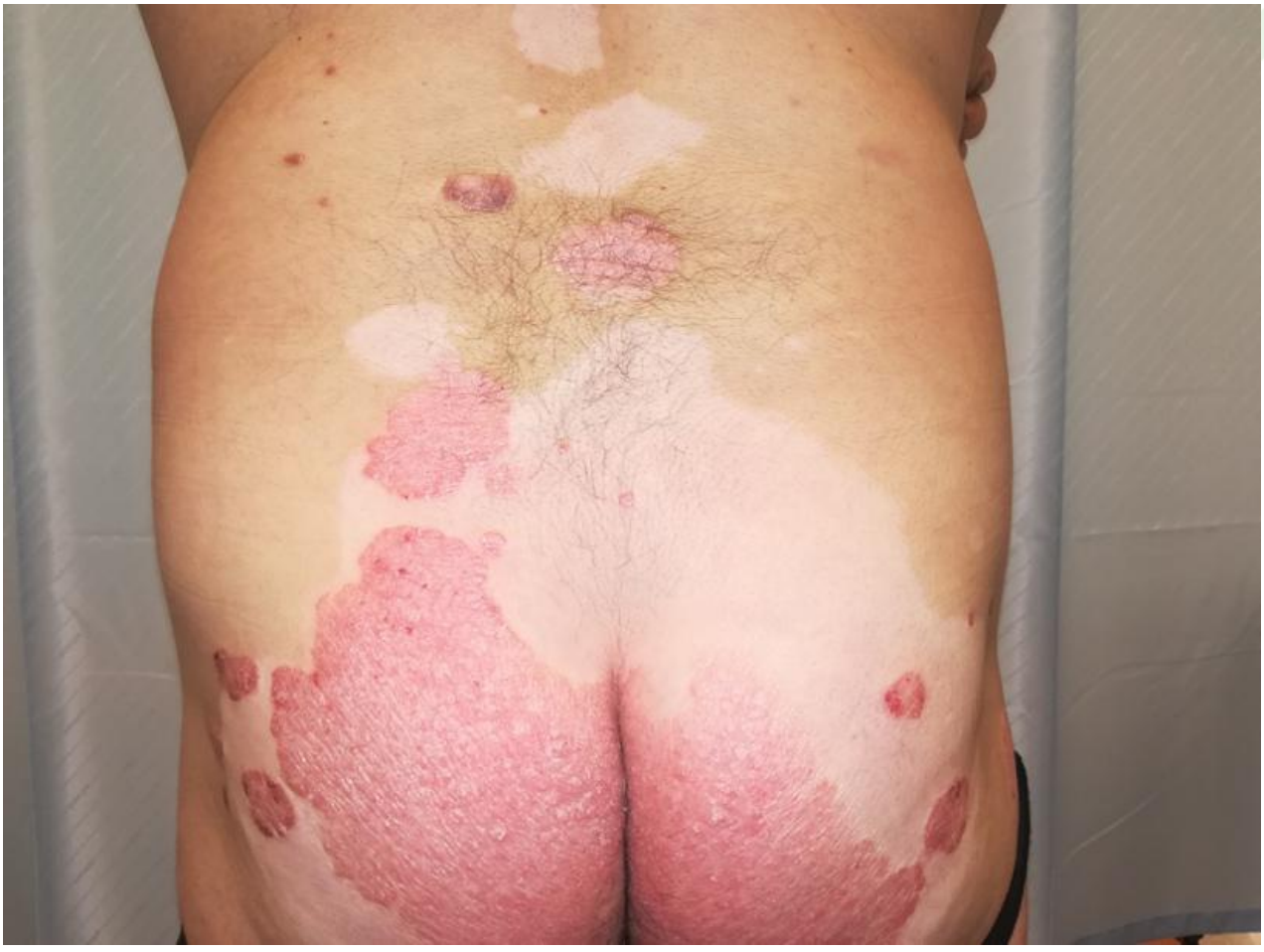
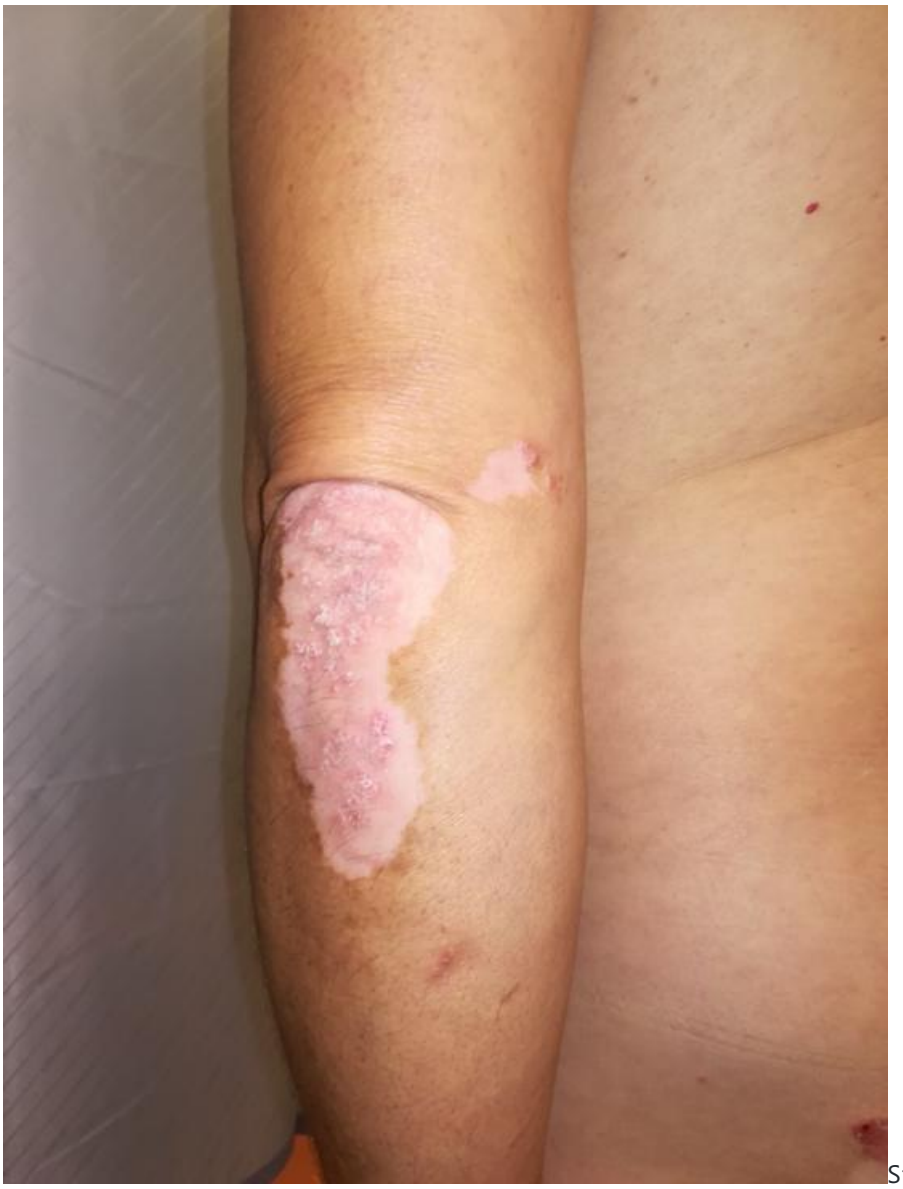
A case of psoriasis limited strictly to vitiligo patches

Results:

Psoriasis and vitiligo are both relatively frequent inflammatory skin diseases, with a prevalence in Europe of 2% and 1%, respectively. Their coexistence in the same patient (in the same or different anatomic regions) has been described in various case reports and case series, and there is some debate about whether there is an association between the two diseases that makes them coexist more frequently than would be expected.





Strict anatomic colocalization of psoriasis in vitiligo patches is uncommon, occurring in only 3-15% of the patients in whom the diseases coexist. We report a case of a 52-year-old male patient with a history of psoriasis and vitiligo since his late teens, both starting at about the same time. Psoriasis plaques are limited strictly to the limits of vitiligo patches, which are present on the lower limbs, forearms and lumbosacral region.

These phenomena suggest a causal relationship or a common pathological link between the two diseases. Some authors have suggested a common Koebner-like phenomena, and other studies have pointed out other links such as autoimmunity or genetic factors (CTLA4, susceptibility locus PSORS7 and AIS1).

Abstract N°: 141

Title: The influence of sleep disorders on the psychosocial aspects in patients with psoriasis.

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Introduction

Psoriasis is one of the most common skin diseases in daily dermatological practice. Psoriasis is associated with wide spectrum of comorbidities and sleep disorders as one of them are gaining more and more attention. They are also inseparably associated with quality of life and psychosocial aspects. Our study was conducted to assess whether psoriatics patients have worse sleep quality, increased risk of obstructive sleep apnea syndrome (OSAS) and restless legs syndrome (RLS) compared to people without dermatoses. Moreover, we assessed their life quality and stress severity. Finally, we analyzed sleep disorders in relation to psychosocial variables in order to find out if sleep disturbances affect mental condition significantly.

Materials and methods

The study group included 60 patients with a flare of plaque psoriasis and the control group 40 subjects without dermatoses, matched for age, sex and BMI. Psoriasis severity and activity index (PASI) was assessed in every patient by the same dermatologist. The administered questionnaires included: Pittsburgh Sleep Quality Index (PSQI), STOP BANG for OSAS, RLS severity scale, Dermatology Life Quality Index (DLQI) and stress assessment tool of own authorship.

Results

Patients with psoriasis had higher PSQI ($p<0.0001$), higher score in STOP BANG ($p<0.05$) and higher severity of RLS symptoms ($p<0.01$) compared to subjects without skin diseases. Furthermore, these factors are independent of PASI. Patients with psoriasis sleep significantly less hours ($p<0.0001$), are more likely to take sleep medication and have less energy to perform daily activities (both $p<0.01$). PSQI did not correlate with PASI or DLQI ($p>0.05$). Patients treated systemically had significantly higher PSQI, but without significant effects of specific medications. Patients' median DLQI score was 10.5, reflecting a moderate to severe reduction in quality of life. PSQI and RLS severity were positively correlated with DLQI ($p<0.001$, $p<0.05$ respectively) and severity of stress ($p<0.01$, $p<0.05$ respectively). There was also a positive correlation between the daily energy impairment and DLQI ($p<0.0001$).

Discussion

The analysis revealed worse sleep quality in patients with psoriasis, higher risk of developing OSAS and higher severity of RLS symptoms compared to subjects without skin diseases. PASI and DLQI should not serve as predictors of sleep disorders in psoriatic patients. Patients with psoriasis have significantly worse quality of life

because of their dermatosis. There is a vicious circle between sleep and psychosocial disturbances and exacerbation of psoriatic lesions: sleep disorders reduce quality of life and increase stress, which in turn aggravates sleep disorders. Sleep disorders are key comorbidities of psoriasis, as they are both mediators and effects. It is therefore advisable to include screening for sleep disorders in patients with psoriasis in diagnostic and therapeutic recommendations and in clinical practice.

Abstract N°: 294

Title: Assesment of effects of the COVID-19 pandemic and Zagreb earthquake on the psychological stress level and disease condition of AD patients

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Introduction

In addition to the influence of everyday psychological stress, extraordinary and unexpected negative stress, such as a catastrophe or human disaster, can also influence and aggravate chronic skin diseases such as atopic dermatitis (AD). Following a slow increase in COVID-19 cases in Croatia, a lockdown was instituted with mandatory social isolation in quarantine (March – May, 2020). Then, on 22 March 2020 at 6:24 A.M. Zagreb, the capital of Croatia, experienced a 5.3 magnitude earthquake and 57 aftershocks in the 24 hours following. The aim of the study was to examine effects of the COVID-19 pandemic and Zagreb earthquake on the psychological stress level and disease condition of AD patients.

Materials and methods

This cross-sectional study included 150 AD patients (three groups with 50 patients): 1) those not exposed to either the COVID-19 pandemic or the earthquake; 2) those who only experienced the COVID-19 pandemic; and 3) those who experienced both the pandemic and the earthquake. We examined the patients' data on Perceived Stress Scale (PSS) and AD severity (SCORAD) and their answers from our newly designed questionnaire on disease-related behaviors and AD condition during the pandemic and quarantine.

Results

According to the patient reports, 59% of them reported psychological stress during the pandemic, mostly caused by: possibility of infection (31%), influence on work (23%), general pandemic-related conditions (17%), concerning survival (11%) and other (6%). Also, the PSS positively correlated with the psychological experience of the earthquake and with the intensity of sleep disturbances. The subjects who experienced both disasters had a greater PSS than those experiencing only the COVID-19 pandemic, especially women, and they also had higher disease severity (SCORAD) than those in the other two groups.

Discussion

Our results confirmed the impact of disasters and adverse events on the AD patients' mental health, psychological stress and disease manifestations. Practitioners should therefore be aware of possible early warning signs of patients' psychological problems and diseases.

Abstract N°: 321

Title: Personality characteristics of patients with psychosomatic skin disorders

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Introduction

The skin is involved in communication with the environment on social, psychological, and neurobiological levels. Psychodermatology is a science and clinical practice that transacts interactions between mind, body, and skin, to help patients with various skin conditions. In addition to the medical aspect, many dermatological diseases also reflect in psychosomatic or behavioural aspect that affects both the onset and the exacerbation of the disease. The skin and brain are interacting through complex psychoneuroimmunoendocrine mechanisms and through behaviour, that affects the causes or worsening of skin diseases. We focused on personality traits of psychodermatological patients and explored connections between experiencing stress, personality traits, and skin diseases. We assumed that patients would report higher levels of stress, use different and more emotion focused stress relieving strategies, feel lower levels of personal hardiness and express higher neurotic and perfectionistic personality traits.

Materials and methods

The study involved 27 patients of dermatological clinic and 29 people without skin disorders. The patients group contained specific diagnosis: atopic dermatitis, rosacea, acne, psoriasis, alopecia, and vitiligo. Both groups were given psychological questionnaires of personality traits, perfectionism, personality hardiness, experiencing stress, and stress coping strategies. Statistical analysis (IBM SPSS Statistics) was performed, using comparison and correlation analysis between independent group samples.

Results

The results showed that psychodermatological patients perceive their lives as more stressful and have higher personality traits of neuroticism and perfectionism. The patients use confrontation and avoidance as strategies of coping with stress, more often, than people without skin disorders. We did not find differences between groups in other personality traits, or feelings of personal hardiness.

Discussion

The presented results indicate that some psychological factors, namely stress and personality traits, play an important role in chronic skin conditions. Thus, the treatment of dermatological diseases requires a holistic and integrated approach, which includes various psychological and psychotherapeutic measures.

