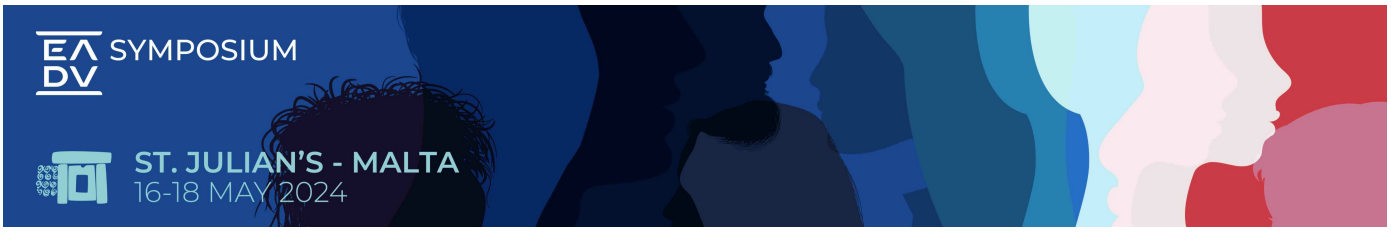


Abstract N°: 55

Could baricitinib treat frontal fibrosing alopecia and facial papules?

Farnaz Araghi[1], Hamideh Moravvej Farshi[1]

[1]skin research center of shahid beheshti university of medical sciences, dermatology, Tehran, Iran

Introduction & Objectives:

Frontal Fibrosing Alopecia (FFA) has been considered a variant of Lichen planopilaris (LPP) which is classified as a lymphocytic cicatricial alopecia. Perifollicular inflammation, due to lymphocytic aggregation, on the dermal-epidermal junction could cause irreversible hair loss in involved areas.

Several studies have investigated the impact of Janus Kinase (JAK) inhibitors on this disease. Barcitinib, which is known as a less potent inhibitor for both JAK1 and JAK2, has been introduced as an effective option for treating FFA. However, the data about the influence of baricitinib on the facial papules are limited.

Here, we are reporting a case of FFA, whose disease went into remission and her facial papules disappeared by baricitinib within 5 months.

Materials & Methods:

A 63-year-old woman was referred to our dermatologic clinic with biopsy-proven FFA. Besides her progressive hair loss, she also complained of the eruptions of facial papules on her upper face.

Her past medical history was negative for any disease and she had not received any treatment for her lichen planopilaris formerly.

Alopecia was mostly significant on her frontotemporal area and the skin on her forehead was atrophic.

In her scalp examination, the erythema, perifollicular scale, and folliculitis scale were +2, +2, and +1, respectively. The essential investigations were done and oral tofacitinib was prescribed (5 mg twice daily) for her. After 8 months severe hair loss stopped and the scalp scores developed. Thus, the tofacitinib was stopped even though her facial papules had been persistent. Later she was started on isotretinoin 20 mg daily especially for the disappearing of these papules. Four months later, she came back to our clinic with hair loss complaints and her examination confirmed the disease recurring.

Subsequently, isotretinoin was discontinued and she was started on baricitinib (4 mg daily). After 5 months, significant improvement was found in both scalp and facial papules.

Results:

The mechanism of FFA is still unknown; however, it is thought that the follicular destruction in this disease could be the result of the T helper1/ JAK-STAT mediated pathway. Thus, targeting this pathway via JAK inhibitors such as tofacitinib and baricitinib could be help to halt the hair loss in FFA. Moreover, in some cases when the treatment failure occurs with one of the drugs, better results could be achieved by switching to the other JAK inhibitor. Recently, a few studies have confirmed the impact of baricitinib on FFA hair loss until now. However, these studies didn't mention the effect of the drug on the facial papules specifically.

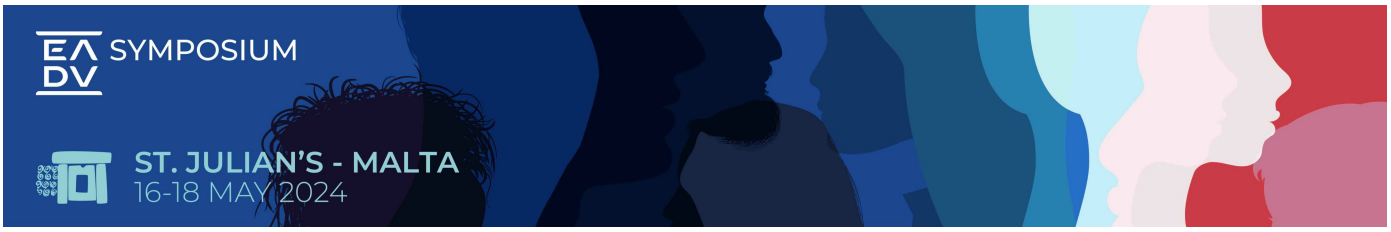
Generally, facial fibrosing papules appear in 14% of patients with FFA and the pathogenesis could be related to either hair follicle inflammation, sebaceous glands enlargement, or both.

According to this explanation, if the papules are the result of the enlargement of sebaceous glands, isotretinoin could be

an efficient treatment for them as was confirmed by the previous studies. In addition, a recent review study showed that oral isotretinoin or alitretinoin significantly (92%) reduces the facial papules of the patients. Further, if the pathogenesis is due to vellus hair involvement, baricitinib could disappear those similar to our case report.

Conclusion:

Taken together, baricitinib could be considered an efficient treatment for the patient with FFA associated with facial papules. However more studies are required in this field.



Abstract N°: 279

Medium-term effect of photodynamic therapy mediated by methylene-containing topical 40% urea cream in the treatment of moderate toenail onychomycosis

Enrique Alberdi Jeronimo*[1], Clara Gómez Hernández[2]

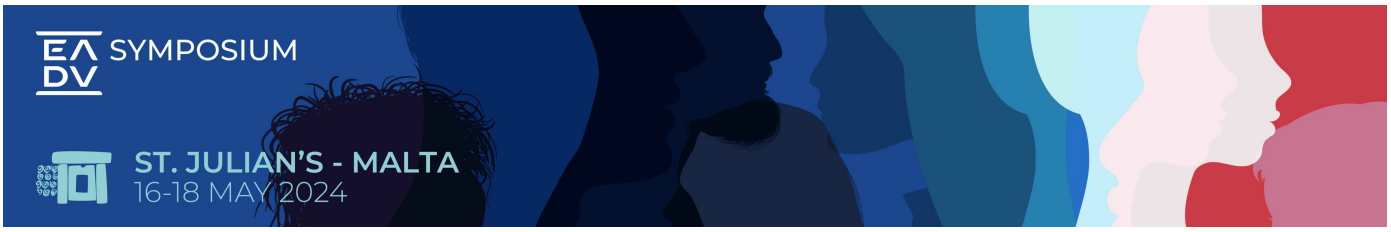
[1]Private clinic Dr. Alberdi, Madrid, Spain,[2]Institute of Physical Chemistry Blas Cabrera, CSIC, Madrid, Spain

Introduction & Objectives: Methylene blue (MB) mediated photodynamic therapy (PDT) has demonstrated local antifungal effect. The aim of the present work was to compare the medium-term efficacy of two concentrations of MB in PDT for toenail onychomycosis by applying them combined with 40% w/w urea in the same topical ungual cream.

Materials & Methods: Twenty toenails with moderate distal and lateral subungual onychomycosis due to dermatophyte fungi were randomized to receive PDT mediated by two topical formulations including MB at two different concentrations: Group I, topical 0.1%w/w MB + 40% w/w urea cream and Group II, topical 2% w/w MB + 40%w/w urea cream. Ten sessions of PDT separated by an interval of 1 week were applied. At baseline, 27 and 35-week follow-ups, clinical efficacy was assessed by digital photographs (allowing evaluation of the Onychomycosis Severity Index (OSI)) and, at the same time, microscopic and microbiological tests were carried out for mycological evaluation. Side effects were recorded along with patient satisfaction.

Results: At week 27, mycological cure rates were 50% and 30% and complete cure rates were 0% and 20% for Group I and II, respectively. At week 35, mycological cure rates were 70% in both groups and complete cure rates were 35% and 50% for Group I and II, respectively. The two cream formulations were safe and patients were fairly satisfied.

Conclusion: A PDT mediated by MB applied at a concentration of 2% w/w in an emollient formulation for topical use can be considered as a good alternative for mild-moderate toenail onychomycosis.



Abstract N°: 304

Effectiveness of oral tofacitinib treatment on patients with moderate-to-severe alopecia areata in Iran

Ali Asilian Mahabadi[1], Parisa Mohammadian*[1], Zabihollah Shahmoradi[1]

[1]Department of Dermatology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, isfahan, Iran

Introduction & Objectives:

Alopecia areata is an inflammatory hair loss and a common autoimmune disease. Conducting treatment studies on alopecia areata is difficult due to unpredictable periods and even spontaneous recovery from the disease. In this study, the effectiveness of tofacitinib in treating alopecia areata was investigated.

Materials & Methods:

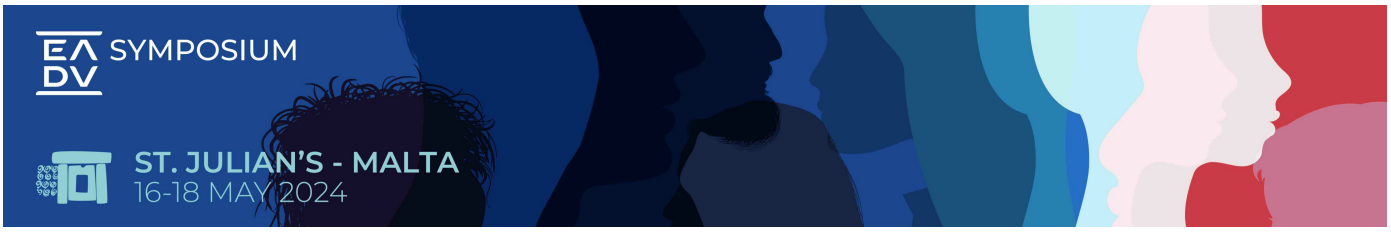
The severity of the disease was evaluated using the Alopecia Severity Tool (SALT), and based on the medical history and patient's documents and photos, the score before and after the treatment was obtained. The patients were prescribed tofacitinib tablets at a dose of 5 mg twice a day for at least 6 months and were followed for a minimum of 18 months.