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Abstract N°: 376

Title: A mixed-methods systematic review of digital interventions to support the psychological health and well-being of people living with dermatological conditions

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Introduction

Dermatological conditions can have a significant impact on patients' health and well-being. Digital technology can facilitate long-term condition management, although knowledge of digital interventions to address the cognitive, emotional, and behavioural aspects of dermatological conditions is limited. We aimed to identify digital psychological interventions for people with dermatological conditions, determine their effectiveness, and explore patients' views and experiences of these interventions.

Materials and methods

A mixed-methods systematic review informed by the Joanna Briggs Institute (JBI) methodology. The protocol was registered on PROSPERO (reference number: CRD42021285435) in October 2021. MEDLINE, EMBASE, Emcare, PsycINFO, CINAHL, Scopus, Web of Science, and the Open Science Framework Preprint Archive were searched from January 2002 to October 2021. We extracted data in Covidence and used JBI critical appraisal tools to critique the methodological quality of included studies. We captured intervention characteristics using the Template for Intervention Description and Replication checklist and guide. We are undertaking a convergent results-based approach to data synthesis and report preliminary results as a narrative summary.

Results

In total, 4,882 references were screened, and 23 papers were included. Eight different study designs were reported, including 15 Randomised Controlled Trials and two pilot trials. One Randomised Controlled Trial included a qualitative component. One study employed an uncontrolled experimental design, four were observational studies, and only one qualitative study was found.

Ten interventions were web-based, one was a mobile application (app), two interventions were delivered via text message, video, and social media. Six interventions combined two mediums of delivery. Nineteen interventions were condition-specific versus four for multiple dermatological conditions. Intervention content varied; seven interventions endorsed established, evidence-based therapeutic approaches, such as Cognitive Behavioural Therapy. No interventions specifically targeted health behaviours. Almost all the interventions were for individual patient use, yet it was unclear whether they were developed with input from patients.

Some studies showed that digital interventions improved physical, emotional, cognitive, and behavioural outcomes to some extent. Heterogeneity in the dermatological conditions studied, study designs and durations,

outcome variables, and measurement instruments and timepoints, made it difficult to determine overall effectiveness. Feedback from patients was somewhat positive and some barriers to using digital interventions were identified.

Discussion

Several digital interventions targeting the psychological health and well-being of people with dermatological conditions exist, and these interventions seem to be acceptable to patients, but evidence of their effectiveness remains limited. Qualitative research is required to further investigate the acceptability and feasibility of digital interventions targeting psychological factors and potential barriers and facilitators affecting their use. Given the role of health behaviours in some dermatological conditions, more focused digital psychological interventions including behaviour change are needed to support patients to live well with their condition.

Abstract N°: 424

Title: Inherited Epidermolysis Bullosa: Assessment of families daily burden

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Introduction

Inherited epidermolysis bullosa (EB) is a heterogeneous group of genodermatoses characterized by localized or generalized skin and/or mucosal fragility. The objective of this work was to evaluate in France the burden of disease for families with a child affected by EB.

Materials and methods

A digital questionnaire was built and distributed to parents of children with EB in partnership with the patients' association DEBRA France. The validated EB-BoD [Epidermolysis Bullosa Burden of Disease] questionnaire made up of 20 questions (score from 0 to 100) was used to assess the burden of families of children with EB. Severity of the child's disease was self-reported by parents using a three-point global assessment scale (mild-moderate-severe).

Results

Between October and November 2021, 77 parents answered the questionnaire. The responder was the child's mother in 77% (n=59) of cases. Parents represented 40 girls and 37 boys with a mean age of 7.5 years and with different EB types and disease severity. The majority of parents (79%) reported performing daily wound care, 90% of whom reported requiring more than 30 minutes to care for wounds. 79% of responders acknowledged that the care is very tiring, 83% admitted feeling frustrated after each doctor consultation, 73% not feeling well the day before the hospital consultation, 61% not feeling well the day after the follow-up, and 91% reported thinking about their child's illness all day long. The mean BE-BOD score was 63.9±20.2. The mean score observed in parents evaluating the child's EB as severe was 69.0±21 vs. 59.0±18.6 for moderate/mild. A difference of 10 points is clinically relevant. Similarly, the mean BE-BOD scores observed in parents performing daily wound care was 67.9±19.6 vs. 50.6±17 for parents with less frequent wound care ($p<0.02$). Univariate analyses demonstrated that the burden was higher for parents caring for a child with junctional EB (+37.91 (8.55,67.27) score increase $p=0.013$ and for child with dystrophic EB [+3.52 (-9.78,16.81), $p=0.6$] compared with EB simplex), higher for parents caring for a girl with EB (+16.18 (4.77,27.59) score increase $p=0.006$ compared boy with EB) and higher for parents who had to perform daily wound care (+16.59 (3.47,29.72) $p=0.014$ score increase compared with parents performing less frequent wound care).

Discussion

Survey responses demonstrate that EB places a considerable burden on families daily lives. daily wound care and female gender are strong predictors of burden on caregivers.

Abstract N°: 689

Title: The Psoriasis Patient Journey

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Introduction

A significant period of suffering often precedes initiation of successful treatment in patients with psoriasis. Little research has been undertaken to examine this important period of time.

We sought to evaluate the psoriasis patient journey to define the challenges in this chronic condition and reveal opportunities for healthcare decision makers. Our aim was to find ways to quantify disease severity on the patient journey prior to satisfactory control taking account of time suffered as well as disease severity scores. Furthermore, to highlight how long it took for a patient with significant psoriasis to achieve satisfactory control. We hope to use this information to determine factors affecting this part of the psoriasis patient journey.

Materials and methods

15 patients on our biologics register with chronic plaque psoriasis were randomly chosen from January to December 2019. An explorative, retrospective study was undertaken on the treatment characteristics of the disease period until first satisfactory PASI (< 7) and DLQI (<5) was attained. The data was then analysed with descriptive statistics.

Results

The average DLQI while a patient was on a systemic agent and a biologic agent was 16.6 (range 9.8-20.1) and 4.7 (range 0-19) respectively. While the average PASI was 14.6 (range 6.4-23.8) on a systemic and 2.6 (range 0-7.3) on a biologic. The mean time it took from diagnosis to a patient being placed on a systemic was 13 years and 3 months, while the mean time it took for a patient to be placed on a biologic from a systemic was 6 years and 1 month. 50% of patients trialled 2 systemic agents and 30 % trialled 3 systemic agents before commencing a biologic. The average time from starting systemic treatment to attaining a PASI under 7.0 was 3 years and 8 months (range 5 months- 8 years 6 months) and attaining a DLQI under 5 was 5 years and 9 months (range 3 years 7 months- 9 years 4 months).

Discussion

Our data indicates that the "journey" a psoriasis patient takes is still long and characterised by multiple treatments before satisfactory results are achieved as indicated by PASI and DLQI. As we embark on an era with multiple new and innovative biologic agents as well as more cost effective biosimilars, it will be important to identify factors influencing the length of suffering prior to adequate control of disease.

Abstract N°: 923

Title: Extensive cutaneous ulceration in an immunocompromised patient with herpes zoster - a rare presentation of dermatitis artefacta

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Introduction

Dermatitis artefacta is a type of psychocutaneous disease that is rather challenging to diagnose, as the patients are usually denying self-inflicting their cutaneous lesions. It is known to affect patients that deal with external stressors or/and have personality disorders and psychiatric illness. Herpes zoster (HZ) infections are more likely to be encountered in immunocompromised patients. Patients with an altered immune system are prone to develop more severe herpes zoster infections and are more likely to progress to a complicated clinical aspect/presentation/form. The most frequent complications are post-herpetic neuralgia, severe ocular/otic complications, bacterial superinfections, encephalitis and disseminated disease (rash in ≥3 dermatomes). The purpose of our case report is to bring to attention an unusual presentation of factitial dermatitis and its complications in the immunocompromised patient with HZ.

Results

A 63-year-old immunocompromised female patient presented to our clinic one week from the onset of an ulcerated vesicular-bullous rash located on the neck, left shoulder and upper back along with intense pain, oral ulcerations and aberrant vesicles on the right arm, which we diagnosed as herpes zoster. During the examination, the patient was constantly scratching, pressing and picking her lesions. The immunosuppression was being caused by chemotherapy and the ulcers were due to local oral radiation therapy the patient received for a squamous cell carcinoma of the buccal mucosa, that she was diagnosed with in September 2021. Systemic therapy was performed with oral Valacyclovir, antibiotics and symptoms relieving medication, besides local treatment. The patient was recommended a psychiatric consultation, which she has not performed so far. She was followed up two weeks after the initial presentation in her local rural medical setting with good resolution of some of the lesions, mostly in the areas that were difficult for her to reach by hand, but with the patient still provoking mechanical trauma to the more accesible areas.

Discussion

We experienced an unusual case of factitial dermatitis superimposed on extended infected HZ lesions. Although the clinical management of the viral infection remains the same, the diagnosis and further management of the case still remains a challenge, with the psychiatric and dermatological team working hand in hand.

Abstract N°: 945

Title: Dermatitis Artefacta : when the skin reflects the psyche

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Introduction

Dermatitis artefacta is referred to as a factitious disorder and corresponds to the voluntary imitation. It is a potentially serious psychopathological manifestation that is often difficult to manage. The aim of our study is to illustrate this factitious disorder through a series of cases.

Materials and methods

a retrospective and descriptive study, performed over a period of 10 years from 2010 to 2020. The study was realized with the collaboration of dermatology residents. The pre-established evaluation form was filled in for each patient from the data provided in the medical records.

Results

Our study concerned a cohort of 32 patients, the average age was 31.5 years with extremes of 11 and 58 years. The sex ratio (M/F) was 0.1. Eighteen patients (56.25%) had a previous history of psychiatric disorders. Precipitating factors were reported in 7 patients in our series. The clinical analysis revealed a bullous lesion in 8 patients (25%), dyschromia in 7 patients (21.9%) and excoriations in 6 patients (18.8%). The trunk and face were the most affected parts of the body with a percentage of 37.5% and 31.25% respectively. In our sample, lesions with clear edges were found in 28 patients (87.5%) and geometric lesions were observed in 20 patients (62.5%). The use of skin biopsy was noted in 84.37% of patients. In our series, the psychiatric examination revealed depression in 20 patients (62.5%), anxiety disorders in 5 patients (15.6%), psychotic disorder in 4 patients (12.5%) and personality disorders in 3 patients (9.4%). All patients were treated with occlusive dressings and topicals. They were followed up jointly with the psychiatrists. In 29 patients (90.48%) medical treatment was initiated, while 3 patients (9.52%) received cognitive behavioural therapy.

Discussion

Our study is among the large series in the literature illustrating dermatitis artefacta . It is a potentially serious psychopathological manifestation that is often difficult to manage. Previous studies have concluded that the predominance is female, the highest incidence is in the twenties, and prior psychosocial stress is often identified, which is consistent with the data in our study. It is a diagnosis of elimination. A set of presumptive arguments such as geometric lesions and sharp contours are often found, which is compatible with the results of the literature. Dermatitis artefacta can mean an "indirect request for help" with regard to a situation of psychological difficulty. Plural management is therefore essential to relieve anxiety and allow access to verbalisation of suffering.

Abstract N°: 1016

Title: Onychotillomania: about two cases

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Introduction

Onychotillomania, defined as self-induced trauma to the nail unit, either by tearing or pulling on the nails, affects 0.9% of the population Onychotillomania remains a clinical challenge for dermatologists, pediatricians, internists, and psychiatrists in practice, as there are no evidence-based treatment methods.

Materials and methods

We report 2 cases of onychotillomania with different presentations in a child and in a woman.

Results

Case 1 :

A 5-year-old boy, with a history of clubfoot and asthma, consulted for fir-tree-shaped nail ridges in the unilateral right thumb that had been evolving for 3 months, posing an aesthetic problem for him. Dermatological examination found a median cleft of the right thumbnail with transverse furrows, the rest of the fingernails and toenails were normal. The diagnosis of onychotillomania was retained, confirmed by an interview with the child and his family which objectified a tic manifested by the scratching of the thumbnail by the index finger, The patient was referred to child psychiatry for treatment specialized .

Case 2 :

A 51-year-old woman, with no particular pathological history, consulted for pruritic erythematous lesions surmounted by plantar vesicles. Examination found erythematous lesions surmounted by vesicles on both soles of the foot and an intertrigo of all inter-toe spaces. In addition, paronychia was found on all the fingers and a median depression with short transverse lines following manipulation of the nail fold of the right thumbnail. The diagnosis of onychotillomania was retained, confirmed by an interview with the patient who found a tic manifested by scratching of the nail of the right thumb by the nail of the left thumb.

Discussion

The originality of our observation lies in the rarity of onychotillomania, especially in children. Onychotillomania represents an unusual behavioral disorder affecting the nail apparatus. It can be difficult for dermatologists to diagnose, as typically patients deny self-injurious behavior and clinical features may mimic other inflammatory conditions affecting the nail unit. Establishing the diagnosis is critical, as onychotillomania is sometimes associated with major depression and obsessive-compulsive disorder, and can be a clue to discovering these debilitating psychiatric disorders.

Abstract N°: 29

Title: Uncovering the Enigmatic Signs: A Case of a 34-year old Newly Diagnosed HIV-infected Filipino Male with Atypical Psoriasiform Plaques and Rare Syphilitic Onychia

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Introduction

Atypical cutaneous manifestations of syphilis are difficult to recognize and can result to delay in treatment. Nail findings are even rarer and can mimic other nail dystrophies. This report aims to highlight the importance of early recognition of atypical psoriasiform lesions and rare nail findings in a patient with co-infection of syphilis and HIV.

Case

A 34-year-old Filipino male with uveitis presented with a 6-month history of erythematous scaly plaques on bilateral dorsal hands and feet, with sparing of the palms and soles, and joint pains of the fingers. Initial consideration of the referring physician was psoriasis. However, the plaques demonstrated negative Auspitz sign. The nails showed persistent onycholysis, onychoptosis, xanthonychia and subungual hyperkeratosis. There was absence of nail pitting, oil spots, and splinter hemorrhages, suggestive of psoriasis. On dermoscopy, there were grey pigmentation, distal bands, Beau's lines, and apparent leukonychia of the nail bed. No aurora borealis or jagged edge spikes typical of onychomycosis were noted. Patient identifies himself as bisexual with multiple partners, mostly male, and does not use any contraception. Skin biopsy findings showed lichenoid and interstitial dermatitis with predominantly plasma cell infiltrates, which were highly suggestive of syphilis. Serum quantitative RPR was reactive at 1:64 dilution, while CSF RPR was reactive at 1:10. HIV ELISA was also reactive and CD4 count was noted to be very low at 15 cells/uL. Patient was given Penicillin G 3 million units IV every 4 hours for 14 days. Antiretroviral therapy was also initiated. Further work-up revealed patient has a myriad of other problems, such as, panuveitis probably secondary to ocular syphilis, pneumocystis carinii pneumonia, tuberculous pericarditis and adenitis, and oral candidiasis. Patient was then managed accordingly. After 2 weeks of treatment, there was complete resolution of scaly plaques on the dorsal hands and feet. Normal regrowth of some nails occurred after 2 months.