Results:

No side effect was observed in 97.9% of the patients. After 6 months, except for three patients who did not need any maintenance dose, others needed an average daily intake of 7 mg of tofacitinib. After 18 months, the hair loss decreased by 6.45 times compared to the beginning and by 0.5 times compared to the end of 6 months ($p < 0.05$). In addition, it was found that body hair loss decreased 4 times compared to the beginning and 0.6 times compared to the end of 6 months ($p < 0.05$). The reduction of nail involvement after 18 months and 6 months was 1.2 times and 0.6, respectively, ($p < 0.05$).

Conclusion:

Treatment of alopecia areata with tofacitinib is recommended due to its effectiveness in reducing hair loss on the head, body, and nail involvement with few reversible side effects.



Abstract N°: 387

The stress-related biological parameters in patients suffering from post-COVID telogen effluvium

Katarzyna Tomaszewska*[1], Julia Ławniczak[1], Bartłomiej Tarkowski[1], Aleksandra Słodka[1], Anna Zalewska-Janowska[1]

[1]Medical University of Lodz, Łódź, Poland

Introduction & Objectives:

Although COVID-19 significantly induces mortality, many of the patients who recovered present other medical problems such as alopecias. Telogen effluvium (TE) is a common alopecia that can be related to events such as acute febrile diseases, including COVID-19. The underlying mechanism is still unclear, however hypothalamic-pituitary-adrenal (HPA) axis as well as brain and hair follicle cross-action is considered in this phenomenon.

The purpose of the study was to evaluate selected biological stress-related hormones such as cortisol and dehydroepiandrosterone sulfate – DHEA-S in patients suffering from COVID-19-induced TE.

Materials & Methods:

The study included 24 Caucasian patients with COVID-19-induced TE. All patients were positively tested for COVID-19 approximately 2-3 months before qualification. Concentrations of biological parameters - cortisol and DHEA-S - were examined in the saliva of 24 patients with TE. The samples were taken twice in 2 weeks, at the same time of the day, before brushing teeth and on an empty stomach. The concentration of cortisol and DHEA was analyzed using ELISA commercial kit according to the manufacturer's instructions. Results obtained from two independent samples were expressed as mean value ± standard error of the mean (SEM) and then referred to the norms provided by the test manufacturer. The reference ranges for cortisol and DHEA-S were 3.0 – 10.0 ng/ml and 0.2- 2.5 ng/ml, respectively.

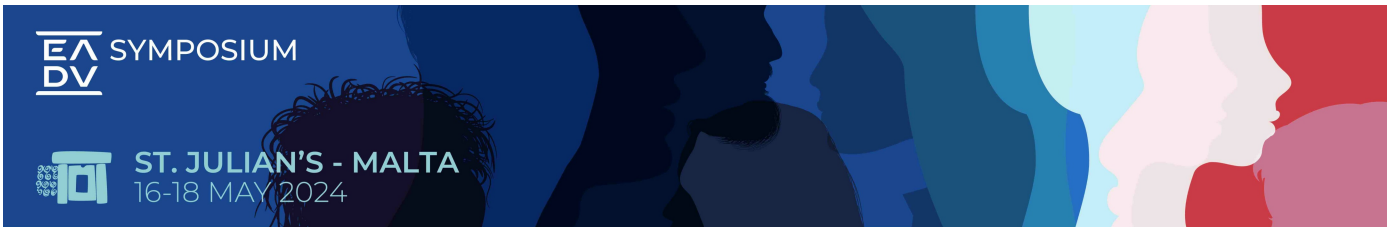
The study was approved by the Research Ethics Committee of the Medical University of Lodz (RNN/168/22/KE). Written informed consent was obtained from the participants.

Results:

Our analysis documented that 19 out of 24 patients had elevated concentrations of salivary cortisol (79,2%), whereas the elevated concentration of salivary DHEA-S was indicated in 21 patients (87,5%). 17 patients out of 24 (70,8%) had elevated both cortisol and DHEA-S concentration. Interestingly, there were no results below the reference value. Endocrinological causes of hypercortisolemia and elevated DHEA-S were excluded during the examination.

Conclusion:

Our results indicate that abnormalities in the levels of stress hormones related to the functionality of the HPA axis may be involved in the pathogenesis of COVID-19-induced TE. This observation confirms the significant role of psychological stress in the pathogenesis, development, and course of disease. Stress coping techniques should be considered to be implemented next to traditional therapy to boost the effectiveness of TE treatment and prolong the remission time of the disease. Further studies may be required to estimate the role of the HPA axis in COVID-19-induced TE.



Abstract N°: 394

Which laboratory/ultrasonographic parameters affect the severity of hirsutism?

Hoda Rahimi[1], Majid Kashi[2], Zohreh Tehranchinia[1], Roya Zeinali*[3], Mojgan Sharifan[4]

[1]Beheshti University of Medical Sciences, Skin Research Center, Tajrish, Iran,[2]Tabnak, Tehran, Iran, [3]Iran University of Medical Sciences, Dermatology, Tehran, Iran, [4]Iranian Institute for Health Sciences Research, Health Metrics Research Center, Tehran, Iran

Introduction & Objectives:

Hirsutism is associated with other androgen-dependent signs/symptoms. This study was designed with the aim of a comprehensive investigation of laboratory and ultrasonographic findings in hirsute women and their probable association with the “severity” of the disease.

Materials & Methods:

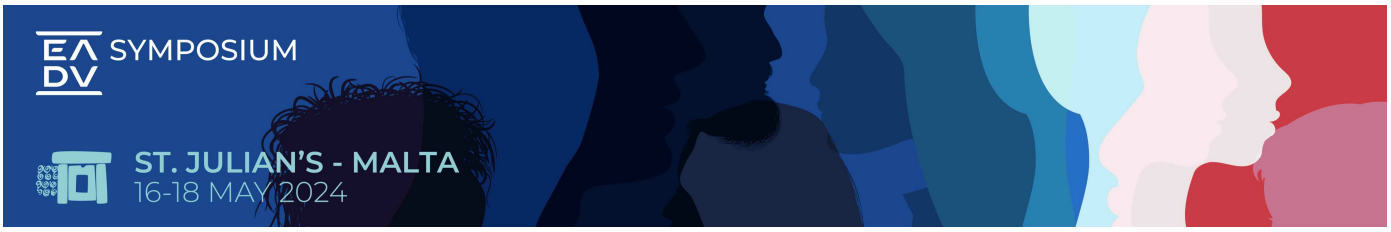
This cross-sectional study included 123 hirsute women. Comprehensive medical history of each patient was recorded, and a broad physical examination was performed by a single dermatologist. Ferriman–Gallwey score was used to evaluate the hirsutism severity. Pelvic ultrasonography was done by a single radiologist for each patient, and serum levels of the follicular stimulating hormone (FSH), luteinizing hormone (LH), LH/FSH ratio, prolactin, thyroid-stimulating hormone, total testosterone, dehydroepiandrosterone sulfate, 17-alpha-hydroxyprogesterone, and cortisol were measured. The association of hirsutism severity and these paraclinical parameters was investigated.

Results:

A statistically significant association was observed between polycystic ovary disease (PCOD) and the severity of hirsutism. A past medical history of PCOD was found to cause more severe forms of hirsutism in the involved patients as well. The presence of hormonal abnormalities was also significantly associated with the severity of hirsutism.

Conclusion:

More than half of the hirsute patients have endocrine abnormalities and/or PCOD. These two disorders are associated with the severity of hirsutism.



Abstract N°: 424

Comprehensive Treatment Approach for Onychogryphosis in a 78-Year-Old Male with Coexisting Comorbidities: A Dermatological Case Study

Grigore Curcubet[1], Bianca Denisa Stoian[1], Gritco Irina[1], Iulia-Maria-Teodora Leulescu[1], Mircea-Stefan Tampa[1, 2], Simona Roxana Georgescu[1, 2]

[1]Victor Babeș Hospital, Dermatology, București, Romania, [2]Carol Davila University of Medicine and Pharmacy, Dermatology, București, Romania

Introduction & Objectives:

Onychogryphosis, characterized by abnormal thickening and curvature of the toenails poses a significant clinical challenge, often requiring intricate management strategies. In today's era of socioeconomic prosperity, it is uncommon to encounter such pronounced nail modifications, making this case particularly noteworthy. This case report examines a treatment approach for onychogryphosis in a 78-year-old male with peripheral vascular disease and type II diabetes mellitus, aiming to contribute valuable insights to the dermatological community.

Materials & Methods:

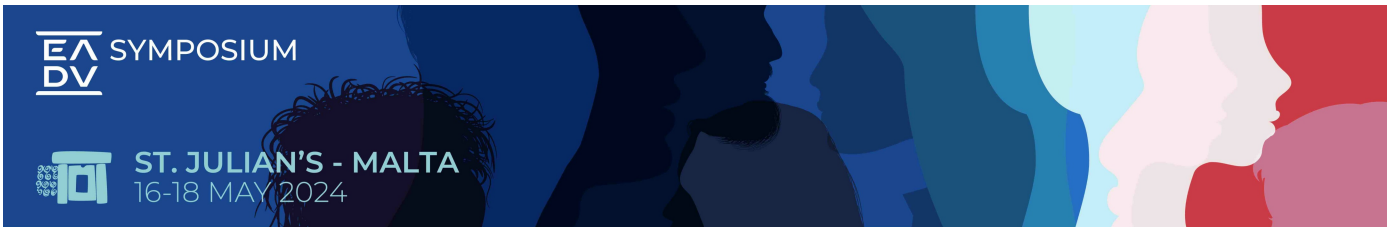
The primary objective was to assess the effectiveness of a treatment regimen involving keratolytic preparation, combined with meticulous trimming in a controlled hospital setting. Additionally, we aimed to document improvements in nail structure and patient quality of life, underscoring the importance of avoiding surgical procedures to minimize complications and accelerate the recovery process. The treatment comprised in the application of a specialized preparation containing urea and salicylic acid over several days, followed by precise nail trimming. Regular follow-up examinations systematically monitored the patient's progress.