Discussion

Psoriasiform lesions are atypical manifestations of secondary syphilis. Non-involvement of the palms and soles may confuse clinicians, as most psoriasiform lesions in the literature are either palmoplantar or photodistributed. High index of suspicion is imperative if patients engage in risky sexual behaviors, similar in this case. Additionally, atypical lesions tend to be more common with HIV co-infection, a condition known to be associated with more severe, protracted, and relapsing course of syphilis. Hence, these should alert clinicians to prevent delay in diagnosis and management. Syphilitic onychia, on the other hand, is also rare and one of the forgotten signs in syphilis, particularly onychoptosis. It is the periodic shedding of nails, in whole or in part and also considered a form of secondary syphilis. These lesions have been reported to appear as early as 6-8 months from infection, similar to the case. Lastly, the presence of gray and distal band nails, also offered a clue to the diagnosis of HIV co-infection. Distal bands are transverse bands of darker than normal nail pigmentation, with 1–3 mm width, in the distal nail bed. Interestingly, there are studies that show significant correlation of this sign with low CD4 count

<200 u/L, similar to the present case. In conclusion, these unusual findings have markedly helped the clinician in uncovering a case of atypical syphilis and an advanced case of HIV co-infection.

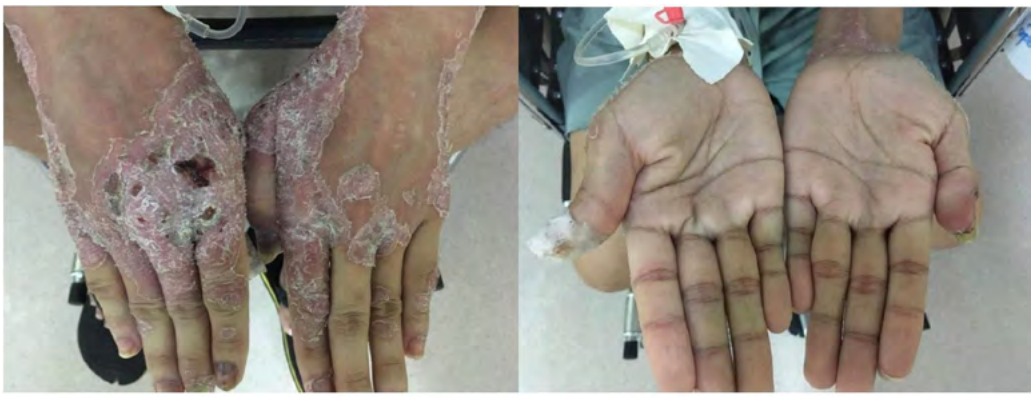

Figure 1. Atypical psoriasiform lesions on the dorsal hands with sparing of palmar aspect

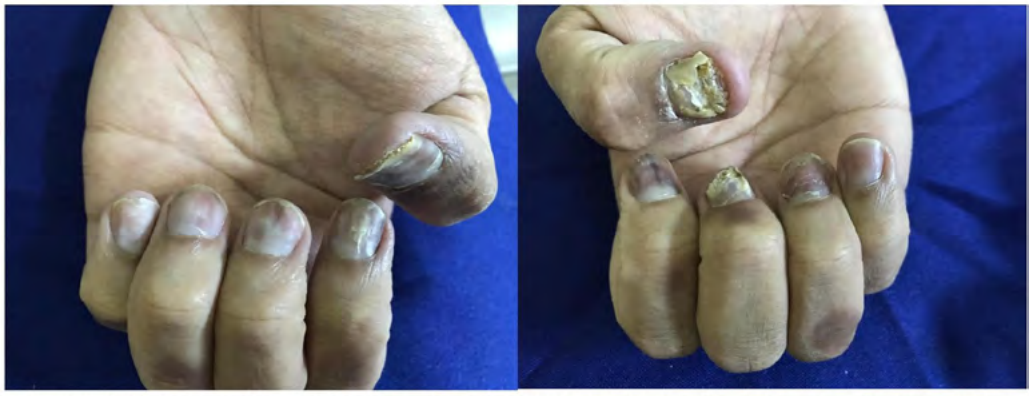

Figure 2. Syphilitic onychia described as onycholysis, onychoptosis, xanthonychia and subungual hyperkeratosis. Presence of grey pigmentation and distal bands offered a clue to the diagnosis of HIV co-infection.

Abstract N°: 89

Title: Microbial flora of the urogenital tract in pregnant women with genital warts

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Introduction Genital warts (GW) are one of the most common clinical manifestations of human papillomavirus infection (PVI). Being a manifestation of temporary physiological immunosuppression, pregnancy contributes to the activation of many latent states, as well as some infections. Changes in the hormonal background in pregnant women cause not only immunological changes, but also a transformation in the structure and microflora of the female urogenital tract (UGT), which contributes to microbial colonization of the genitals. And the abundance of microflora, in turn, contributes to more active reproduction of the human papillomavirus (HPV), both conventional and oncogenic types. In this regard, the purpose of this study was to study the composition of the urogenital microflora in pregnant women with genital warts.

Materials and methods Under our supervision there were 33 pregnant women at different stages of pregnancy. All patients underwent a microbiological examination. Also, all women underwent PCR detection of the most common pathogens from the group of sexually transmitted infections (STIs) of the "new generation": Ur. urealyticum, Myc. genitalium, Chl. trachomatis, herpesvirus infections (HSV I, HSV II, CMV) and assessment of the background of high-oncogenic HPV infections (HPV16/18, HPV 31/33) and low-oncogenic (HPV 6, 11) types.

Results Among the examined 33 women, 22 (66.7%) were primigravidas, 11 (33.3%) were recurrent. GW occurred in the 1st trimester in 8 (24.2%), in the 2nd trimester - in 13 (39.4%), in the 3rd - in 12 (36.4%). In 12 (36.4%) women, a history of primary or secondary infertility was noted, in 8 (24.2%) - reproductive losses, in 7 (21.2%) - intrauterine infection of the fetus. Pathogens from the STI group or from the composition of the accompanying microflora in the form of mono-infection or mixed infection were detected in most of the examined women. In the course of the conducted studies, out of 33 patients, the following were revealed: Trichomonas vag - in 1 (3.0%), Chl.trachomatis - in 2 (6.1%) patients, Ureaplasma urealyticum - in 11 (33.3%), Myc. Genitalium - in 3 (9.1%) women. The accompanying microbial flora was represented by the following microorganisms: Gardnerella vaginalis - in 10 (30.3%), fungi of the genus Candida - in 19 (57.6%), St. Saprophyticus - in 8 (24.2%), Enterobacter - in 6 (18.2%), Staphylococcus aureus – in 7 (21,2%), St. Haemolyticus - in 7 (21.2%), Escherichia coli - in 2 (6.1%), Proteus vulgaris - in 1 (3.0%). According to the results of a PCR study for the detection of highly oncogenic viral DNA of HPV 16/18 and 31/33 types, it was found that HPV 16/18 type was found in 12 (36.4%) women, HPV 31/33 type in 4 (12.1 %), HSV-1 - in 14 (42.4%) women, HSV2 - in 8 (24.2%) women, CMV - in 7 (21.2%) women. Also, the examination revealed the simultaneous presence of HPV and herpesvirus pathogens in 11 (33.3%) women.

Discussion The results obtained indicate a high incidence of STIs and concomitant pathogens in pregnant women with GW, especially Ureaplasma urealyticum (33.3%), fungi of the genus Candida (57.6%), Gardnerella vaginalis (30.3%), Staphylococcus saprophyticus (24.2%), HPV 16/18 type (36.4%) as well as HSV type I (42.4%), HSV type II

(24.2%), CMV (21.2%). The presence of the above pathogens in the urogenital tract of pregnant women can be a cofactor in the manifestation and growth of genital warts. The detection of these infections must be taken into account in the complex therapy of GW, as well as in the treatment of their sexual partners.

Abstract N°: 111

Title: The result of the examination of patients with syphilis for the most common STIs

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Introduction In recent years, the importance of the problem of mixed infection of the genitals has increased dramatically. It is caused by a combined (simultaneous or sequential) effect on the host of two or more etiological factors: viruses, bacteria, mycoplasmas, chlamydia, fungi, spirochetes, protozoa. The combination of pathogens (associated, satellite, mixed infection) emphasizes the main originality of the infectious process at the present stage. To date, the possibility of the existence and preservation of Treponema pallidum in the patient's body in special stable forms - cysts has been proven. The presence of concomitant STIs and their late diagnosis and treatment can also contribute to the persistence of syphilitic infection increased reproductive losses, damage to the placenta, and an increase in cases of congenital syphilis.

Materials and methods In order to study the spectrum of pathogens accompanying syphilitic infection, we conducted a clinical and bacteriological analysis of 798 patients with an established diagnosis who were hospitalized in the venereology department of the Dermatology and Venereology Center clinic for the period from 2009 to 2020. Of these, men - 287, women - 399, children - 112. Patients with secondary recurrent syphilis predominated in the structure of syphilitic infection - 347 people (43.5%), of which 146 were men, 201 were women and latent early syphilis - 314 people (39.4%), including 130 men, 184 women. Patients with primary syphilis and persons receiving preventive treatment amounted to 137 people (17.1%), there were 11 men, 14 women, and 112 children. The diagnosis of syphilis was made on the basis of clinical and serological examination data. Laboratory diagnosis of gonorrhea and trichomoniasis was based on microscopy of swabs of the cervical, urethral canals and vagina, as well as bacteriological method. For the diagnosis of other STIs, PCR and ELISA methods were used. In 88% of the patients examined were insolvent and the full examination was carried out at the expense of the state grant.

Results As a result of these studies, out of the total number of patients, the following were identified: patients with gonorrhea - 43 (5.4%), of which men - 8, women - 34, children - 1; trichomoniasis - 49 (6.1%), of which men - 9, women - 40. In 18 (2.3%) cases, there was a combination of gonorrhea and trichomoniasis. Chlamydia was detected in 126 (15.8%) cases, ureaplasmosis - in 118 (14.8%) cases, Candida fungi - in 150 (18.8%) cases, Gardnerella vaginalis - in 94 (11.8%) cases, HSVI - 614 (76.9%), HSV-II- 430 (53.9%), HPV 16/18 - 179 (22.4%), HPV 31/33 - 82 (10.3%). In 33 cases, gonococci were isolated only by the bacteriological method, in 28 cases trichomoniasis was detected using the cultural method in the absence of Trichomonas **v**aginalis in the native preparation.

Discussion The data obtained indicate a high percentage of "2nd generation STIs" and associated microflora among patients with syphilitic infection. While this contingent of patients is often limited to receiving only a course of antisyphilitic therapy, having no financial means for a more detailed examination for other STIs. Thus, they

become spreaders of other STIs that have an equally detrimental effect on general and reproductive health, as well as on the health of unborn children. In this regard, it is important to attract state and grant subsidies for a more detailed examination of the most common STIs.

Abstract N°: 112

Title: Clinical and anamnestic features of the onset and course of genital warts in pregnant women

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Introduction Human papillomavirus (HPV) is one of the most widespread sexually transmitted infections (STIs). One of the most common clinical forms of papillomavirus infection (PVI) of genitals is genital warts (GW) or condyloma acuminate. In turn, GW significantly complicate the course of pregnancy and childbirth, if it was not possible to prevent their occurrence and eliminate them in time. It is also known that the destruction of condylomas acuminate does not eliminate the presence of the virus in the body, and antiviral treatment during pregnancy has significant limitations. Thus, the fetus and newborn remain a target for PVI even in case of effective treatment of GW in a pregnant woman.

Materials and methods We observed 33 pregnant women aged 18 to 35 years with a diagnosis of condylomas acuminate at different stages of pregnancy. All patients were classified as socially adapted. HIV-positive patients were not included in the survey. Before the start of the survey, we performed testing using specially developed questionnaires in order to find out possible predisposing factors that could contribute to the appearance, growth and recurrence of GW. To interview the respondents, we used the form of questionnaires for a scientific and practical task. Questions and answers were confidential and used for internal use and for the formation of global conclusions.

Results Among them, there were 22 primipregnants (66.7%), 11 re-pregnants (33.3%). GW occurred in the 1st trimester in 8 (24.2%), in the 2nd trimester - in 13 (39.4%), in the 3rd - in 12 (36.4%). The onset of the disease was associated with the presence of GW in a sexual partner for 10 (30.3%) women, with an inflammatory process of the urogenital tract (UGT) - 5 (15.2%), with the use of synthetic progestins to prolongation of pregnancy in the 1st trimester due to the threat of termination - 6 (18.2%), with the intake of vitamin preparations - 4 (12.1%), with malnutrition of the type of insufficient, unbalanced or excessive nutrition, more often associated with adherence to a diet or toxicosis of pregnant women. - 7 (21.2%), the presence of skin lesions of HPV (papillomas, keratomas, congenital nevi) - 3 (9.1%). 14 (42.4%) women did not have information about the presence of similar rashes in their sexual partners, as well as whether they were receiving treatment. 12 (36.4%) women had a history of primary or secondary infertility, 8 (24.2%) had reproductive losses, and 7 (21.2%) had intrauterine infection of the fetus. Before contacting us, 12 (36.4%) patients received ineffective therapy for GW followed by relapse, of which: cryodestruction - 6 (18.2%), diathermocoagulation - 3 (9.1%), chemical destruction - 1 (3.0%), immunotherapy or antiviral treatment against the background of destruction - 7 (21.2%), laser destruction - 0 (0%).

Discussion Thus, it can be assumed that such factors as the lack of information about the presence of GW in the sexual partner, concomitant inflammation of urogenital tract the use of synthetic progestins, a history of reproductive losses that could outdated methods of destruction (cryodestruction), restrictions on antiviral therapy

during pregnancy are possible triggers of GW in pregnant women.

Abstract N°: 247

Title: Lues maligna in an immunocompetent patient

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Introduction

Lues maligna is a rare and severe form of secondary syphilis, more common in immunocompromised patients, mainly those with human immunodeficiency virus (HIV), being particularly rarer in immunocompetent ones.