Results:

The treatment regimen demonstrated remarkable improvements in the onychogryphotic nails, which measured an extraordinary 10 cm in length. Reduction in thickness, correction of curvature, and enhanced overall nail integrity were observed.

Conclusion:

This clinical case study concludes that a multidisciplinary approach, including podiatric care, emollient therapy, and patient education, can successfully manage onychogryphosis. The presentation of such a profound case underscores the need for ongoing discussions within the dermatological community, promoting advancements in the care of patients with complex nail disorders.



Abstract N°: 446

Chemical straightening products: assessment of a common practice and its effects on the scalp

Sara Ben Salem[1], Mounia Benkaraache[1], Siham Dikhaye[2], Nada Zizi[2]

[1]University Mohammed VI, Department of Dermatology, Venereology and Allergology, Oujda,[2]Laboratory of Epidemiology, Clinical Research and Public Health Faculty of Medicine and Pharmacy of Oujda, University Mohammed The first, Department of Dermatology, Venereology and Allergology, University Mohammed VI, Oujda

Introduction & Objectives:

Chemical straightening products are becoming increasingly popular and have become very trendy. They can be applied by professionals in hair salons or at home by purchasing the product easily online. However, the safety of these cosmetics is questioned due to their content of formaldehyde and glutaraldehyde. The aim of our study is to assess the practices and knowledge of users regarding these products.

Materials & Methods:

This is a descriptive cross-sectional study conducted in May 2023 through a questionnaire

Results:

We collected data from 88 individuals with a clear female predominance (gender ratio F/M = 7.8) and an average age of 28.8 years. The majority, 57%, reapply the chemical straightening product every 6 months. The frequency is quarterly in 3% and annually in 23%. 47% use a product with formaldehyde, 30% without formaldehyde, and 20% are unaware of what it is. However, only 9% check the composition of the product before use. Prices vary widely depending on the hair salon and the product. The average duration of the effect on the hair is 6 months. Adverse effects reported by users include hair loss (75%), brittle hair (36%), dandruff (35%), irritative dermatitis (12%), and allergic reactions (10%). Only 5% are aware of the carcinogenic risk of formaldehyde inhalation, and 43% wear a mask during product application. All users reported never consulting a doctor before using these products. 44% are very satisfied with the results, and 56% are moderately satisfied. Moreover, 79.5% stated they could stop using the product if they were better informed about the risks and dangers involved.

The cosmetic industry places great emphasis on physical appearance. There is a wide range of hair products, including chemical straightening products, which are highly demanded by consumers. Permanent hair straightening aims to permanently straighten the hair, and since it only affects the hair shaft, new hair will retain its original shape, requiring repeated straightening.

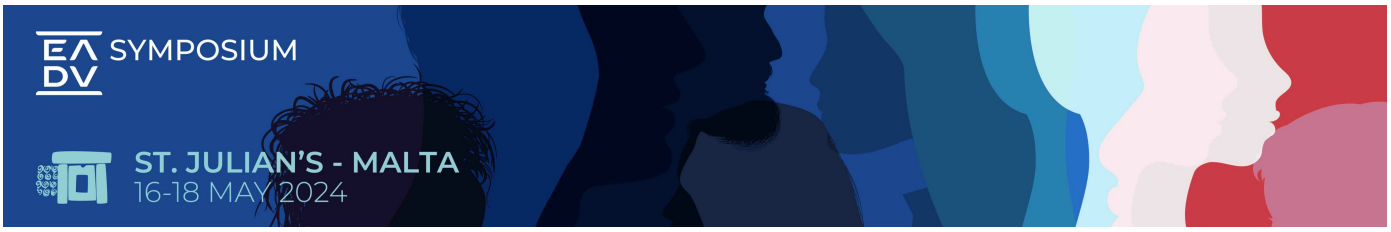
According to the European Cosmetics Directive, the maximum allowed concentration of formaldehyde in finished cosmetic products is 0.2%. However, there are chemical straightening products with very high formaldehyde concentrations from foreign countries at low prices. New Brazilian straightening products without formaldehyde may be proposed but with lower efficacy.

Concerns about formaldehyde stem from its adverse effects with repeated and regular application, including itching, burns, scalp scarring, thinning of the hair shaft (due to alterations in the chemical structure of keratin and hair fibers), discoloration, hair loss, and allergic reactions. Formaldehyde can also cause severe damage to the upper respiratory tract for both the user and the professional and poses a carcinogenic and teratogenic inhamation risk

Conclusion:

This study highlights the importance of educating the population about the risks associated with the use of chemical

straightening products.



Abstract N°: 494

Chemotherapy induced nail abnormality - Muehrcke's nails

Irena Komljenović*[1], Aleksandra Bukvić Šajinović[2], Milos Nisavic[2]

[1]Dom zdravlja "Novi Sad", Novi Sad, Serbia, [2]Medical Faculty in Novi Sad, Novi Sad, Serbia

Introduction & Objectives:

Drug-induced nail abnormalities, particularly associated with chemotherapeutics like docetaxel, are known but not extensively reported in the medical literature. One such rare manifestation is Muehrcke's nails, characterized by apparent leuconychia, white lines parallel to the lunula, and their unique feature of fading under pressure. The objective is to contribute valuable clinical information on this uncommon manifestation, distinct from the more prevalent Melanonychia, Beau lines and Onychomadesis observed post-chemotherapy. Muehrcke's nails, first described in 1956, are typically associated with hypoalbuminemia, indicating a possible vascular origin with damage to the nail bed. In this case report, we present a 77-year-old male patient who developed Muehrcke's nails following docetaxel chemotherapy.

Materials & Methods:

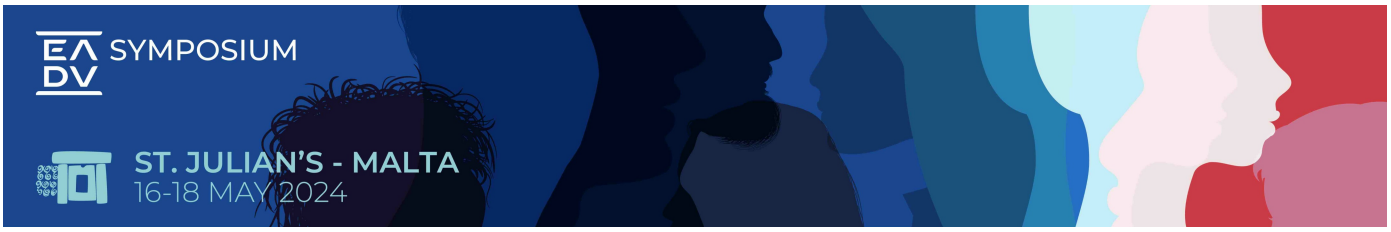
Our case involves a male patient who underwent surgery for prostate cancer in 2015, followed by adjuvant chemotherapy in the following weeks. In 2021, he experienced a recidive with bone metastasis, leading to the administration of docetaxel in 2023. Three weeks post-treatment, the patient developed nail changes consistent with Muehrcke's nails, displaying apparent leuconychia and white lines parallel to the lunula.

Results:

Upon examination, the differential diagnosis included other nail abnormalities such as Beau lines, Mee's lines, and Terry lines. Even though Melanonychia is more common presentation following the treatment with chemotherapeutic agents, in our case clinical and physical examination aimed the diagnosis to Muehrcke's nails. The distinctive feature leading to the conclusive diagnosis of Muehrcke's nails was the observed fading of nail changes under pressure.

Conclusion:

Muehrcke's nails should be considered in the differential diagnosis of drug-induced nail abnormalities following chemotherapy. This case report emphasizes the importance of recognizing diverse presentations, especially those less commonly reported, for accurate diagnosis and management. While no specific therapy exists for Muehrcke's nails, addressing the underlying cause—in this case, the completion of docetaxel treatment—typically results in the spontaneous resolution of the nail changes. This report contributes valuable clinical insights to the understanding of docetaxel-induced Muehrcke's nails, paving the way for enhanced awareness and recognition within the medical community.



Abstract N°: 535

Short Anagen Syndrome^ Case Reports and role of Phychological Treatment

Marta Hladun*[1]

[1]Lviv, Privit Clinic, Lviv, Ukraine

Short Anagen Syndrome: Case Reports and Role of Phychological Treatment

INTRODUCTION

Short anagen syndrome (SAS) is a condition in which hair does not grow long, clinically characterized by persistently short fine hair since birth. The common parent's complaint is that the hair does not grow long and that it has never been cut. Parents usually perceive it in children around 2-7 years of age. It is a benign disease of the hair cycle. We report 2 cases of SAS in a 6-year-old girl and 5 -year-old girl.

CASE REPORT

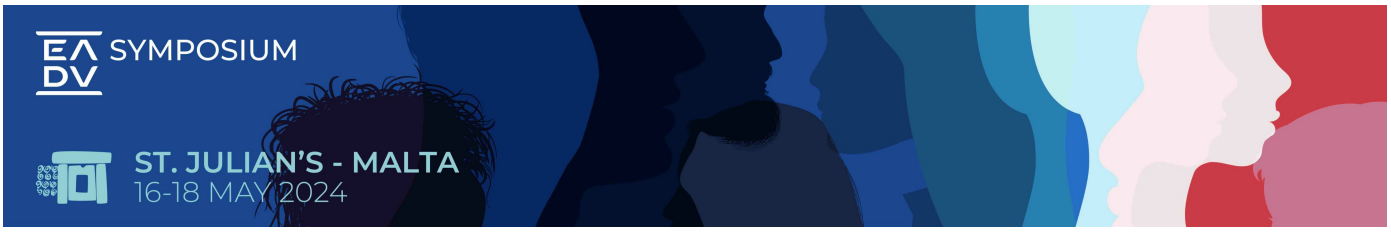
A healthy 6-year-old girl presented a history of short hair since birth. The mother reported poor hair growth and that the girl had never needed a haircut. Their family history was negative for hair loss or hair diseases. Upon examination, the patient was well-developed and did not present any abnormality except for short, blond, and thin hair. The pull test was positive. Body hair was normal, as was the rest of the physical examination (level of ferritin, TSH, genetic analysis, level of vitamin D3). Trichogram shows anagram-telogen ratio (66:34).