Materials and methods

We report an exuberant case of lues maligna in an immunocompetent male.

Results

A 30-year-old heterosexual male with no medical history was referred to our department due to 2-month history of a disseminated, painful, nodular-ulcerative cutaneous eruption associated with low-grade fever and asthenia. The patient reported unprotected sex with one female partner in the previous 7 years. Physical examination showed rounded, well-demarcated, erythematous-violaceous, ulcerated, tender nodules and plaques, some of them covered by rupioid brown crusts, located on the neck, trunk, and limbs, sparing only the face and mucous membranes. There was no lymphadenopathy nor palpable hepatosplenomegaly. Neurological examination was normal. Suspected clinical diagnoses included ecthyma gangrenosum, mycobacteriosis, deep mycosis, leishmaniasis, cutaneous T-cell lymphoma, and syphilis. Serologic tests revealed a high titer of RPR, TPHA, and VDRL (>256 dils). Serology for HIV and hepatitis B and C was negative. The remaining laboratory tests were normal. Skin biopsy showed a superficial dermal inflammatory infiltrate composed of plasma cells, forming granulomas in the upper dermis. Warthin-Starry staining revealed few spirochetes. Immunochemistry for *Treponema pallidum* was positive. Regarding these clinical features, serological and histopathological findings, the diagnosis of lues maligna was established. The patient was treated with benzathine penicillin 2.4 million units weekly, intramuscularly, for 3 weeks, with an excellent clinical response. A Jarisch–Herxheimer reaction was noted on the first day of treatment. After 6 weeks, he was asymptomatic with only residual hyperpigmented macules. A 4-fold decrease in VDRL titer was observed after 4 months.

Discussion

Recently, it has been suggested that lues maligna is the consequence of either an interaction between Treponema

pallidum and HIV or a functional immunological defect, rather than a quantitative immunological deficit. Lues maligna is characterized by a prodrome of fever, headache, arthralgias, myalgias, and photophobia, followed by a papulopustular eruption with secondary ulceration and incrustation (rupia syphilitica). The trunk, palms, soles, and mucous membranes are less commonly involved. The clinical differential diagnosis can be challenging. Histologically, it is characterized by a dense inflammatory infiltrate, with a predominance of lymphocytes, plasma cells, and occasional granulomas. Classically, Treponema pallidum is absent in histology (probably due to the intensity of the inflammatory infiltrate). However, it was detected by Warthin-Starry staining and immunohistochemistry in our case. The most commonly used treatment regimen is the same as that used for late latent syphilis (3 consecutive weekly intramuscular injections of benzathine penicillin, 2.4 million units/dose) with a good response. We present this case to raise awareness of an uncommon subtype of secondary syphilis, which, despite particularly rare, can affect immunocompetent patients and must be promptly recognized to avoid delay in diagnosis and treatment.

Abstract N°: 335

Title: Epidemiologic characterisation of lymphogranuloma venereum cases in a sexually transmitted infections clinic in Lisbon over 20 years

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Epidemiologic characterisation of lymphogranuloma venereum cases in a sexually transmitted infections clinic in Lisbon over 20 years

Introduction

Lymphogranuloma venereum (LGV) epidemics across Europe has been occurring since 2003, especially in HIV-positive men who have sex with men (MSM). Here, we assessed the clinical and epidemiological characteristics of all LGV cases diagnosed at one major sexually transmitted infections (STI) clinic in Lisbon, Portugal.

Materials and methods

From the first case in 2001 until the end of 2020, all confirmed cases of LGV diagnosed in the Lapa Health Center STD clinic were reviewed. All the results retrieved from *Chlamydia trachomatis* (CT) testing collected between 2017 and 2020 were also reviewed in order to evaluate LGV prevalence among CT cases.

Results

Between 2017 and 2020, the proportion of LGV among CT positive tests was 8.3%, and 56.5% if only anorectal samples were considered. From 2001 to 2020, a total of 54 LGV cases were identified, most in MSM (87%), HIV-negative (63%), and from anorectal mucosa (72.2%). LGV cases among heterosexuals were also identified (13%). Symptoms were present in 75.9% of the patients, with proctitis occurring in 63% (34/54). Concomitant STIs were present in 46.3% of the patients, namely syphilis (31.5%; 17/54) and anorectal *Neisseria gonorrhoeae* (16.7%; 9/54). Two main LGV genovariants were detected (L2b, 50%; L2-434, 44.4%), and no significant association between genovariants and clinical or epidemiological features was found.

Discussion

The characteristics of the LGV patients in our study grossly match those already described in similar studies performed in Portugal and in Europe. Active surveillance programs of LGV irrespective of sexual orientation and HIV status are needed to avoid the morbidity associated with this condition.

Abstract N°: 378

Title: An Audit of Herpes Management - Is Management Consistent Across the Week

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An Audit of Herpes Management – Is Management Consistent Across the Week?

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Introduction

Early initiation of Aciclovir (ACV) in patients with primary Genital Herpes (GH) reduces the risk of acute complications and severe, prolonged disease. Weekend closure of Sexual Health Clinics can delay important patient care and follow up (F/U), resulting in inconsistent management and poorer outcomes.

Aim: To audit the management and outcomes of Solent Sexual Health patients with primary GH and determine if variation occurs based on the day of initial presentation.

Materials and methods

Data was collected retrospectively from the notes of 90 patients diagnosed with primary GH (identified with a C10A code) from 6 Solent Sexual Health Clinics, between 2018 and 2019. Data was analysed using SPSS.

Results

Follow up (F/U) within five days occurred in 43% (37/86) of patients. Compared to the rest of the week, significantly more patients presenting on a Monday (80%, 13/17, X^2 p=0.002), and significantly fewer patients presenting on a Tuesday (12.5%, 2/16, X^2 p=0.006), received F/U within 5 days. The mean time to F/U was 6 days (SD=3.6) but was significantly different across the week. The mean time to F/U was 4 days on Monday (SD=3.4) and 8 days on Tuesday (SD=1.5).

Patients initially presenting on Monday had a significantly more advanced stage of disease (p=0.009), and their lesions were 4 times less likely to be healed (p=0.023), compared to the rest of the week.

In patients receiving F/U via telephone the initial dose of ACV was significantly more likely to be sufficient to heal lesions (p=0.027) and patients were less likely to report new lesions (p=0.049) than those reviewed face to face.

Discussion

Weekend closure of clinics affected the presentation, F/U and outcomes in patients presenting on a Monday and Tuesday. A 7-day course of ACV may mitigate these issues allowing greater continuity in treatment and to save

time, expense, and improve patient outcomes.

Abstract N°: 391

Title: Audit of Pre-Exposure Prophylaxis and offer to high risk men who have sex with men

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Audit of Pre-exposure prophylaxis and offer to high-risk men who have sex with men

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Introduction

PrEP is an indispensable method of preventing the acquisition of human immunodeficiency virus (HIV) in high-risk groups such as men who have sex with men (MSM). It is a combination of two anti-retrovirals and is taken before high-risk intercourse to prevent intracellular replication. Previous literature showed that PrEP could be delivered through the NHS and that it is most effective when delivered rapidly.

Aim: To assess whether the risk of HIV acquisition is being assessed, whether a subsequent offer of PrEP is made, and how long it takes to provide PrEP.

Materials and methods

A sample of 100 patients was drawn from seven Solent sexual health clinics and their patient notes were accessed from RSH. Risk factors for HIV acquisition were identified and any subsequent discussions were compared to British HIV Association guidelines for PrEP provision. Data on the time between consultations and the prescription of PrEP was also collected and any deviations from guidelines were recorded.

Results

Analysis showed that clinics are assessing the risk of HIV acquisition adequately, and that PrEP provision is occurring in a timely window (median=12 days). However, results showed that all clinics have missed opportunities to prescribe PrEP, with 46% of 'non-offers' being inappropriate. Statistical testing revealed that only the 'Condomless anal sex' risk factor influenced an offer of PrEP, further suggesting that clinicians need to improve consultation methods when discussing PrEP to ensure that care is meeting the published standards.

Discussion

All centres are identifying risk factors, but there is a need to improve when it comes to making the PrEP offers after this risk is identified. Improvements also need to be made to the nature and frequency of discussions being had, as well as simple note-taking, which can help to make it clearer which MSM are eligible and which are not.

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Abstract N°: 407

Title: Mystery Shopping Service Evaluation of Access to Sexual Health Clinics in the UK, Presenting With Symptoms of Primary Genital Herpes

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Mystery Shopping Service Evaluation of Access to Sexual Health Clinics in the UK, presenting with Symptoms of Primary Genital Herpes

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Introduction

In the NHS, sexual health services (SHS) are free and available to everyone. They should offer advice, testing, diagnoses, and treatment, but SHS have been struggling with rising demand and the COVID-19 pandemic. The British Association for Sexual Health and HIV (BASHH) and the National Institute for Health and Care Excellence (NICE) state that 98% of patients contacting a clinic should be offered an appointment within two working days.

Aim

The aim of this service evaluation is to determine current access to SHS in the UK and compare the results with data from student researchers in 2019 and 2020.

Materials and methods

Approval was gained from BASHH and University of Southampton Ethics and Research Governance Online (ERGO). A BASHH clinic list with 241 clinics used in previous studies was updated and used. Calls were made in October and November 2021, with the researcher presenting as a patient with symptoms of primary genital herpes. Data was collected using a data collection tool and analysed anonymously using SPSS.

Results

209 out of the 241 clinics were contacted, as 32 were omitted due to being closed or open less than two days a week. 72.2% of clinics were able to offer an appointment within two working days, which is a statistically significant difference to the 98% BASHH standard (binomial testing showed $p<0.001$). There was no significant improvement comparing the 2021 results to the 2020 results (binomial testing showed $p=0.199$). Chi-squared tests showed there was no significant variation between 18 BASHH regions ($X2=12.089$, $df=17$, $p=0.795$), and no significant variation between the devolved nations ($X2=3.698$, $df=3$, $p=0.296$).

Discussion

SHS have not been able to meet the BASHH standard that 98% of clinics should offer an appointment within two working days. These data suggest that services have still not recovered from the disruption of the COVID-19

pandemic.

Acknowledgements

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Abstract N°: 412

Title: Palmoplantar hyperkeratotic erythematous papules - palmoplantar psoriasis or something else?

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Introduction

Hyperkeratotic palmoplantar papules are most commonly a manifestation of palmoplantar psoriasis. However, in the absence of response to treatment and unaffected other predilection sites for psoriasis, physicians must have also other diagnoses in mind, especially secondary syphilis which is known as a great mimicker.

Materials and methods

We present a case report of a patient with palmoplantar hyperkeratotic papules simulating palmoplantar psoriasis.

Results

30-year-old heterosexual male patient presented with palmoplantar erythematous papules with keratotic rim which lasted for four weeks (Fig. 1-3). He also had slightly erythematous macules on lateral parts of trunk. He reported difficulty in walking due to crackling and fissuring of the affected areas of the soles. His personal and family history were negative for psoriasis. He denied any infection prior to development of skin lesions and risky sexual behavior. He had a history of having immunotactoid glomerulopathy which was diagnosed in 2017. His renal function was therefore decreased with estimated glomerular filtration rate of 48 ml/min. He also had arterial hypertension and hyperlipidemia for which he was receiving treatment. Physical examination was unremarkable with unaffected other predilection sites for psoriasis including scalp, nails and joints.

Since palmoplantar lesions were more erythematous than in typical palmoplantar psoriasis, syphilis was suspected. We performed serologic testing which confirmed our suspicion. He had positive EIA test, reactive RPR test (1:128) and positive TPPA test (1:10240). He was treated with benzathine penicillin G 2.4 million units intramuscularly weekly for three weeks upon which lesions rapidly completely resolved. Additionally, he was also tested for HIV, hepatitis B and C, Chlamydia trachomatis, Mycoplasma hominis, Mycoplasma genitalium, Neisseria gonorrhoeae which were all negative. The swab of urethra was positive for Ureaplasma urealyticum and he was treated with doxycycline.

Discussion

Secondary syphilis typically manifests with non-pruritic red or reddish-brown papules on trunk, palms and soles. Besides typical presentation, there are also many atypical presentations, where syphilis can mimic psoriasis, pityriasis rosea, eczema, drug eruption, erythema multiforme, lichen planus or lichenoid lesions, pityriasis versicolor, seborrheic dermatitis or even mycosis fungoides.

Secondary syphilis mimicking palmoplantar psoriasis is known since 19th century then being termed »syphilide psoriasiforme«. This term was later omitted since it is not linked with psoriasis etiology. In the literature several

main features are presented that can help physician to differentiate between secondary syphilis and palmoplantar psoriasis: i) involvement of predilection sites for psoriasis, including scalp, elbows, knees, nails and joints which are mainly unaffected in syphilis, ii) more erythematous hyperkeratotic palmoplantar papules which are also symmetric and monomorphic in the case of syphilis, and iii) plantar lesions being more concentrated on medial part of the soles in syphilis. Additionally, family history of psoriasis or personal sexual history can aid in making the diagnosis. Due to recent resurgence of syphilis and its great mimicking ability, physicians should have a low threshold for testing for syphilis.

Abstract N°: 779

Title: The attitude of medical students towards HIV-infected people: fear or compassion?

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Introduction

The objective of the study was to evaluate the opinions of students and their attitude to people with HIV-infection, who come into contact with them during education, work and in everyday conditions, including questions about testing, confidentiality and conditions of giving medical

care to people with HIV-positive status.

Materials and methods

The survey tool was a self-administrated questionnaire adapted from the UNAIDS

model questionnaire with 5-point Likert scale for an anonymous survey. Data is presented in

percentage. Statistical significance was set at $p<0.05$.

Results

The study involved 1092 students of 4th year studing in medical university. About one third of students (33%) used to provide medical care to patients with HIV infection, while only 21% took courses concerning HIV-infected persons. Most of the students consider appropriate to test a patient for HIV without his knowledge or permission under certain circumstances. 89% of students consider that it is necessary to mark medical cards or wards of patients with HIV-positive status in order to notify health workers. There is a tendency among students to avoid or refuse giving care to patient with HIV/AIDS and to have fear of being infected with HIV during the work.

Discussion

According to the results of the survey, the students showed good awareness of HIV infection

and ways of its spread. Negative beliefs about testing, confidentiality and disclosure of HIV status prevail among respondents, which may violate ethical and legal norms. Some respondents have a negative attitude to the provision medical care to patients with HIV. However, future doctors have generally positive and non-discriminatory attitude to people with HIV/AIDS as part of the society. We recommend to integrate medical ethics education related to HIV/AIDS into current existing medical curriculum.