The other patient - a 5-year-old girl, has a history of short hair since birth. The patient has atopic dermatitis. After 2 years, the patient had scoliosis, and after genetic consultation, the doctor established a diagnosis of acromegaly and SAS. The pull test was positive, examination of ferritin level, and TSH was normal. The level of vitamin D3 was below the normal level. Trichogram Anagen-telogen ratio (63:37). I directed that both patients and their families have psychological symptoms, including anxiety, depression, low self-esteem, sadness, and worry. In our clinical, we recommend seeking help from a psychologist.

DISCUSSION

Short anagen hair syndrome is a condition where the anagen phase is shortened, and subsequently, there is an increase in the number of telogen hairs. The disease is congenital and is thought to be sporadic. Clinically, the patients are not able to grow long hair and present with increased shedding. The condition is usually benign; nevertheless, associations with the tricho-dental syndrome and acrocephalia have been reported. The characteristic clinical image and the finding of short (less than 6 cm long) telogen hairs with a tipped point at the pull test or trichogram make the diagnosis. Topical minoxidil may be an effective treatment for SAS; however, a slow, spontaneous improvement is typical. CONCLUSION

The therapy showed that biotin with topical minoxidil is an effective treatment for SAS. SAS has strong psychological, emotional, and social impacts on the affected children and their caregivers. One of these patients and her family have undergone a course of psychotherapy. And we note better results of treatment. Due to the small sample of patients, it is difficult to note. Still, it is possible that with the addition of psychotherapy to correct the emotional and mental state of the patient, we will get better clinical results of therapy.



Abstract N°: 629

Celiac disease and alopecia areata in a child: an uncommon association

Fikri Chaimaa[1], Bendaoud Layla[1], Maryem Aboudourib[1], Ouafa Hocar[1], Said Amal[1]

[1]Faculty of medicine and pharmacy Cadi Ayad Marrakech, dermatology departement, Hospital University Mohamed VI Marrakech, Marrakech, Morocco

Celiac disease and alopecia areata in a child: an uncommon association

Introduction & Objectives:

Alopecia areata is an extremely common autoimmune condition affecting hair. It has been reported in association with many other conditions. Herein we report a case of a girl presented with AA and celiac disease.

Case report:

11-year-old girl, from a consanguineous marriage, followed since the age of 7 for celiac disease, confirmed by biology and histology, putted on a gluten-free diet. Has presented for 3 years with episodes of patchy alopecia concomitant with discontinuation of the diet, and regressed after reintroduction. on clinical examination, the patient presented with alopecic plaques on the scalp, with no involvement of the eyelashes, eyebrows or other areas. On dermoscopy, we noted activity signs consisting of blackheads, broken hairs and exclamation mark hairs. we prescribed minoxidil topic combined with dermo corticoids, and insisted on the benefits of a strict gluten-free diet.

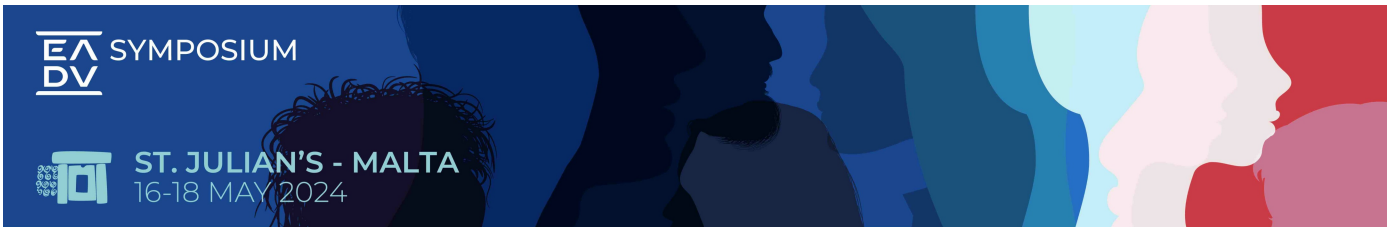
Results:

Alopecia areata (AA) is one of the most common forms of hair loss in childhood. It affects approximately 1-2% of the population. The etiology of AA is as yet unclear, but it is presumed to be a result of an autoimmune reaction, it tends to cluster in the same individuals with other autoimmune disorders, such as Addison’s disease, autoimmune thyroiditis, atrophic gastritis, systemic lupus erythematosus. Recently, there have been reports in the literature of an association between AA and celiac diseases, which have both responded to gluten-free diets . In our patient, the withdrawal of gluten from the diet strictly coincided with the complete regrowth of scalp and other body hair. Spontaneous regrowth is considered extremely rare in patients of this age, It is therefore possible that gluten free diet can in the same way determine a beneficial effect on both conditions. However, there are no controlled studies specifically addressed to this subject except for dermatitis herpetiformis.

Alopecia areata may constitute the only clinical manifestation of celiac disease and that the association between these two conditions is a real one because the observed frequency of association is much greater than can be expected by chance. It is suggested that antigliadin and antiendomysial antibodiesshould be included in the work-up of patients with alopecia areata.

Conclusion:

Alopecia areata and celiac disease is an uncommon association , more research are needed to improve care and support.



Abstract N°: 651

Nail Changes in Pemphigus: A Systematic Review

Nicole Lau*[1], Clara Ng[1], Ellie Choi[2], Shihuan Valencia Long[2], Nisha Suyien Chandran[2]

[1]National University of Singapore Yong Loo Lin School of Medicine , Singapore,[2]National University Hospital Singapore, Singapore

Introduction & Objectives:

Pemphigus, autoimmune mucocutaneous bullous disorder, characterized by acantholysis resulting from autoantibodies targeting epithelial cell surface antigens. Studies reflect the presence of nail manifestations in some patients and suggest a potential correlation with clinical severity. This study examines the overall prevalence and characterizes diverse manifestations of nail changes in pemphigus.

Materials & Methods:

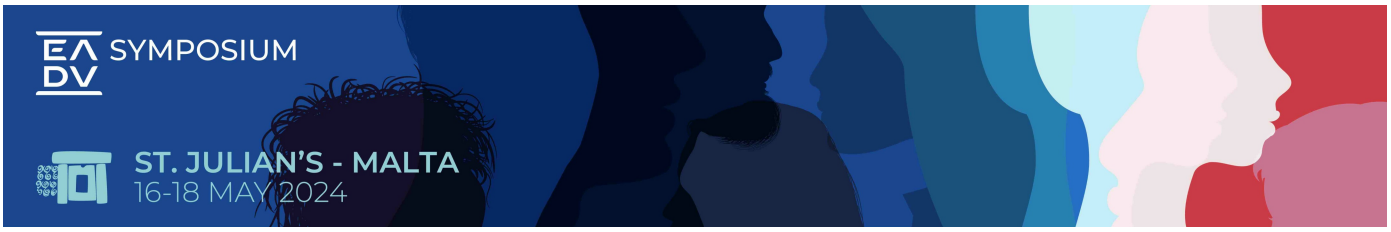
We searched on Cochrane, MEDLINE, EMBASE and LILACS from 1990 to 26 June 2023 for studies reporting different nail changes in pemphigus patients. Data was collected and pooled to obtain proportions of prevalence of nail changes in patients with pemphigus. Risk of bias was assessed with the Joanna Briggs Institute Checklist.

Results:

Of 321 studies screened,** 14 studies (n=1208) were included. Of the 9 analysed studies, pooled number of patients with pemphigus having nail changes was 455/1140 patients. Pemphigus vulgaris (n= 833) and pemphigus foliaceous (n = 161) were the 2 most common patient groups studied Paronychia (n=185) and Beau Lines (n=104) were the most common nail changes identified. Pooled prevalence of nail disease in pemphigus patients was 0.389 (number of studies; [95% CI] : n= 9; [0.160, 0.680], with high heterogeneity between studies (I^2 =95.0%, p < 0.001). Nail changes exhibited varied temporal relationships with disease onset and flares, either preceding, being concomitant or following these events.

Conclusion:

Nail changes in pemphigus, particularly pemphigus vulgaris and pemphigus foliaceus, may be under recognised. Observations regarding temporal associations and potential correlations with disease severity highlights the diagnostic and prognostic implications of nail changes in the pemphigus. Limitations of this study includes study heterogeneity and potential bias. Further research to establish the correlation of presence and severity of nail changes on the overall disease course would be useful.



Abstract N°: 656

A multicentric, spectrophotometric analysis to determine the role of the follicular SULT1A1 sulfotransferase gene in minoxidil conjugation, its prevalence, and regulation by oral acetylsalicylic acid and topical retinoic acid - Deciphering the mystery behind the variable therapeutic efficacy of topical minoxidil.

Aseem Sharma*[1]

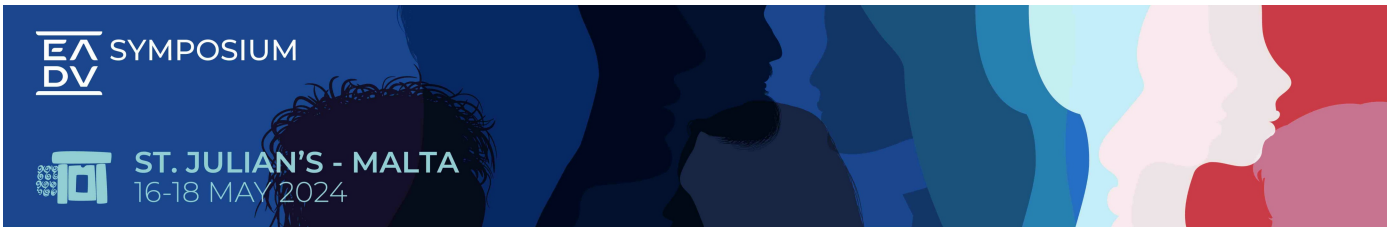
[1]Skin Saga Centre for Dermatology, Dermatology, Mumbai, India

Introduction & Objectives: Topical minoxidil is the only licensed topical drug for androgenetic alopecia, with a clinical response rate between 30% and 40%. This interindividual variability has been likened to incongruous sulfation of minoxidil. We attempted to discern the same, through the follicular sulfotransferase enzyme system, predominantly SULT1A1, and did accessory studies to understand its regulation.