Abstract N°: 850

Title: HLA class II alleles as one of the factors affecting susceptibility to tuberculosis.

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Introduction

This study assessed the distribution of variants of HLA Class II alleles in patients with HIV and TB within the Latvian population.

Materials and methods

A case-control study was conducted with 511 participants. The first group included 55 primary active tuberculosis patients (PATB group), the second group included 20 patients with recurrent TB infection (RTBI group), the third group (HIV-1/TB group) included 168 HIV-1 -positive patients with TB (HIV-1/TB group), and the fourth group included 168 patients with HIV-1 infection without TB (HIV-1 group). HLA typing was performed at the HLA-DRB1, -DQA1 and -DQB1 loci by polymerase chain reaction using low resolution sequence specific primers. To determine protective and risk alleles of the HLA Class II gene, a control group (HC) of 100 adults was created (without active TB or HIV-1). When comparing the distribution of HLA-DRB1/DQA1/DQB1 alleles in different groups (PATB, RTBI, HIV-1/TB and HC) it was found that the alleles HLA-DRB1*11:01, HLA-DRB1*13, HLA-DQA1* 01:01 and HLA-DQB1*03:01 are more represented in RTBI compared to the HC group (p value 0.05), these alleles are identified as risk alleles for TB. HLA-DRB1*15:01 and HLA-DQA1*01:02 were identified as protective alleles. Comparative analysis with the results of other studies of different populations in Europe and Asia was performed.

Results

The results showed that in the Latvian subpopulation there are specific risk alleles and protective alleles of HLA class II for the development of tuberculosis. Despite the relatively high statistical significance, further research is needed to determine the protective and risk alleles of HLA class II for TB patients in Latvia. Individual genetic variation may help explain the different immune responses to M. tuberculosis within a population.

Discussion

Tuberculosis (TB) is a major opportunistic infection in HIV-infected patients, with M.tuberculosis/HIV-1 coinfection being one of the main reasons of death among HIV-1 infected patients. HLA diversity is a major influence on the likelihood of developing various forms of tuberculosis and the expected severity of the infection in HIV-infected patients.

Abstract N°: 853

Title: The role of medical and social factors in development of syphilis in HIV-n+infected patients: what has changed in 10 years?

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Introduction

The prevalence of HIV and syphilis co-infection globally have been on a steadily increase in recent years. The synergistic relationship between HIV and syphilis remains challenging, and requires more research. Particularly social and behavioral features of those patients are changing rapidly, and may influence on spreading of this co-infection. The objective of study was to analyze the changes in medical and social factors which can influence on the development of syphilis and HIV co-infection.

Materials and methods

A retrospective study was carried out by non-repeatable sampling of HIV-infected patients with syphilis. The research was carried out from 2008 to 2010 and from 2018 to 2020 and was based on the data provided by main in-patient hospital. The research includes 411 patients which satisfy the requirements and shows the data comparison between two periods from 2008 to 2010 and from 2018 to 2020.

Results

To date, 13.9% of patients receiving inpatient treatment for syphilis are HIV-infected. The result exceeds data we received 10 years before (5.4%). At the same time, the share of first time diagnosed HIV infection has significantly decreased from 49.4% to 7.5%($p \leq 0.05$). The quantity of male patients has increased significantly from 59.7% to 92.6% ($p \leq 0.05$), as well as the proportion of men who have sex with men changed from 16.5% to 51.1% ($p \leq 0.05$). Also, the quantity of patients with promiscuous behavior and the absence of a permanent sexual partner experiences increase as well. Now the majority of patients (64,4%, $p \leq 0.05$) have more than 3 partners in last 6 month. At the same time, the number of patients who gets drugs (including intravenous drug abuse) has significantly decreased from 33.9% to 9.2% ($p \leq 0.05$).

Discussion

All these which stimulate the development of this co-infection are not enough investigated. They depend much on country, population, lifestyle, and change rapidly. The received data could be used to optimize the procedure of prevention and treatment in this group of patients.

Abstract N°: 149

Title: Management of Localized Scleroderma with Systemic Immunosuppressive Therapies: An Evidence-Based Review

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Introduction

Localized scleroderma (LS) is an idiopathic immune-mediated inflammatory and sclerosing disease with cutaneous and extracutaneous manifestations. Early treatment initiation is of utmost importance to halt progression and prevent irreversible tissue damage. This systematic review examines the use of systemic immunosuppressive therapies in LS, with a focus on skin efficacy.

Materials and methods

Following PRISMA criteria, a MEDLINE, and Embase Ovid search was conducted on December 1, 2021, using variations and synonyms of the keywords "localized scleroderma" and "therapy". After independent screening, data from 62 studies involving 744 patients were analyzed. The mean age was 22.5 years (range: 2-91 years). There were 203 males (27.3%) and 520 females (69.9%); gender was not stated for 21 patients (2.8%). Linear (306/744, 41.1%) was the most reported LS subtype followed by generalized (134/744, 18%), and circumscribed/plaque (55/744, 7.4%). Subtype was not reported in 164 patients (22%).

Results

A total of 748 instances of systemic immunosuppressive therapy use with outcomes were documented in the 744 patients; treatments were categorized as monotherapy (482/748, 64.4%) or combination therapy (226/748, 35.6%). Methotrexate (201/482, 41.7%), mycophenolate mofetil (93/482, 19.3%), and hydroxychloroquine (84/482, 17.4%) were the most common monotherapies. Corticosteroids with methotrexate (246/266, 92.3%) and methotrexate with tocilizumab (9/266, 3.4%) were the most frequent combination therapies. Treatment duration was described in 531 instances (mean: 9.1 months; range: 0.75-53 months). Outcomes were reported as improved, stabilized (no improvement or worsening), and worsened in 70.7% (529/748), 19.9% (149/748), and 9.4% (70/748) instances, respectively.

Based on existing pediatric data, the minimal clinically important difference (MCID) in the modified Localized Scleroderma Skin Severity Index (mLoSSI), a validated outcome measure for LS disease activity (range: 0-162), is a reduction by ≥6 points from baseline. mLoSSI was recorded in 15.6% of patients with LS (116/744). The mean change in mLoSSI from baseline across treatments was -7.1 (SD: ± 3.2) points, with 86.2% (100/116) of patients achieving MCID. The most common treatment regimens resulting in MCID for mLoSSI were monotherapy with methotrexate (86.3%, 44/51), corticosteroids with methotrexate (100%, 36/36), and abatacept (58.1%, 18/23). Treatment-related adverse events (AEs) were reported in 78 cases (10.5%), with none resulting in death; no

patients discontinued treatment due to AEs.

Discussion

The SHARE (Single Hub and Access point for paediatric Rheumatology in Europe) initiative has published consensus-based recommendations for the management of LS in children, with treatment selection depending on the clinical subtype and severity. These guidelines suggest systemic corticosteroids with methotrexate as first-line systemic immunosuppressive therapy for all patients with active, potentially disfiguring or disabling forms of the disease. In methotrexate-refractory or -intolerant cases, adding or switching to mycophenolate mofetil is advised. Consensus-based recommendations for LS in adults have not been published.

This research highlights evidence for systemic immunosuppressive therapy use in LS. Rigorous placebo-controlled and head-to-head clinical trials involving systemic immunosuppressive therapies in LS populations are needed.

Abstract N°: 411

Title: Developing a novel pro-vitamin D3 to enable vitamin D supplementation via the skin

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Introduction

Vitamin D_3 (vit-D_3) deficiency has been increasing globally due to insufficient sun exposure and a reduction in dietary intake. Low levels of this vitamin can lead to a wide range of disorders including rickets, osteoporosis and infections [1]. Oral supplements are available and daily vit-D_3 supplements are recommended for vit-D_3 deficiency, but the currently available oral supplements are often not suitable to treat those most in need of this vitamin such as children and the elderly [3]. Supplementation via the skin could be an attractive option as a patch is more user friendly. In addition, vit-D_3 is naturally produced in the skin and thus has natural transport systems that could facilitate administration, but vit-D_3 is too hydrophobic to pass through the skin that allows vit-D_3 to be administrated using a traditional transdermal patch. Modifying the structure of vit-D_3 that maintains its biological action and improves its skin permeation could allow vit-D_3 transdermal supplementation, but this has yet to be achieved. The aim of this study was to synthesise novel phosphoric cholecalciferol esters to reduce vit-D_3 hydrophobicity and increase its skin absorption.

Materials and methods

The synthesis of vit-D_3 phosphate acid (VDP acid)/disodium salt (VDP salt) was performed using triethylamine and phosphorous oxychloride under nitrogen, with the final product hydrolysed with water. NMR and LC/MS analysis confirmed the synthetic products structure and purity. Ex vivo skin permeation studies porcine skin in Franz diffusion cells determined transdermal delivery with HPLC quantification.

Results

The VDP acid and salt were successfully synthesised, confirmed by NMR and LC/MS analysis, with a yield of 72 ± 11 % and purity of > 96 % (n=3). The agents in a PG lotion formulation showed that the phosphorylated agents more readily passed into and through the skin compared to vit-D_3. The passage of 290 ± 345 µg/cm^2 of VDP acid and 1090 ± 500 µg/cm^2 of VDP salt through the skin corresponded to 11,628 and 43,604 IU vit-D_3 respectively.

Discussion

The introduction of a charged phosphate in the vit-D_3 improved skin absorption by reducing its hydrophobicity [4]. The skin absorption of VDP salt was better than VDP acid. One reason for the better performance of the VDP salt could be ion-paring of the phosphate with the sodium ions. Ion-pair formation partially neutralises the electrostatic charge of agents applied to the skin and increase their penetration into the tissue [5]. For the VDP salt the phosphorylation process enabled >100 times the recommended daily supplement dose (400 IU) to pass through the skin. VDP is naturally metabolised in the skin like vitamin E phosphate, and further work will

investigate the conversion of VDP to vit-D_3, its binding to the vitamin D binding protein association and its pharmacokinetics.

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Abstract N°: 577

Title: Oral terbinafine in short course Versus Ciclopirox alamin in the treatement of tinea pedis

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Introduction

Tinea pedis is a frequent infection due to a fungal agent, it is the most frequent cause of intertrigos in our context, the treatment is essentially based on local antifungals : azoles (sertaconazole; itraconazole…), ciprox alamine, topical terbinafine… applied twice daily for 2 to 4 weeks

The aim of this study is to compare the topical antifungal (ciprox alamine) with an oral antifungal (terbinafine) in the treatment of this condition

Materials and methods

It is a prospective study conducted at the Dermatology Department of CHU Ibn Rochd. Adult patients of both sexes with tinea pedis were included. Patients with associated onychomycosis or other dermatoses (psoriasis, lichen, etc.) or patients already taking another antifungal were excluded from the study.

After an initial assessment, the patients were divided into 2 groups:

- Group A: receiving ciprox alamine 1%: twice a day
- Group B: receiving oral terbinafine 250 mg: once daily for 2 weeks

Weekly monitoring was performed for 4 weeks. Efficacy was judged on the delay of both disappearance of lesions and functional signs.

Results

39 patients were included in this study with 20 patients in the ciprox alamine group and 19 in the terbinafine group, there were no significant differences between the patients of the 2 groups concerning age, symptomatology and duration of treatment.

Evolution :

- At the control of the 1st week:clinical improvement and regression of pruritus was reported in 57% of patients (n=11) in group B versus 25% (n=5) of patients in group A.
- At the control of the 2nd week:disappearance of the lesions was noted in 95% of patients (n=18) in group B, versus 25% (n=5) of patients in group A.
- At the control of the 3rd week: disappearance of the lesions was reported in 70% (n=14) of the patients in group A, while maintenance of the treatment for 4 weeks was necessary in 30% (n=6) of the patients to obtain complete healing.

- At the control of the 4th week: no relapse was noted in the patients of group B, and a total disappearance of the lesions was observed in all the patients of group A.

Discussion

the 2 antifungals seem effective in the treatment of tinea pedis , however in this study we noted a faster improvement in symptoms in the group treated with oral terbinafine, and better compliance this can be explained by the single daily dose versus 2 applications per day in the ciprox alamine group, moreover topical ciprox alamine has the advantage of being less expensive and offers the possibility of use in patients with renal or hepatic insufficiency and in breastfeeding women given the absence of systemic passage .

Abstract N°: 814

Title: Unconventional therapies in dermatology

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Introduction

Unconventional therapies are those treatments that have not been proven effective based on scientific evidence. These treatments include acupuncture, aromatherapy, homeopathy, phytotherapy, vitamins, yoga, meditation... This study aims to evaluate the use of these treatments in dermatology.

Materials and methods

Prospective study of all adult patients hospitalized in dermatology at the Mohammed VI University Hospital of Oujda from January 2021 to August 2021. All patients answered a questionnaire including age, gender, socioeconomic level, education level, diagnosis and unconventional treatments used.

Results

We collected 128 patients, 69 women and 59 men, with a M/F sex ratio of 0.85. The mean age was 52.34. Thirty-three patients (25.7%) used at least one alternative treatment. The most frequently used treatments were herbal medicines (69%), essential oils (15%) and humectants (15%). These treatments were frequently used in neoplastic pathologies (22%), alopecia (15%), psoriasis (12%) and chronic prurigo (9%). Most of the patients using these treatments had never received schooling (14) or had only had primary schooling (9). Almost all patients did not find these treatments useful (96%). Patients' sources of information were family (65%), friends (25%) and social networks (10%).

Discussion

Unconventional therapies have become increasingly popular in the last decade [1]. An English study showed that one third of the patients followed in dermatology were using unconventional therapies [2]. Another Turkish study found a percentage of 30%. Our percentage (25.7%) is slightly lower than that of the literature, which is explained by the fact that our sample was based only on hospitalized patients. Data from the literature did not show a significant relationship between gender, education level, and socioeconomic status [2,3]. The authors showed that urticaria, alopecia areata and psoriasis were significantly related to the use of unconventional therapies [3]. This is partially consistent with our study, which found that patients followed for alopecia areata and psoriasis use more these therapies.

Conclusion

Moroccan dermatologists should be aware of the tendency of patients to use unconventional therapies and should guide them toward the use of safe treatments.

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Abstract N°: 273

Title: Angioedema: as far as the eye can see

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Introduction

Materials and methods

Results

We present a case of a 72 year old male with a 12 month history of increasing swelling of his upper and lower eyelids to the point where his vision was affected. He had a past medical history of atrial myxoma, ischaemic heart disease with coronary stents, hypertension, dyslipidaemia and atrial fibrillation.

On examination, he had periorbital oedema greater on the left than the right. He had a slight increase in the orbital lobe of the left lacrimal gland. He also had longstanding, familial facial erythema. Two biopsies of the affected area reported only dermal oedema with otherwise normal epidermis and dermis.