Materials & Methods: This transverse, cross-sectional study was done over three years (and ongoing), over multiple centers across the globe, involving 164 patients. A standardized 1 x 1 cm2 scalp area was taken from androgenic alopecia patients. 10 anagen bulbs, with intact outer root sheaths were plucked, and bio-assayed in a patented solution. Spectrophotometric analysis was done at 405 nm, and a lower optical density (OD) limit of <0.4 arbitrary units (AUs) was pre-allocated, for SULT1A1. We have, in prior studies, demonstrated that these levels predict minoxidil response. An OD < 0.4 AU was defined as a Minoxidil 'non-responder'. Two accessory cohorts were studied, for therapeutic effects with oral acetylsalicylic acid (SA) and topical retinoic acid (RA), for 15 and 5 days, respectively.

Results: Of clinical significance, 40.83% subjects (n=49/120) showed a low prevalence point for SULT1A1 level, which was matched for distributions of sex (higher in males), age, clinical grade of hair loss, and family history. Sulfotransferase activity predicted treatment response with 93% sensitivity and 83% specificity. Of the upregulatory cohort with RA, 60% of subjects (n=12) initially predicted to be non-responders to topical minoxidil were converted to responders following 5 days of RA application. The downregulatory cohort had subjects on OTC acetylsalicylic acid (75-81mg). In this accessory cohort, 54.16% (n=13/24) were initially predicted to be responders to minoxidil. Following 14 days of SA, only 29.16% (n=7/24) of the subjects were predicted to respond to topical minoxidil, rendering 25% (n=6/24) subjects non-responsive to minoxidil.

Conclusion: This is the first study to elucidate the interaction between topical minoxidil, retinoids and oral acetylsalicylic acid, and is a pioneer prevalence study for the follicular sulfotransferase enzyme, an efficacy predictor and biomarker, and thus provides a pathway for development of future alopecia treatments. It paves the way for 'boosting' the sulfotransferase enzyme system for better patient-reported outcomes, where necessary.



Abstract N°: 668

Evaluation of the Outcomes of Matricectomy Procedures for Ingrown Toenails: A Real Life Data

Ayda Acar*[1], Ayris Öztürk[1], Berke Köklüce[1], Bengu Gerceker Turk[2], Tugrul Derelİ[2]

[1]Ege University, Medical Faculty, Dermatology, Izmir, Türkiye,[2]Special office, Izmir, Türkiye

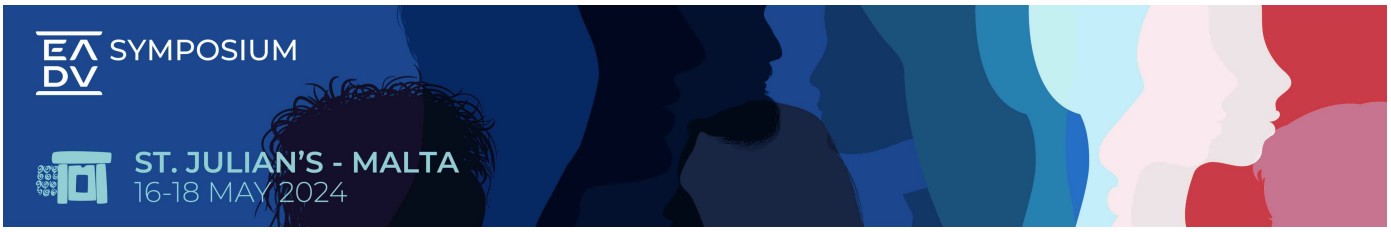
Evaluation of the Outcomes of Matricectomy Procedures for Ingrown Toenails: A Real Life Data

Introduction & Objectives: Matricectomy is an effective treatment method for ingrown toenails. We aimed to examine the outcomes of matricectomy procedures performed for ingrown toenails at a dermatology clinic, including patient characteristics, recurrence rates, post-operative complications, and patient satisfaction associated with these procedures.

Materials & Methods: Records of patients who underwent surgical or chemical matricectomy for ingrown toenails in our dermatological surgery unit between 2009 and 2023 were retrospectively reviewed. For accessible patients, post-procedure satisfaction was assessed through telephone interviews and recorded.

Results: A total of 300 matricectomies in 164 patients were examined in the study. A chemical matricectomy was performed on 97.6% (160) of the 164 patients, while 2.4% (4) of patients underwent surgical matricectomy alone and 20.7% (34) underwent both surgical and chemical matricectomy. There was no significant difference in healing times and prolonged pain between surgical, sodium hydroxide, and phenol matricectomy. No significant relationships were found between the development of side effects and comorbid conditions, the presence of diabetes mellitus, previous nail procedures and having surgical, phenol or sodium hydroxide matricectomy. The order of recurrence rates from lowest to highest was combined surgical and chemical, sodium hydroxide, and phenol matricectomy, but this difference was not significant.

Conclusion: We found no significant differences in recurrence rates, side effects, or patient satisfaction among surgical, sodium hydroxide, and phenol matricectomy procedures.



Abstract N°: 694

Platelet-rich plasma and topical minoxidil 5% in the treatment of severe alopecia areata: report of two cases (an update)

Lidiya Todorova[1]

[1]Medical University of Plovdiv, Dermatology and Venereology , Plovdiv, Bulgaria

Introduction & Objectives:

Alopecia areata (AA) is an autoimmune non-scarring hair-loss that can affect any hair-baring area of the body. Corticosteroids are considered first line traditional treatment, but their long-term use may lead to undesirable side effects. Platelet-rich plasma (PRP) is an autologous product, which includes concentrated platelets with rate above the baseline. They secrete growth-factors which stimulate hair follicle proliferation. Topical minoxidil has been used for mild cases of AA and other types of non-scarring hair loss. However, the combination of both treatments hasn't been scientifically researched. We report two cases showing significant hair-growth results in severe multifocal AA with the use of platelet-rich plasma and 5% topical minoxidil.

Materials & Methods:

Standard laboratory tests, including complete blood count and differential platelet count, electrolytes, serum creatinine, liver function tests and uric acid, were done at first visit. PRP was prepared by the double-spin methodology and then injected in the scalp in the subfollicular plane. The procedure was performed once monthly for a total of six sessions. Patients were advised to use 5% topical minoxidil twice daily for six months. Follow up (FU) was done one month after the last PRP session. Trichoscopy was performed with Dino-Lite Edge Digital Microscope AM7915MZT(R7), x70 magnification at first visit, base line (BL), and at FU. Evaluation of the severity of hair loss was done with Severity of Alopecia Tool (SALT).

Results:

Case 1

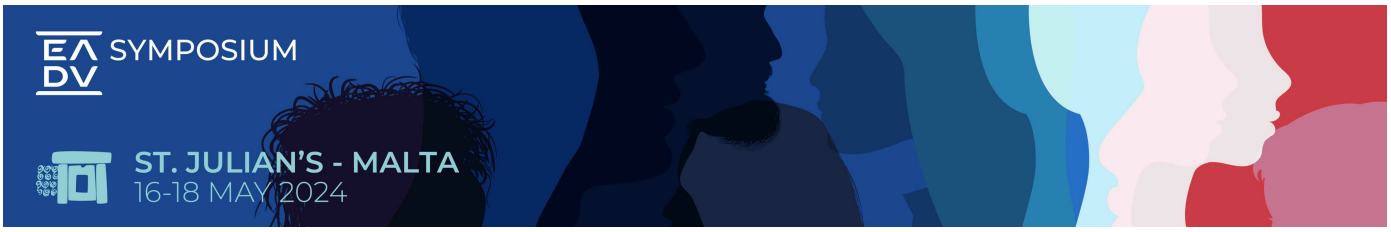
A 38-year-old female patient had first episode of AA with estimated SALT 65. The duration of the episode was 12 months. Standard laboratory tests were within the norms. Trichoscopy revealed black dots, exclamation mark and vellus hairs. After the treatment, at FU SALT was 4,5. Trichoscopy showed upright regrowing hairs, pigmented terminal hairs and increased hair shaft thickness. Three months after the last PRP application, the patient had SALT 0.

Case 2

A 49-year-old female, with a recurrent severe AA for 6 months had SALT 82%. Standard laboratory tests were within the norms. Trichoscopy depicted yellow dots, black dots, broken hairs and vellus hairs. After treatment, at FU SALT was 19 and trichoscopy showed upright regrowing hairs and terminal hairs.

Conclusion:

Various therapeutic modalities have been used for AA, showing limited efficacy and leading to undesirable side effects. Full hair regrowth was observed in couple of studies exploring PRP effectiveness in patients with AA. Topical minoxidil 5% has been considered of no benefit for patients with severe AA. It is usually recommended for mild AA. The combination of both therapies has not been explored yet for AA. The presented clinical cases show effective results in patients with severe multifocal AA. Further controlled trials with more subjects are needed to validate the reported results.



Abstract N°: 750

ethnic melanonychia and dark phototype

Ihssane Biygjoine[1], Maryem Aboudourib[1], Ouafa Hocar[1], Said Amal[1]

[1]university hospital Mohammed 6, department of dermatology and venerology, Marrakech, Morocco

Introduction & Objectives:

Melanonychia is the hyperpigmentation of one or several nails due to stimulation of pigment production by melanocytes located in the distal nail matrix. It is common in patients with pigmented skin. Melanonychia can be mono- or polydactylic, as in our patient's case, and may involve almost the entire nail.

Melanonychia is a frequent reason for consultation in practice, whether of melanocytic or non-melanocytic origin.