The patient had been initially referred to an ophthalmologist who managed the condition surgically with ptosis repair and debulking of the upper eye lid. This considerably improved the patient's significant visual interruption. However, the condition recurred several months later. The patient was noted to have been on ramipril for 12 years and this was thus ceased. There was no change in oedema at follow up.

Angioedema is a localised and self-limiting oedema of the subcutaneous and submucosal tissue due to a temporary release in vascular permeability caused by release of vasoactive mediators. It can be classified into hereditary and acquired causes. Acquired causes include secondary to C1-inhibitor deficiency, ACEI (angiotensin-converting enzyme inhibitor) treatment or idiopathic with or without response to antihistamines. Hereditary causes include genetic C1-inhibitor deficiency, Factor XII mutation, or unknown origin.

ACE (angiotensin-converting enzyme) is involved in the breakdown of bradykinin to inactive peptides and its inhibition causes elevated plasma levels of bradykinin. Less than 0.5% of patients on ACEI are affected. ACEI-induced angioedema often affects the face or upper airway and typically affects patients aged greater than 65. It more typically occurs in females. It is rare that it is accompanied by urticaria. The diagnostic characteristic is onset whilst on ACEI treatment with no other underlying cause.

The interest in this case is that latency is typically a few hours to a few years. It is unusual to be on an ACEI and develop this side effect 12 years later. Discontinuation resolves angioedema in many (54%) but not all patients, as we have seen here. Surgical management can improve short-term symptoms but does not alter the underlying cause and can be associated with relapse. Despite some early promise from bradykinin-targeted drugs such as icatibant, there is yet to be strong evidence for this avenue of treatment.

Discussion

Abstract N°: 285

Title: Evaluation of Endocrinological Diseases in Chronic Spontaneous Urticaria Patients

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Evaluation Of Endocrinological Diseases in Chronic Spontaneous Urticaria Patients

Introduction

Urticaria is a condition characterized by the formation of urtica plaques, angioedema or a combination of both. If urticaria lasts less than 6 weeks, it is called acute urticaria (AU), while conditions exceeding 6 weeks are considered the chronic urticaria (CU). CU is divided into chronic spontaneous urticaria (CSU) and chronic inducible urticaria (CIU).

Endocrinological diseases are a series of diseases caused by hormones and/or organs affected by hormones. Although there are studies investigating the relationship between urticaria and certain endocrinological diseases in the literature, we aimed to investigate the relationship between CSU and whole endocrine system in our study.

Materials and methods

107 CSU patients have been included aged between 18 and 74 and 53 volunteers aged between 18 and 65 who did not have a known systemic disease as the control group, who matched with patient group in aspect of sex and age. Fasting serum glucose, TSH, free T4 (fT4), anti-thyroglobulin (Anti-TG) and anti-thyroid peroxidase (Anti-TPO) levels were compared in the patient and control groups. In addition, both groups were questioned in detail in terms of the presence of diseases involving other elements of the endocrine system (parathyroid, hypothalamus-pituitary-adrenal axis, gonads, pancreas). Female patients were also asked about the effects of menarche, menstrual periods, pregnancy, oral contraceptive (OCS)/hormone replacement therapy (HRT) use, and menopause on CSU symptom severity.

Results

There was no statistically significant difference in TSH and fT4 levels in the patient and control groups. While there was no significant difference between the groups in terms of anti-TG, number of people who have high anti-TPO level was found to be significantly higher in the CSU group than control group, 19 and 2 respectively (p=0.014). 15 patients out of 107 have DM type 2 whereas 1 person has in the control group. Rate of DM type 2 to be significantly higher in CSU group (p=0.016). Both from patient and control group, nobody has other diseases of endocrine system.

Discussion

The relationship between thyroid diseases and CSU has been known for years. We think that thyroid function tests should be followed up frequently in patients with thyroid auto-antibody positivity, and it would be useful to question other autoimmune diseases with an increased incidence in CSU in this patient group.

It is known that skin diseases with chronic inflammation are a risk factor for metabolic syndrome. Data on the increase in the level of systemic inflammation in CU are increasing day by day. We found the rate of DM to be significantly higher in our study (p=0.016). However, we would like to point out that the control group consisting of healthy individuals may also contribute to this situation. We think that chronic urticaria patients may carry one or more of the metabolic syndrome components despite their young age, and appropriate screening tests should be performed.

Although there were patients who stated that sex hormonal factors affect the severity of urticaria in our study, it is not possible to make a statistical interpretation. Randomized controlled studies examining the effects of natural hormonal factors and OCS/HRT use on CSU are needed in the literature.

Abstract N°: 298

Title: malaria and urticaria in India

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Introduction

Malaria is common in areas where new construction is taking place. In Navi Mumbai during monsoon patients present as urticaria often have underlying malaria. Malaria is a protozoal infection transmitted to human beings by mosquitoes biting mostly between sunset and sunrise.

Materials and methods

Ten patients (six females and four males; mean age, 34 years) presented with a generalized mildly itchy urticarial rash since 3 to 30 days. Fever was present at the time of presentation in three patients. Fever was present for one/two days along with urticaria. Paracetamol was ingested by two patients for fever control. Joint pain was reported by six patients. Generalized malaise, which is never noted in acute urticaria patients, was present in five patients

Results

All patients had urticarial wheals in size varying from 3 to 10 cm that were erythematous and edematous plaques all over the body, and five had splenomegaly. Angiodedma was not present in these patients. Peripheral blood examination revealed microcytic anemia in six patients. A malarial smear showed ring forms *Plasmodium falciparum* in six patients and rings and trophozoites of *Plasmodium vivax* in four patients. They were also given cetirizine 10 mg once daily for control of the urticaria. The clinical response to antimalarial treatment was excellent, with rapid recovery from fever and the urticarial rash.

Discussion

In an endemic area, the presentation of fever and urticaria should give physicians a clue of an underlying malarial infection and call for appropriate investigations as early diagnosis and treatment will help to prevent morbidity and mortality due to malaria.

Abstract N°: 382

Title: Occurrence of alexithymia in patients with chronic urticaria

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Introduction

Alexithymia is defined as lack of emotional awareness, difficulty identifying ,describing and distinguishing feelings from bodily sensations of emotional arousal.It is associated with difficulty describing feelings (DDF) to people, a constricted imagination and a stimulus-bound cognitive style.It is due to a combination of neurophysiological and psychological defects·Patients with alexithymia demonstrate lack of emotional awareness and communication and have little or no insight into their condition· Alexithymic patients express themselves in bodily symptoms along with providing excessive information regarding their health issues ,daily events instead of emotional expression.Studies indicate that the prevalence of alexithymia in the general population ranges between 10%–13%,and is especially seen in males over females.Alexithymia has been reported in various medical and dermatological conditions but little is known about its occurrence in patients of chronic urticaria.

Chronic urticaria is a benign allergic skin condition which has correlations with psychological symptoms as well as symptoms like depression and anxiety which can precipitate the disease as well as affect the course of the illness.

Hypothalamic pituitary axis is not only responsible for exacerbation of symptoms of chronic urticaria but dysregulation of the same can play a role in development of psychiatric symptoms as well.

Aims & Objectives: To determine prevalence of alexithymia in chronic urticaria patients using Toronto Alexithymia Scale, Urticaria Activity score over 7days, Urticaria Control Test

And Morisky Medication Adherence scale (MMAS-8) .

Materials and methods

A study was carried out in 30 OPD patients(Male:Female=13:17) between 12-72 years of age with chronic urticaria. A form containing sociodemographic data, Covid infection, Vaccination status ,TAS(Toronto Alexithymia Scale), UAS-7(Urticaria Activity score over 7days), UCT(Urticaria Control Test) and Morisky Medication Adherence scale (MMAS-8) was administered.

Results

Out of 30 patients (Male:Female= 13:17) between 12-72 years with chronic urticaria, mean age group being 33 . Mean duration of urticaria was 12 Months. Majority consisted of female patients (56.66%) ,41.1% (n=7) had alexithymia. Among these 85%(n=6) had moderate activity urticaria with poor disease control , of which 66% had moderate adherence with medication. In male patients 46.1%(n=6) had alexithymia . Among these 50%(n=3) had moderate activity urticaria with poor disease control ,among these 66.66% had moderate adherence with medication.

Discussion

Study conducted indicates high prevalence of alexityhmia in patients with Chronic Urticaria. Chronic Urticaria is often associated with psychological symptoms. Pharmacotherapy and adherence to medications are the crux for its management . Alexithymia prevalent with chronic urticaria can often interferes with the course and the long term control of the disease. Hence timely measures in form of recognising symptoms of alexithymia and referral to psychotherapists for treatment modalities such as Cognitive Behavioural Therapy (CBT), Interpersonal Therapy (IPT), Psycho-educational Therapy (PET) as well as group therapy sessions must be done to reduce burden of alexithymia. Reducing the burden of alexithymia will help in better control of disease and encourage adherence to treatment in patients diagnosed with chronic urticaria.

Abstract N°: 610

Title: Correlation of depression and anxiety in patients with chronic spontaneous urticaria

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Introduction

Chronic urticaria (CSU) is a common skin disease characterized by the occurrence of wheals, angioedema or both lasting more than 6 weeks.Many studies have shown that patients with CSU often experience psychiatric complications The most common mental disorders observed in CSU patients are depression and anxiety.

our studies will be able to assess incidence.

We would be assessing this through 2 scales

Hamilton Anxiety rating scale for anxiety (HAMA, consisting of 14 questions and total ranging from 0-56 score) < 17= mild anxiety, 18-24 = moderate anxiety and >25 severe anxiety

Hamilton Rating Scale For Depression (HDRS) consisting of 14 questions ,score ranging from 0 to 52, where <7 is normal and >20 is severe depression

Materials and methods

A study of 30 cases of CSU patients(M:F 16:14) and 30 control (M:F 18:12)were taken with no underlying mental illness or episode of urticaria between age 18-50. A form of HAMA, HDRS, UAS 7, UCT and history of angioedema and inducible urticaria was administered.

Results

In a 30 case study (M:F 16:14), mean age being 26.9

14 out of 30 showed moderate to severe signs of anxiety (M:F 1:3)

21 out of 30 had moderate to severe signs of depression(M:F1:3)

In a 30 control study (M:F 18:12), mean age being 26.9

7 out of 30 showed moderate to severe signs of anxiety (M:F 2:5)

8 out of 30 had severe depression (M:F 3:4)

Discussion

the incidence of anxiety and depression is more in patients with CSU, in mean age of 26.9 with female predilection

Conflict of interest :- none

EADV SYMPOSIUM 2022
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12 – 14 MAY 2022

Abstract N°: 757

Title: Impact of a dedicated dermatology omalizumab service on quality of life in patients with chronic spontaneous urticaria - a multimodal qualitative and quantitative study

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Introduction

Chronic spontaneous urticaria (CSU) is characterized by persistent symptoms of urticaria occurring for 6 weeks or longer. CSU can have a detrimental impact on patients' quality of life, with both physical and psychosocial implications. Omalizumab, a humanized IgG1k monoclonal antibody that binds IgE, is licensed to treat CSU refractory to conventional therapy. Our department is the first in Ireland to establish a dedicated omalizumab service for dermatology patients, with access to intradepartmental clinical psychology services. We sought to explore patients' experiences of living with difficult-to-treat CSU, and of treatment with omalizumab from a qualitative perspective while measuring quantitative progress.

Materials and methods

Patients with CSU attending our monthly omalizumab service were invited to complete anonymous questionnaires. These included open-ended questions prompting descriptive statements about the effect of the disease on their life, and the changes noticed after omalizumab treatment. Clinical data including Urticaria Activity Score (UAS7), and Visual Analog Scales (VAS) for Itch and Rash were recorded on a monthly basis while on treatment.

Results

Of 15 patients attending the service, 9 completed qualitative questionnaires. 66% (n=6) reported improvement in social life, and 77% (n=7) described a positive impact on psychological health. "Unbearable" and "debilitating" were some of the terms patients used to describe their condition, causing them to feel "isolated" and "depressed". Many described dramatic and "life-transforming" changes after treatment: "It has given me my life back". All patients described a significant improvement in physical symptoms. Median treatment duration was 11 months (range 6-24 months). At baseline, Mean UAS7 was 21 (range 2-28). At 6 months UAS7 improved by 80%. Mean VAS-Itch and VAS-Rash were 4.15 (range 0.2-7.6) and 5 (range 0.7-8) respectively at baseline, improving by 63% and 85% respectively after 6 months.

Discussion

Treatment with omalizumab had both a positive physical and psychological impact on our CSU patients, in both qualitative and quantitative respects. Qualitative descriptions of patients' lived experience with CSU can be quite poignant, and enhance our understanding of not only the disease itself but the impact effective treatment can have. We believe the availability of receiving omalizumab in a dedicated dermatology clinic, while also being able to offer clinical psychology support, can enhance both qualitative and quantitative outcomes in this patient cohort with difficult-to-treat CSU.

Abstract N°: 784

Title: chronic urticaria and the impact of corticotherapy: series of 34 patients

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Introduction

Chronic urticaria is a common skin disorder with considerable impact on quality of life, hence the repeated use of corticosteroid therapy due to lack of awareness of the diagnosis or to improve the quality of life. Few clinical data have been reported on the aggravating role of corticosteroids in CU. We report a series of 34 patients with chronic urticaria initially treated with corticosteroids.

Materials and methods

A retrospective study including 34 patients followed for chronic urticaria with little or no improvement by H1 antihistamines, taking corticosteroids more than two days per month.

Results

Thirty-four patients were included in the study: 5 men and 29 women (sex ratio: 0.17) aged 7 to 60 years (mean: 36.91) with severe urticaria from 6 weeks to 23 years (mean: 62 months). All our patients had presented with typical urticaria symptomatology with an average of 2 episodes per week. Twenty-five patients (75.5٪) had concomitant angioedema with superficial urticaria at a frequency of 1 episode/week on average. GCs were taken 3 to 30 days per month, administered most often orally, occasionally intramuscularly. The mean duration of corticosteroid use was 1.45 years. All patients had an initial improvement in symptoms with corticosteroids and a rebound in symptomatology when they were stopped. Aggravation of symptomatology was noted in 75.52٪ of patients with daily frequency of superficial urticaria and repetitive flares of angioedema. An exploration of the adrenal axis had revealed iatrogenic adrenal insufficiency. Treatment consisted of gradual withdrawal of corticosteroids, hydrocortisone in case of adrenal insufficiency, and 2nd generation anti-H1 drugs (triple dose in 71.44%, double dose in 11.76%, and quadruple dose in 14.7%) associated with an antileukotriene in 26.47%. Methotrexate was prescribed in 14.7% of patients. A good evolution was noted, with 88.23% of patients spacing their relapses after 9 months.