Case report:

A 54-year-old female patient, with no particular pathological history and no medication intake, who presented for polydactylic melanonychia evolving since the age of 16 and progressively increasing in number and diameter. Nail mycological test were negative twice, and HIV serology was negative. An oral anti-mycosis treatment was prescribed without improvement. The diagnosis of ethnic melanonychia was adopted. The patient remains under surveillance.

Discussion:

Ethnic melanonychia accounts for 17.1% of all melanonychias, and is characterized by a polydactylic involvement with the presence of a regular band of grayish (66% of cases) or brownish (34% of cases) color.

Two mechanisms are responsible for ML: melanocytic activation without an increase in the number of melanocytes (functional ML) or melanocytic proliferation: lentigo, nevus, and melanoma.

Functional melanonychia has multiple causes, such as ethnic melanonychia, which affects 77% of black-skinned subjects from the age of 20, rising to 95% by the age of 50; it is often multiple, well-limited, of varying diameter and darker or lighter color. Ethnic MLs are mainly found on the fingers most involved in grasping (thumb, index and middle fingers) or those subject to trauma (big toe). The number and thickness of these MLs increase with age. In contrast, the frequency of ML is 1% in fair-skinned subjects.

Pathophysiologically, there is no increase in the number of melanocytes, ML being linked to functional stimulation of mature melanocytes, with transfer of pigment from melanocytes to keratinocytes.

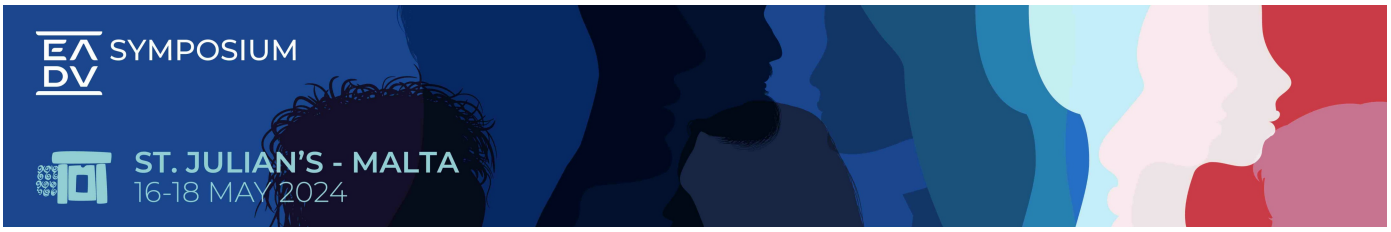
Basal pigmentation intensity is variable. Fontana coloration is sometimes necessary when this pigmentation is not very pronounced, allowing visualization of melanocyte dendrites. Elsewhere, the pigmentation is clearer, sometimes extending to the entire epithelium. The low number of melanocytes contrasting with this clear pigmentation is a good sign of benignity.

Melanocytes are difficult to see on standard colorations, and immunostaining with HMB45 and Melan-A will enable them to be visualized, finding between 4 and 10 melanocytes (mean 7.7) per mm, in basal and suprabasal positions, and noting the absence of proliferation.

The pathologist diagnoses melanocytic activation, but is unable to specify the cause. Surveillance is recommended, as the potential for degeneration of pigmented areas into melanoma is high. A biopsy should be performed if there is the slightest doubt (morphological change or appearance of a darker band).

Conclusion:

Ethnic melanonychia is common, and malignant subungual melanoma is the most important differential diagnosis, and must be excluded in all cases. Dermatoscopy may be useful. If no biopsy is performed, clinical follow-up is required at frequent intervals.



Abstract N°: 763

Assessment of the efficacy and tolerability of a topical formulation containing caffeine and Procapil 3% for improvement of male pattern hair loss

Aniseh Samadi[1], Zahra Saffarian[2], Mehdi Moazzami Goudarzi[1], Saman Ahmad Nasrollahi[1], Alireza Firooz*[1]

[1]Tehran University of Medical Sciences, Center for Research & Training in Skin Diseases & Leprosy, Tehran, Iran,[2]Tehran University of Medical Sciences, Dermatology department of Imam Khomeini complex hospital

Introduction & Objectives:

Androgenetic alopecia (AGA) is one of the most common hair loss pattern featured by the alteration of terminal follicles to vellus ones. A combination of complementary and alternative therapies can provide suitable treatment in many cases. This study evaluated the efficacy and tolerability of a topical formulation containing caffeine and Procapil for improving male pattern hair loss.

Materials & Methods:

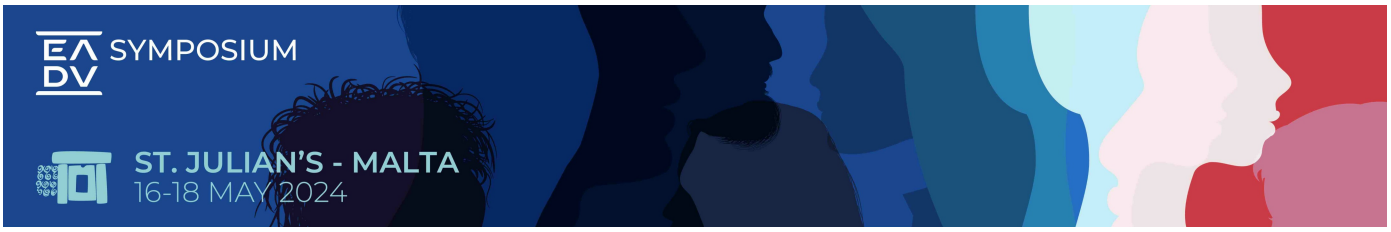
During a 12-week study, twenty eligible males with a mean age of 36.8 (range: 18-57, SD=9.01) years were received daily topical treatment containing Procapil TM 3%, caffeine, and zinc PCA. Standard scalp photography, comb test, and trichoscale assessment were performed before the treatment and also 6 and 12 weeks later. Additionally, adverse reactions and patients' satisfaction were documented.

Results:

After 12 weeks of treatment, combing test demonstrated a 26.9% reduction in hair fall count (p-value=0.026) and trichoscale assessment showed 53% increase in terminal/vellus hair ratio (p-value= 0.028), however, no statisticaly significant change was detected in total hair count/density at weeks 6 and 12. At weeks 6 and 12, 79% and 84.2% of participants rated their hair loss as "improved" or "very improved", respectively. No adverse effects were observed or reported during the course of treatment.

Conclusion:

This study found that treatment with a topical formulation containing caffeine and Procapil 3% for 12 weeks appears to be effective in treating AGA in men.



Abstract N°: 808

The Relationship Between the Severity of Hair Loss and Emotions Following FUE Hair Transplantation: Personal Experience

Piotr Turkowski[1]

[1]Klinika OT.CO - Chirurgia plastyczna & Medycyna estetyczna, Warszawa, Poland

Introduction & Objectives:

In our analyzed group of 100 male patients with male androgenetic alopecia who sought consultations for FUE hair transplantation, we assessed the severity of hair loss using the Hamilton-Norwood scale.

Materials & Methods:

Among these patients, 51 fell into the 1-3 category, 31 were in the 4-5 range, and 18 had scores of 6-7. Specifically, there were 6 individuals with severity level 1, 11 with level 2, 34 with level 3, 23 with level 4, 8 with level 5, 13 with level 6, and 5 with level 7 hair loss.

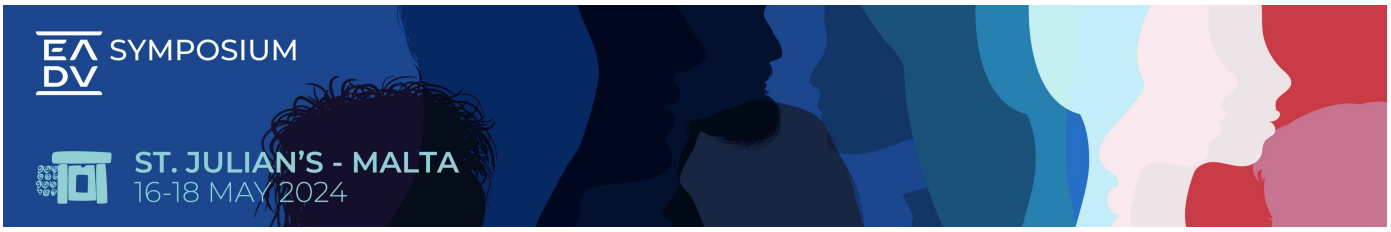
Results:

Before their consultation, only 12 out of 100 had previously been treated for androgenetic alopecia using pharmaceuticals, meaning they had taken finasteride for over a year or were currently under dermatologist-prescribed finasteride treatment. Additionally, 25 individuals used topical minoxidil 5% once a day, with none using minoxidil 5% twice daily, and 30 people underwent local treatments such as mesotherapy or platelet-rich plasma therapy.

These findings highlight that effective treatment is often initiated too late, as a significant number of men seeking hair transplant procedures have already reached an advanced stage of hair loss or are unsuitable due to the donor area’s condition.

Conclusion:

patients are often unaware of the possibility of early and effective treatment for androgenetic alopecia. Moreover, treatment is frequently misused, leading to advanced hair loss. Hair loss severity beyond stage 6 is borderline for transplantation qualification, as we recommend not harvesting more than 3500 grafts in a single session due to reduced graft survival and its impact on the transplanted hair’s condition. Therefore, we suggest undergoing two sessions, with the possibility of harvesting grafts from another body area like the beard. Patients achieve the best results when they have been on effective treatment for approximately six months, followed by a single transplantation session when the hair loss severity ranges from 2 to 4 according to the Hamilton-Norwood scale on the day of the procedure.



Abstract N°: 810

Comorbidities in Patients with Hair Loss: A Gender-Based Analysis

Katarzyna Osipowicz*[1], Patrycja Łazicka[1]

[1]Klinika OT.CO - Chirurgia plastyczna & Medycyna estetyczna, dermatology, Warszawa, Poland

Introduction & Objectives:

Hair loss is a nonspecific symptom that can occur as an independent condition or as a symptom accompanying systemic disorders. The objective of our analysis was to present the comorbidity profile among patients undergoing treatment for hair loss in our clinic.

Materials & Methods:

A total of 1037 patients with hair loss symptoms were included in the analysis, comprising 417 (40.2%) females and 620 (59.8%) males. Comorbidities were present in 392 (37.8%) patients, with 246 individuals (23.7% of the analyzed population and 62.8% of those with comorbidities) being female. In contrast, males with comorbidities accounted for 14.08% of the analyzed population and 37.2% of those with comorbidities. The difference in the distribution of comorbidities between genders was statistically significant ($p<0.000001$).

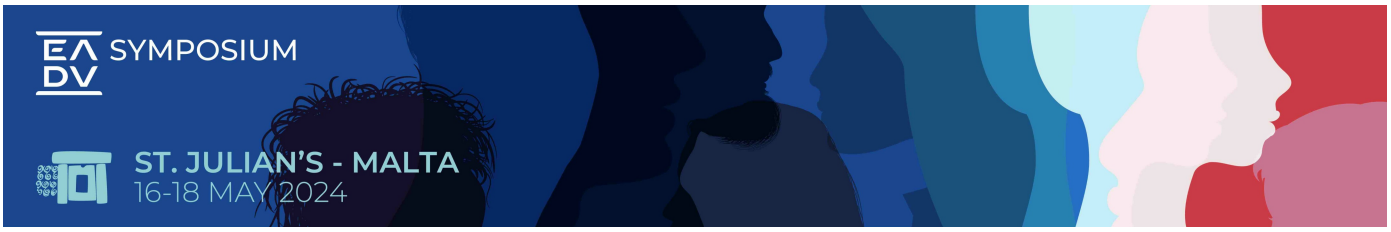
Results:

Hypothyroidism was diagnosed in 88 (8.5%) participants, with the majority (89.8%) being female ($p<0.000001$). Hypertension was identified in 45 participants (4.34%), with 55.6% of them being female. COVID-19 within the six months prior to the study was experienced by 82 participants (7.9%), with 62.2% being females ($p=0.000023$).

Additionally, the most frequently noted diagnoses included: skin diseases other than hair loss (n=110, 10.6% of participants, with 55.4% being female, $p=0.000585$), immune system-related diseases (n=99, 9.5%), endocrine diseases, including Hashimoto's disease (n=80, 7.7%, with 87.5% being female, $p<0.000001$), psychiatric disorders, primarily depression (n=43, 4.1%), metabolic disorders, including glucose metabolism disturbances (n=39, 3.75%), gastrointestinal diseases (n=24, 2.3%), diseases of the reproductive system (n=24, 2.3%, with 100% being female, $p<0.000001$), neoplastic diseases (n=15, 1.4%, with 80% being female, $p=0.001566$), respiratory diseases (n=10, 1.0%), hematological diseases (n=10, 1%), neurological disorders (n=9, 0.9%), cardiovascular diseases (n=8, 0.8%, with 87.5% being female), urological diseases (n=7, 0.7%), infectious diseases (n=4, 0.4%), and genetic defects (n=4, 0.4%).

Conclusion:

In summary, certain systemic disorders are significantly more prevalent among patients with hair loss, particularly among females, highlighting the need for more comprehensive diagnostic evaluations in such cases



Abstract N°: 811

The Influence of Depression on the Severity of Hair Loss at Diagnosis

Katarzyna Osipowicz*[1], Patrycja Łazicka[1]

[1]Klinika OT.CO - Chirurgia plastyczna & Medycyna estetyczna, dermatology, Warszawa, Poland

Introduction & Objectives:

Feelings of exhaustion, reduced motivation, and neglect of physical appearance, all characteristic of depression, can significantly disrupt the daily lives of those suffering from this condition. It can be hypothesized that the presence of depression has a substantial impact on the diagnosis and treatment of co-occurring illnesses. The objective of our study was to assess whether patients with a history of depression present with more advanced hair loss at the time of seeking dermatological evaluation compared to patients without a history of depression.

Materials & Methods:

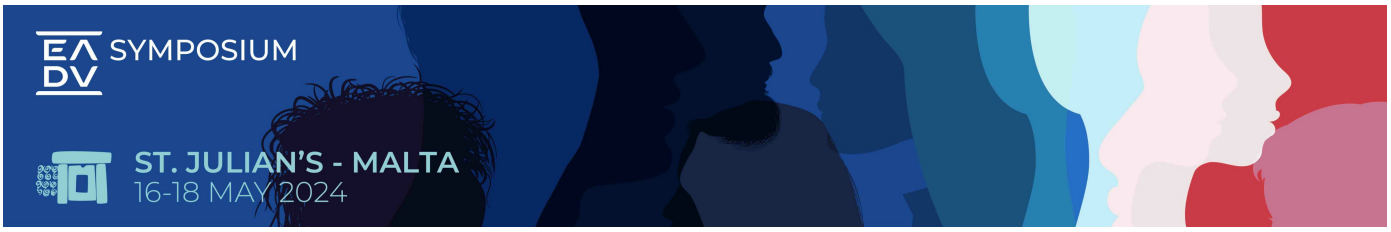
Among 454 patients who underwent disease severity assessments using the Hamilton scale, 13 (3%) had a history of depression. The distribution of patients with and without depression concerning disease severity at the initial visit was as follows: I – 8% vs. 1%, II – 23% vs. 18%, IIa – 8% vs. 1%, IIv – 0% vs. 0%, III – 38% vs. 34%, IIIa – 8% vs. 4%, IIIv – 8% vs. 8%, IV – 0% vs. 17%, IVa – 0% vs. 1%, IVv - 0% vs. 1%, V – 8% vs. 10%, Va – 0% vs. 0%, VI – 0% vs. 4%, VII – 0% vs. 1%.

Results:

The difference in distribution did not reach statistical significance based on the chi-square test. However, after assigning ordinal ranks and applying the Mann-Whitney U test, significance was achieved at $p<0.05$. The median severity level was III in both subgroups, with a range of I-V for individuals without depression and an interquartile range of II-III for those with depression.

Conclusion:

No significant differences were observed in either the Ludwig scale or the SALT scale, likely due to the limited availability of results in these scales among the depressed patients, with only 14 out of 36 having recorded results in the Ludwig scale and only 2 in the SALT scale.



Abstract N°: 895

Onychomatricoma: a rare nail tumor to consider

Asmaa Elkissouni[1], Fatima-Zahra Elfatoiki[1], Hayat Skalli[1], Hali Fouzia[1], Soumia Chiheb[1]

[1]Chu ibn rochd, dermatology, CASABLANCA, Morocco

Introduction :

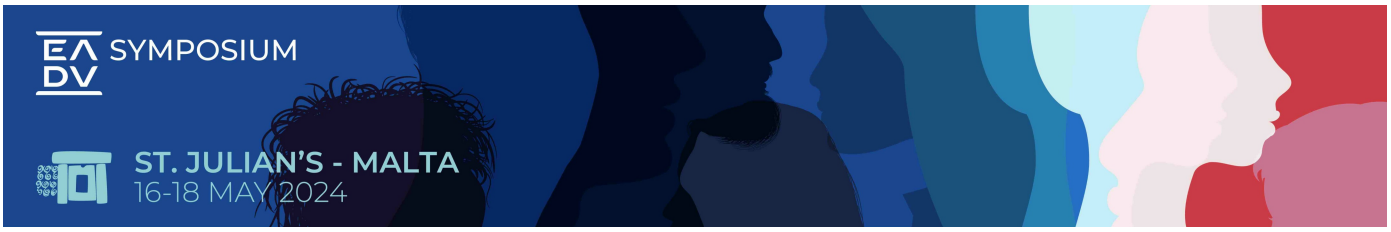
Onychomatricoma is a rare fibroepithelial tumor of the nail matrix, whose clinical aspects are multiple, which can simulate other pathologies including onychomycosis, we report here a case

Observation:

A 52 year old female patient, a baker by profession, was consulted for a pigmented band on the right thumb nail which has been evolving for 2 years and which was treated as onychomycosis without any improvement. The clinical examination found a pigmented lateral longitudinal band with the presence of parallel grey and white lines, as well as a lateral pachyonychia with a swelling of the lateral edge of the nail and a pseudo Hutchinson sign, dermoscopic examination of the nail plate showed leukonychia, hairpin vessels, and the presence of digitations with honeycomb cavities at the free edge of the nail, A surgical exploration with complete exeresis of the lesion was proposed. The histological assessment showed a fibro epithelial proliferation, invaginations of the epithelium and epithelial-connective digitations in favour of an onychomatricoma without any sign of malignancy

Conclusion:

Onychomatricoma is a rare benign tumor derived from the nail matrix, affecting mainly the fingernails. Several clinical aspects have been reported in the literature, such as total or lateral pachyonychia, Xanthonychia, Leuconychia or even melaonychia, as well as the presence of parallel ridges and furrows. In coronal view, onychomatricomas take on a Wood Worm appearance with a hyper curvature, and dermoscopic examination of the free edge is essential, with thickening of the free edge, hyper keratosis under the nail, and the presence of characteristic thread-like cavities and honeycomb cavities, surgery is of interest to make a positive diagnosis, to eliminate differential diagnoses, essentially other ungual tumors, and to treat the disease



Abstract N°: 932

The role of changes in the immune system in the formation and progression of Lichen planopilaris

Reis Mukhamadiev[1]

[1]Research Institute of Dermatology, Moscow, Russian Federation

Introduction & Objectives:

The immune system plays a pivotal role in the initiation and advancement of lichen planopilaris (LPP), a primary lymphocytic cicatricial alopecia characterized by the destruction of stem cells in the bulge region of hair follicles. Clinical manifestations include extensive whitish scarring areas devoid of follicular orifices and the presence of tufted hair follicles, often accompanied by symptoms like scaling, itching, burning of the scalp, and increased hair fragility. Given the irreversible damage associated with LPP, prompt therapeutic intervention is crucial for optimal outcomes.