Discussion

The originality of our study lies in the illustration of the absence of indication of corticosteroids in spontaneous chronic urticaria. Repeated corticosteroid therapy seems to aggravate CU and to induce resistance to anti-H1 and thus a therapeutic escape from the first-line treatment. It may generate corticosteroid dependence and significant side effects in a skin condition that is certainly invalidating in terms of quality of life, but benign. we recommend that this drug must be avoided for patients with CSU.

Abstract N°: 810

Title: Urticarial vasculitis following SARS-CoV-2 vaccine

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Introduction

Multiple studies have recently reported cutaneous manifestations following SARS-CoV-2 virus infection and vaccination. Cases of urticarial vasculitis (UV) following mRNA vaccine are extremely rare. Here, we describe a case of UV after the second dose of mRNA vaccine (Pfizer-BioNTech vaccine).

Materials and methods

Results

A 73-year-old man with a history of chronic spontaneous urticaria (CSU) consulted for purpuric rash that appeared two days following the second injection of Pfizer-BioNTech vaccine.

No history of previous SARS-CoV-2 virus infection was noticed. The patient was under second generation H1-antihistamine (Cetirizine). He received two doses of Pfizer-BioNTech vaccine 7 months apart (April and November 2021). Physical examination revealed two burning, purpuric edematous and reticulated plaques with symmetric distribution located on both thighs. Multiple macules and papules of the extremities and trunk were associated. Histopathologic examination of the purpuric plaque revealed erythrocyte extravasation, leucocytoclasia, fibrin deposits with an inflammatory infiltrate of neutrophils and lymphocytes. Autoimmune serology was unremarkable. Laboratory examinations reveled an inflammatory biological syndrome. Viral analysis to exclude concomitant viral reactivations revealed chronic Epstein-Barr-Virus, Parvovirus B19 and Herpes Simplex Virus infections. Anti SARS-Cov2 antibodies and RT-PCR were not performed. Based on chronological, clinical and histopathological findings, the diagnosis of UV after the second dose of Pfizer-BioNTech vaccine was made. The lesions had healed spontaneously within one week with post-inflammatory hyperpigmentation.

Discussion

Most of the reported cutaneous reactions after mRNA vaccines against the SARS-CoV-2 virus are immediate reactions (urticaria, morbiliform eruption, erythromelalgia, local injection site reaction and angiodema). Delayed large local reactions are often described with Moderna's vaccine. Interestingly, the first case of UV after the second dose of SARS-CoV-2 vaccine was described by Dash S et *al*, in a young healthy man and was treated with oral indomethacin.

Larson V et *al*, have recently described one cases of UV after the first dose of Moderna vaccine and one case of leukocytoclastic vasculitis, one week after the second dose of Pfizer-BioNTech vaccine. Tihy M et *al* reported another case of UV, 21 days following the second dose of Pfizer-BioNTech vaccine. Alden Holmes G et *al*, have also described another case of UV after the second dose of Pfizer-BioNTech vaccine.

Some authors suggest that the delayed reactions to mRNA vaccines are T-cell mediated hypersensivity and induce a type I interferon response, explaining the autoimmune mechanism and the activation of auto reactive antibodies

with immune complex deposition and vascular inflammation. Bermingham WH et *al.* discussed the exacerbation of CSU and angioedema following SARS-CoV-2 vaccination.

Abstract N°: 956

Title: Hereditary angioedema- 6 case series

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Introduction

> Hereditary angioedema (HAE) is a rare disease possibly life threatening condition caused by deficiency of C1 esterase inhibitor (C1-INH). HAE is typically characterized by recurrent episodes of nonpruritic, nonpitting, subcutaneous, or submucosal edema of the arms, legs, hands, feet, trunk, bowels, genitalia, face. We will present a 6 case series with HAE in patients ranging from 3 to 60 years old, members of the same family.

Materials and methods

> The diagnosis was made based on the signs and symptoms- angioedema with different localisation and also based on laboratory tests such as C4 level, antigenic C1-INH levels and functional C1-INH levels.

Results

> All the patients were confirmed with hereditary angioedema with the onset at different age, the earliest symptoms being before the age of 2 and the latest at the age of 17. The laboratory data is consistent with HAE type I with low antigenic C1-INH levels and low functional C1-INH levels. Furthermore, all 6 cases had positive family history. The acute attacks were located mainly on the extremities and intra-abdominal (gastrointestinal tract) and sometimes they had prodromal symptoms like erythema marginatum.
>
> HAE typically do not respond to administration of antihistamines, glucocorticoids, or epinephrine or adrenaline. For acute attacks of the extremities, respiratory airway and gastrointestinal tract, plasma-derived C1-INH (Berinert) and icatibantum are effective. Fresh frozen plasma (FFP 2U)should be used only if other therapies are not available.
>
> Intubation and ventilator support may be necessary for episodes associated with severe respiratory tract compromise from laryngeal edema. The mortality rate is approximatively 35%. In some cases of abdominal attacks use of narcotics, iv hydration and spasmolitics can be helpful.

Discussion

> Hereditary angioedema is a very rare genetic disease transmitted in an autosomal dominant pattern that requires mandatory familial screening even before the onset of the clinical manifestations. Earlier diagnosis and treatment of hereditary angioedema can prevent HAE-associated mortality.

EADV SYMPOSIUM 2022
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Abstract N°: 1092

Title: Role of bilastine in chronic spontaneous urticaria - experience from a tertiary case centre in North India

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Introduction and objectives

Urticaria is an acute or chronic reactive skin condition consisting of a wheal-and-flare reaction in which localized intracutaneous edema (wheal) is surrounded by an erythematous area that is typically associated with itching. Urticaria and angioedema lasting for more than 6 weeks have been classified as chronic urticaria (CU). Bilastine is a new second generation H-1 antihistamine approved for the symptomatic treatment of allergic rhinitis and chronic urticaria in patients older than 12 years of age. It holds the promise of being an ideal antihistamine owing to its efficacy and non-sedating properties. There is a paucity of literature for this drug from the developing world including India. The objective of this study is to establish the efficacy of bilastine in chronic spontaneous urticaria among Indian patients as well as study its side effect profile.

Materials and methods

This prospective trial was conducted at a tertiary care centre from North India. 32 participants attending the outpatient department of dermatology were recruited after taking informed consent. Detailed history was taken and laboratory examinations were conducted fir each point. The improvement in urticaria was measured by the Urticaria Assessment Severity Score (UAS7 score). All patients were given bilastine 20 mg once daily and up dosing up to four times was performed according to the EULAR guidelines for management if urticaria. Patients were followed up every week to evaluate treatment outcome as well as patient reported side effects. The total study duration was 3 weeks.

Results

The study population comprised of 14 males and 18 females (female to male ratio 1.2:1). The mean age was 30 years (range 14 years to 54 years) and the mean duration of illness was 1.43 years. Majority(53%) were aged between 25-34 years. 15% suffered from thyroid disorders and 9% from anaemia. The baseline UAS7 score was 20.41+8.9. At the end of first, second and third week the score was 8.32+7.4, 2.73+2.5 and 1.56+2.1, (p =0.02) respectively and showed a statistically significant improvement. Five patients were declared treatment failures as they showed less than 50% fall in UAS7 score and prescribed alternate therapies. After accounting for loss to follow up a total of 25 patients successfully completed the study (78% showed adequate treatment response). Treatment outcome was significantly poor for patients who has a higher score at baseline. 31% patients reported at least one side effect with 15% reporting somnolence. The treatment outcome was not influenced by presence of comorbidities.

Conclusion

We were able to establish that bilastine is a safe and effective anti-histamine in management of chronic spontaneous urticaria. On comparison with data from other studies on levocetirizine and fexofenadine it shows a more tolerable side effect profile while maintaining a good therapeutic response.

Abstract N°: 74

Title: Treatment of different non- healed skin ulcers using biological active irradiated amniotic membrane

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Introduction

Skin ulcers are non-healed wounds caused by inflammation of epidermis up to the dermis, which causes pain and limits body movements, significantly reducing quality of life. Amniotic membrane is a placental collagenous biomaterial with many biological and mechanical properties important for tissue engineering and regenerative medicine.

Materials and methods

The current study included 15 patients who were recruited from the outpatient clinic of the Egyptian Atomic Energy Authority. Follow up of all treated cases that completed the regimen was up to 3 months. The clinical progression of all treated ulcers was quantitatively evaluated by computerized estimation of the wound size reduction based on 3D image analysis.

Results

All cases in this study showed great outcomes within several weeks of treatment depending on wound infection, ulcer depth and size, period of healing disorder, age, blood glycaemia, and other clinical criteria. Patients' questionnaires revealed that pain was controlled by the first time of treatment. After one week post-treatment, granulation tissue was generated and observed in all patients, and all microbial colonies have been eliminated from wounds with previous infection.

Discussion

The current study indicated that the dressing of ulcers with irradiated Human Amniotic Membrane induces fast healing without complication.

Abstract N°: 211

Title: Successful treatment of pyoderma gangrenosum in a patient with ulcerative colitis and COVID-19 infection: An unusual case report

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Introduction

Pyoderma gangrenosum (PG) - is a sterile neutrophilic dermatosis manifesting as painful inflammatory plaques and ulcers, frequently associated with inflammatory bowel disease, rheumatoid arthritis, myelodysplastic syndrome, and acute myeloid leukemia and other disorders.

Materials and methods

We present a 72-year-old woman with a painful, extensive abdominal ulcer, against the background of newly COVID-19 infection. Past medical history revealed ulcerative colitis (UC) for 2 years.

Results

Physical examination revealed an oval ulcer on the skin of the abdomen 24x45 cm in size with the undermined edge with violaceous borders, the surface of the ulcer was filled with fibrin granulations. Histological examination of skin sample demonstrates: mixed inflammatory infiltrate with a predominance of neutrophils, spreading deep into the dermis, with signs of leukocytoclastic vasculitis (LCV). The treatment was carried out: methylprednisolone 24 mg/day orally; sulfasalazine 2000 mg/day; tofacitinib 10 mg orally; enoxaparin 0.4 ml subcutaneously. A positive clinical outcome with complete resolution of the lesion was obtained after 4 months.

Discussion

Treatment for PG is aimed at reducing systemic inflammation and includes a combination of systemic immunosuppressive therapy, wound care, antibiotics for secondary infections, and treatment targeting the associated disease. The severity of the underlying disease is a factor in the prognosis of PG. This data suggests that effective treatment of associated conditions leads to improvement or complete remission of PG. Described clinical case is of interest due to the rarity of dermatosis, the severity of the disease, large area and depth of ulcers, combination with UC and COVID-19 infection the optimal response after treatment with systemic corticosteroids and sulfasalazine.

Abstract N°: 305

Title: Leg ulcer patient journeys - a qualitative analysis for the representation and evaluation of individual disease and therapy stations

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Introduction

The medical care of people with leg ulcers is complex. In general, factors such as the patient's level of suffering and the polyetiological genesis must be considered.

A crucial part of therapy is an interdisciplinary and close collaboration of specialists. The present study examines the experiences of patients with leg ulcers, in clarifying their complaints and journey through the health care system. The aim is to record individual "patient journeys" as precisely as possible, from the first onset of symptoms to adequate specialist treatment. In this way, we want to identify barriers and ultimately improve medical care.

Materials and methods

Face-to-face, semi-structured, qualitative interviews were conducted with twenty-four participants, suffering from chronic leg ulcers. A study population consisting of patients, treated in varying medical departments of dermatology, plastic surgery, and vascular surgery at a university hospital setting, guarantees the open-endedness of the study. The interviews were digitally recorded, transcribed verbatim, and subsequently evaluated, using qualitative content analysis.

Results

Six core categories were identified: Wound and digital literacy, patient journeys, assessments, physical limitations, psyche, and interview conclusions.

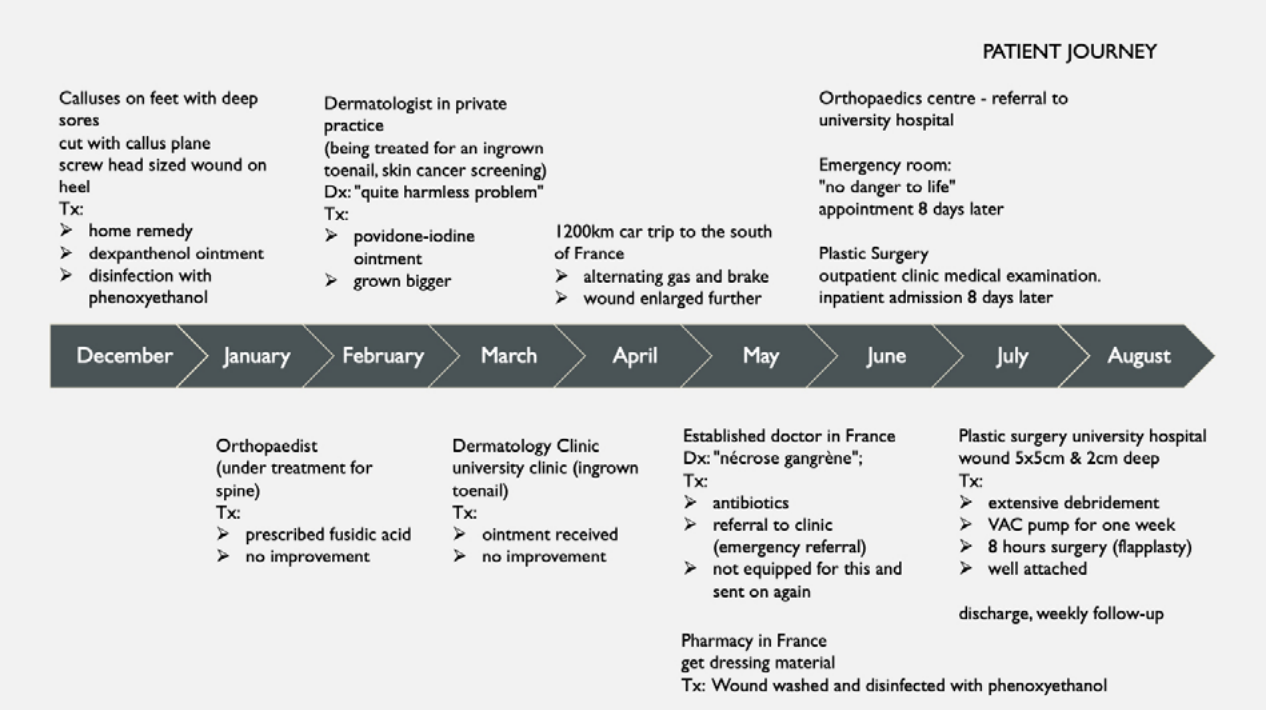

Figure 1

Wound and digital literacy were poor among the study population. Twenty-two out of twenty-four participants had little to no knowledge about their diagnosis. The participants had a median patient journey duration of 32 months (range 2-140 months). As seen in the example journey (figure 1) several medical doctors from different specialties had to be consulted until the treatment was successful. Most patient journeys followed a similar pattern.

Next, the assessment was divided into two subcategories: Attributions included the overall organization, the clinic, and medical staff, whereas experiences referred to specific memorable incidents and mainly related to negative experiences with the outpatient nursing service or individual doctors or nurses.

Physical limitations mentioned by the participants were categorized in day-to-day life (mobility), hygiene (showers), and clothing (shoes). The subjects described their psychological feelings predominantly in terms of negative emotions, such as anger, sadness, fear, dependency, stress, and depression. Influences of personal resources, social contacts, stress, and suicidality were often mentioned and discussed.

Discussion

This qualitative study offers a valuable insight into the complex issues for this patient group. The implications of the findings suggest that most of the patients had little knowledge of leg ulcers and a passive expectation of therapy from doctors and nurses. Considering the negative assessments, one key factor is the limited doctor-patient discussions, resulting in a poor understanding of the respective illness or the requisite procedure of care.

A potential guideline to meet the challenge is to introduce ulcer training seminars. An expanded horizon of the own illness possibly boosts self-efficacy and encourages the patient to engage as an active and willing partner in his or her treatment plan. In this way, the patient journey duration is expected to reduce significantly. This paper serves as a basis for further studies to improve the medical care of patients suffering from leg ulcers.

Abstract N°: 430

Title: Ulceration of the scalp- a diagnostic and therapeutic problem

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Introduction

Ulcerations of the scalp are an uncommon type of chronic ulcers but there is wide range of possible causes. The clinical differential diagnosis should include infection, malignancy, inflammatory causes, drug-induced, iatrogenic and traumatic wounds. The literature data indicate malignancy as the most common cause of scalp ulcers, which contribute to more than 50% of ulcers.

Results

We are presenting five case reports of patients with the scalp ulcers of various diagnoses: squamous cell carcinoma, pyoderma gangnerosum, delayed healing of herpes zoster, pemphigus vulgaris and ulceration after mechanical damage.

Discussion

We would like to draw the attention of clinicians that carefully taking patient's medical history and performing wide range of diagnostic tests are a key to the right therapeutic decision. Many disease entities manifest themselves in a similar clinical appearance what causes problems in establishing the etiology of the ulceration. We also emphasize that healing of the ulcerations requires collaboration between many different specialists.

Abstract N°: 562

Title: Antibiotic and silver resistance of bacterial strains isolated from chronic leg wounds in a Romanian dermatology clinic

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Introduction

Management of chronic wounds remains challenging when it comes to the presence of infection. Nanosilver (NAg) is currently one of the major alternative antimicrobials to control microbial growth, bt current studies demonstrate the emerging evidence of silver-driven co-selection of antibiotic resistance determinants.

Materials and methods

All the patients with chronic leg wounds which presented to our clinic between 2019-2020 were included in our study. The isolated and identified bacterial strains were tested for antibiotic resistance and silver resistance.

Results

A total of 125 bacterial strains were isolated from 103 patients with chronic leg wounds. Following microbiological analysis of the leg ulcer wound secretion samples the most frequently isolated bacterial strains were Staphylococcus aureus and coagulase-negative staphylococci, followed in descending order by Enterobacteriaceae, and Gram-negative, non-fermentative bacilli and streptococci, the results obtained being comparable to those reported in the international literature on the frequency of the identified species

Gram-positive cocci strains showed significant resistance phenotypes of epidemiological resistance, namely methicillin resistance in to staphylococci (37.5% MRSA) and vancomycin resistance in enterococci (71.42%), while Gram-negative bacilli strains harboured broad-spectrum beta-lactamases encoded by the CTX-M gene, with global epidemic distribution (identified in strains of Enterobacteriaceae and Pseudomonas aeruginosa) and blaOXA-23 and blaOXA-24 genes in Acinetobacter baumannii strains.

The investigation of the genetic determinism of silver resistance has allowed highlighting the plasmid resistance markers in the sil operon, respectively the presence of the silA, silB, silC genes encoding efflux pumps, of the silE gene encoding for periplasmic proteins that bind Ag + and of silR and silS regulatory genes in Staphylococcus spp. (especially S. aureus) strains, followed by Escherichia coli and P. aeruginosa.

Discussion

The correlation of resistance to large spectrum antibiotics and silver resistance in important nosocomial bacterial species reveals the possible existance of co-and cross-selective mechanisms, that could also be located on mobile platforms and contribute to the dissemination of multiple resistance determinants in the hospital environment.

Abstract N°: 688

Title: A pseudo-wound infection in a postpartum female

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Introduction

Materials and methods

Results

We report the case of a 37 year-old primigravida who underwent emergency caesarean section for failure to progress. Four hours post-partum, she was brought to theatre for a laparotomy to control intra-abdominal haemorrhage. Prior to conception, she had received Adalimumab in the context of infertility treatment for Natural Killer cell hyperactivity. There was no past medical history of note, though a history of pathergy at the site of an insect bite was reported.

On post-operative day (POD) 7 the patient was readmitted with fevers and wound pain. CRP was elevated (210) with a neutrophilia (19). Post-operative wound infection with dehiscence was diagnosed and broad-spectrum antibiotics commenced. She remained febrile at 39.5 degrees. Ultrasound and CT abdomen and pelvis confirmed a fluid collection related to the lower segment of the uterus. Incision and drainage was performed.

Further extension of the wound prompted a dermatology referral on POD 13. Examination revealed two rapidly expanding, painful, ulcerated areas with violaceous undermined borders at the site of the lower segment caesarean section incision. Skin biopsy from the ulcer margin was performed and revealed scattered intraepidermal neutrophils, a dense neutrophilic infiltrate filling the entire dermis with associated necrotising vasculitis and leucocytoclasis. Gram and DPAS stains were negative. Based on the clinical and histopathology findings and history suggestive of pathergy, a revised diagnosis of pyoderma gangrenosum (PG) was made. Prednisolone (1mg/kg) was commenced with rapid clinical improvement.

PG is a rare auto-inflammatory disease. The incidence rate is approximately 3–10 patients per million per year, with a peak incidence between 20 and 50 years and women more commonly affected. PG develops in 50% of cases after surgery or trauma to the skin due to neutrophil activation, the so-called pathergy phenomenon. Over 50% of the patients have an associated systemic disease, most frequently inflammatory bowel disease.

PG in pregnancy is extremely rare, with 26 cases reported to date. Gestational age appears to play a role in the development of PG, with reported cases occurring in the second or third trimester or post-partum (up to four weeks). 30% of reported cases were in pregnant patients with pre-existing diseases known to be associated with PG including inflammatory bowel disease, rheumatological conditions, hepatitis, hidradenitis suppurativa and haematological disorders.

Given the rarity of PG in pregnancy, there is no consensus on treatment. Systemic corticosteroids are the preferred first-line treatment due in part to the rapid therapeutic response.

To conclude, the diagnosis of PG is challenging and requires the exclusion of other causes of nonhealing ulcers,

particularly infections and neoplasms. Post caesarean-section PG, though extremely rare, can mimic surgical site infection and thus should be considered in the differential diagnosis. Prompt recognition and appropriate treatment of PG is imperative to reduce iatrogenic morbidity and progression of the condition following inappropriate surgical intervention.

Discussion

Abstract N°: 709

Title: A prospective, multicentre study to assess frailty in elderly patients with leg ulcers (GERAS study).

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Abstract

Introduction

Although leg ulcers are a burdensome disease most common in those aged 65 years and older, frailty in this population has not yet been well established. The aim of this study is to explore the presence of frailty in elderly patients with chronic leg ulcers using multiple validated scoring methods. Furthermore, we investigate to what extent frailty is different in leg ulcer patients in four healthcare settings. This is achieved while taking patient and ulcer-related characteristics, frailty questionnaire outcomes and ulcer-related quality of life into consideration.

Materials and methods

This study was conducted in four different settings: an academic centre ulcer population, a non-academic centre ulcer population, a home care ulcer population and a dermato-oncology population (control group, containing no ulcers). Frailty and quality of life were assessed using four validated questionnaires: the Groninger Frailty Indicator, Geriatric-8, Mini-Cog and Wound Quality of Life. Patients were considered 'frail' when at least one of first three questionnaires score was positive. To analyse data multiple (non)-parametric tests were performed.

Results

Fifty of 60 included leg ulcer patients (83%) scored 'frail' on at least one frailty questionnaire. All four population contained twenty patients. The number of patients scoring 'frail' on two or three out of three applied frailty questionnaires were significantly higher in the academic and home care ulcer population compared to the non-academic ulcer population and dermato-oncology population (p=.002). In the academic ulcer population mean Wound Quality of Life scores were 30.2 (SD 17.6), compared to 17.7 (SD 13.1) in the non-academic and 15.0 (SD 10.4) in the home care ulcer population (p=.002).

Discussion

A substantial proportion of patients suffering from leg ulcers is frail. The highest frailty outcomes were observed in the academic and home care ulcer populations. The largest impaired quality of life was reported in the academic ulcer population. In dermatology practice implementing frailty screening and initiating appropriate (para-medical) supportive care should be considered.

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Abstract N°: 885

Title: Acroangiodermatitis of Mali: an unusual cause of painful ulcer

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Introduction

Acroangiodermatitis, also known as pseudo-Kaposi sarcoma, is a rare benign vascular proliferation mainly of the extremities. Only a few cases have been reported over the last years. In this communication, we report a case of acroangiodermatitis of Mali.

Results

We present a case of a 58-year-old man, phototype III, with a history of diabetes, psoriasis vulgaris and polycythemia vera. He presented to the emergency department with a two-months history of two painful ulcers on the left leg, developed after minor trauma. On physical examination, there were two round shape, well-defined, with red- violaceous elevated borders and discharging ulcers, of approximate 0.5 cm and 3 cm of diameter, on the extensor surface of the left leg. The skin surrounding the ulcers showed hyperpigmentation. The peripheral arterial pulsations were normal. Routine laboratory tests showed no anomalies. Bacterial culture isolated methicillin-sensitive *staphylococcus aureus*. The biopsy from the edge of the ulcer revealed an increased number of thick-walled capillaries that were present in a clustered pattern through the entire dermis, with prominent endothelial cells and extravasated erythrocytes and hemosiderin. Cytologic atypia was not noted. Venous Doppler ultrasound of bilateral lower limbs showed incompetence of saphenofemoral junction and popliteal vein of the left lower limb. Arterial Doppler was normal. Based on the examination and biopsy findings, a final diagnosis of acroangiodermatitis of Mali was made. The patient was treated with oral antibiotic and local wound care. He was also advised leg elevation and rest. The ulcers healed gradually in three months. The patient was referred to a vascular surgeon.

Discussion

Acroangiodermatitis is a rare chronic inflammatory skin process involving a reactive proliferation of capillaries and fibrosis of the skin. It may mimic Kaposi sarcoma clinically and histopathologically. The lesions tend to be circumscribed, red-violaceous macules, papules, or plaques that may become verrucous or develop into painful ulcerations, generally occur on the distal dorsal aspects of the lower legs and feet. There are two variants of acroangiodermatitis: the Mali type, associated with chronic venous insufficiency, as our patient, and the Stewart-Bluefarb type, associated with arteriovenous malformations or arteriovenous fistulae. Its physiopathology is poorly understood. It is postulated that severe chronic venous stasis with insufficiency of the calf muscle pump elevates the capillary pressure and leads to chronic tissue hypoxia which induces neovascularization and fibroblast proliferation. Treatment reports are anecdotal. The goal is to correct the underlying venous hypertension. Oral antibiotics and local wound care with topical emollients and corticosteroids have been shown to be effective treatments. Acrodermatitis is an unusual cause of non-healing painful ulcer that dermatologist should take in

consideration. As the case reported, most cases of acroangiodermatitis of Mali have been associated with venous insufficiency and the treatment involves correction of the underlying vascular pathology.

Abstract N°: 974

Title: Leg ulcer revealing type T large granular lymphocyte leukenia : about a Moroccan case

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Introduction

Large granular lymphocyte (LGL) leukemia is a rare chronic lymphoproliferative disease of either the T cell lineage or the natural killer (NK) cell line. Large T-cell granular lymphoid leukemia (T-LGL leukemia) is a rare chronic lymphoproliferative neoplasm in the peripheral blood. It is a rare pathology that is observed mainly in the West. The evolution is indolent except for the aggressive leukemia with NK cells for which the prognosis is more severe.

Materials and methods

We report the case of a patient admitted for leg ulcer revealing a leukemia with large granular lymphocytes type T.

Results

This is an 82-year-old patient, followed for arterial hypertension under monotherapy, who has had two ulcerations in the left lower limb for 7 months. The whole evolves in a context of deterioration of the general state. The dermatological examination finds two ulcerations, one circumferential at the level of the lower third of the left leg with a fibrinous and necrotic background, with erythematous - violaceous peri-lesional skin, another in the process of healing at the level of the posterior face of the thigh left. The biological assessment shows on the hemogram a normochromic normocytic anemia with Hb (hemoglobin) at 9.9 g / dl, mean globular volume (MCV) at 86.2 ; MCHC) at 32.2, with white blood cells at 9490 / mm3 , neutrophils at 130/mm3, lymphocytes at 9080/mm3 and platelets at 151000. The myelogram is rich with the presence of 41% of lymphocytes with a mature appearance. The peripheral blood smear with immunophenotyping shows the presence of 96.7% of lymphocytes with 99.3 of T lymphocytes. The T lymphocytes are CD3+, CD2+, CD8+, low CD7+, and not expressing CD4-, CD5-. Immunophenotypic profile in favor of an expansion of LGL-type T lymphocytes . Skin biopsy in favor of non-specific ulceration. No sign in favor of TVP. The patient is put on antibiotic treatment. The patient was referred to the hematology department after confirmation of the diagnosis of LGL leukemia with specialized treatment. The evolution is fatal with death of the patient 3 months after the diagnosis.

Discussion

LGL T-cell leukemia is a rare disease that can vary in severity from indolent to severe, with cytopenias leading to life-threatening infections. It is very difficult to diagnose, often requiring a multitude of diagnostic studies . The management is not codified , hence the interest of other studies in order to standardize the treatment and improve the prognosis in the event of severe damage .

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