Materials & Methods:

PubMed articles published in the last decade were discovered using search terms like “Lichen planopilaris,” “Lichen planopilaris pathogenesis,” “Lichen planopilaris immunology,” and “JAK inhibitors.” A detailed analysis of each article was conducted to evaluate alterations in the regulation of the immune system.

Results:

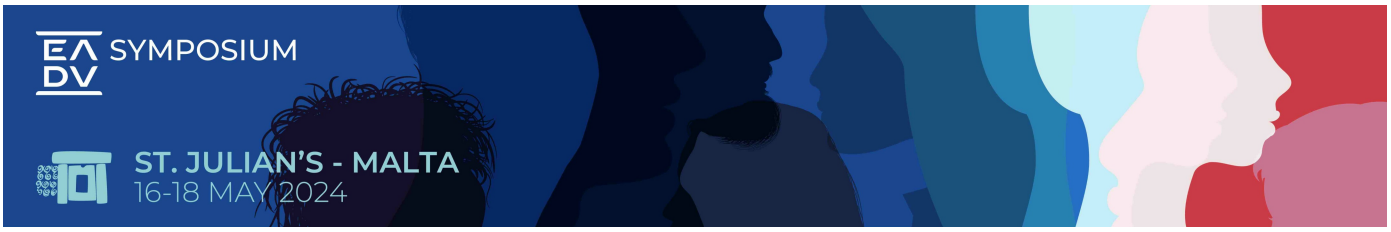
In cases of LPP, there is a localized inflammatory reaction surrounding the hair follicles, marked by the infiltration of immune cells, particularly T lymphocytes, into the affected regions. Alterations in the production and equilibrium of cytokines, crucial signaling molecules in immune responses, have been noted in LPP. Typically associated with a T-helper 1 (Th1) immune response, LPP involves the activation of specific immune cells and the release of cytokines like interferon-gamma (IFN-γ) and tumor necrosis factor-alpha (TNF-α). Elevated levels of these pro-inflammatory cytokines contribute to the inflammatory cascade and tissue damage in affected areas.

M. Harries et al. demonstrated a significant increase in the levels of CD8+, in the distal hair follicle epithelium and perifollicular mesenchyme in LPP compared to controls. CD8+ T cells, a type of immune cell, are thought to play a role in the destruction of hair follicles in LPP. For CD8+ cells to carry out their specific targeting and destructive actions in LPP, interaction and signal reception from Th cells are necessary.

The JAK-STAT signaling pathway and immune responses are interconnected. The interplay between various cytokines and the JAK-STAT pathway influences the differentiation and development of immune cells, exerting immunoregulatory effects in the process.

Conclusion:

The study of the impact of changes in the regulation of the immune system on the pathological processes of the skin is of broad interest in shaping an understanding of the pathophysiological mechanisms and their role in the progression of diseases. Additionally, comprehending these alterations opens possibilities for the application of new therapeutic agents for treatment. The use of a new generation of drugs as like JAK inhibitors represents a novel and evolving approach to managing LPP, offering potential alternatives for individuals who may not respond well to traditional treatments. As with any medical intervention, decisions about the use of JAK inhibitors should be made in consultation with healthcare professionals based on the individual’s specific circumstances and the available clinical evidence.



Abstract N°: 1056

Hair loss and vitamin D

Ouissal Hormi[1], Zerrouki Nassiba[2], Dikhaye Siham[2], Zizi Nada[2]

[1]Department of Dermatology Venereology and Allergology, CHU Mohammed VI, Oujda Morocco., Faculty of Medicine and Pharmacy Oujda, University Mohammed Premier, Oujda Morocco, Oujda, Morocco, [2]Department of Dermatology Venereology and Allergology, CHU Mohammed VI, Oujda Morocco., Laboratory of Epidemiology, Clinical Research and Public Health Faculty of Medicine and Pharmacy, Mohammed Premier University, Oujda, Morocco, Oujda, Morocco

Introduction & Objectives:

Hair loss is a complex and multifactorial phenomenon that is garnering increasing interest in the field of medical research.

Malnutrition is a global health issue resulting from a deficiency in proteins and micronutrients; inadequate consumption can lead to a lack of adequate nutrients to support normal hair renewal.

Vitamin D plays an important role in dermatology due to its anti-inflammatory and immunomodulatory properties, as well as its regulation of keratinocyte differentiation and proliferation. It also affects the hair cycle, and its role in hair loss is the subject of ongoing research.

Materials & Methods:

This is a descriptive retrospective study conducted over a period of 3 years, from January 2021 to January 2024. It includes patients who presented with hair loss and underwent vitamin D level assessment.

Results:

During this study period, 292 patients presented with hair loss. The mean age of the patients was 36 +/- 8.9 years, ranging from 9 to 58 years old. There was a predominance of female patients (69%).

The patients were divided into two groups based on the type of alopecia: scarring and non-scarring. Non-scarring alopecia was subdivided into six subtypes: androgenetic alopecia, found in 37.7% of patients, telogen effluvium in 25.7%, alopecia areata in 6.9%, tinea capitis in 13%, and traction alopecia in 7.9%.

Among the scarring alopecia cases, frontal fibrosing alopecia was present in 4.1%, discoid lupus in 1.3%, and folliculitis decalvans in 3.4%.

A vitamin D deficiency, defined as a level between 10-30 ng/ml, was found in 33.4% of patients, while insufficiency, defined as < 10 ng/ml, was found in 41% of patients. 25.6% had normal levels of vitamin D.

Vitamin D deficiency was more frequent among patients with androgenetic alopecia (69%) and telogen effluvium (27%), while insufficiency was predominant among patients with non-scarring alopecia.

Hair loss is considered a common issue in the dermatological community with a profound negative psychological and emotional impact on patients.

Vitamin D is a fat-soluble vitamin synthesized in the keratinocytes of the epidermis. The two main sources of vitamin D are cutaneous production during sunlight exposure and oral intake, including dietary sources and supplementation. It is closely involved in various signaling pathways of hair follicle growth and differentiation.

Most studies show an inverse relationship between serum vitamin D levels and non-scarring alopecias such as telogen

effluvium, androgenetic alopecia, alopecia areata, trichotillomania, and scarring alopecia.

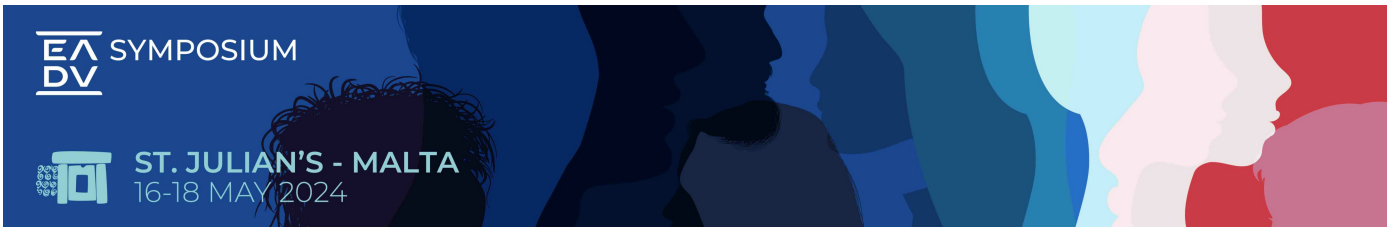
A cross-sectional study conducted by Kondrakhina et al evaluated the levels of trace elements and vitamins in plasma and found that patients with androgenetic alopecia had deficiencies in trace elements and vitamins, including vitamin D.

Conic et al also found that serum vitamin D levels were lower in patients with lichen planopilaris, telogen effluvium, alopecia areata, and androgenetic alopecia compared to controls.

Thus, two systematic reviews and meta-analyses published in 2018 demonstrated that patients with alopecia areata have a higher prevalence of vitamin D deficiency than the control group.

Conclusion:

While the direct relationship between vitamin D deficiency and hair loss may not be as clear-cut as for other conditions, screening for vitamin D deficiency may be relevant in the context of hair loss to identify potential contributing factors and to optimize overall scalp and body health.



Abstract N°: 1178

Clinico-Pathological Attributes, Trichoscopic Patterns, and Perifollicular Mast Cell Expression among Patients with Alopecia Areata in a Tertiary Care Hospital in Northeast India.

Shikha Thakur[1], Debastuti Bharali[1], Anita Marak[1], Biswajit Dey[2]

[1]North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Dermatology & STD, Shillong, India, [2]North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Pathology, Shillong, India

Introduction & Objectives: Alopecia areata (AA) is characterized by a T-lymphocyte-mediated autoimmune response against the hair follicle. Trichoscopic evaluation is a valuable tool for examining alopecia areata. AA is a disease of multifactorial origin, and a key area of investigation is the role of perifollicular mast cells in maintaining the physiological hair follicle immune privilege. However, their exact role in the pathogenesis is yet to be known. CD117 or c-Kit (a tyrosine kinase receptor) is highly expressed on the surface of mast cells making it a reliable marker for mast cell identification. This study aims to explore the various clinico-histopathological and trichoscopic features and involvement of perifollicular mast cells in pathogenesis of AA.

Materials & Methods: Study participants included clinically diagnosed AA cases over 6 months period. Twenty age and sex-matched healthy individuals served as controls for trichoscopy. Epidemiological data, clinical and family histories, and information on other associated diseases were collected. Trichoscopy was performed on alopecic patches. The Severity of Alopecia Tool (SALT) score was utilized to determine the extent of scalp involvement. Skin biopsy for histopathology was done from the alopecic margin. Statistical analysis was done by using software Bluesky Statistics

Results: Twenty alopecia areata patients were included in the study. There were 14 (70%) males and 6 (30%) females. The mean age at time of onset of disease was 30.1 years. The majority of patients (15, 75%) had a duration of disease less than 6 months, while four (20%) had a duration of >2 years. All the cases (20) had patch form of scalp alopecia areata. The most common AA morphological type seen was 'Patch-multiple' with 11 cases (55%) while 9 cases (45%) had 'Patch-single' type. 2 patients (10%) had associated co-morbidities (hypothyroidism) while only 3 patients (15%) had associated nail findings (fine pits). Body hair loss was not seen in any of the patients.

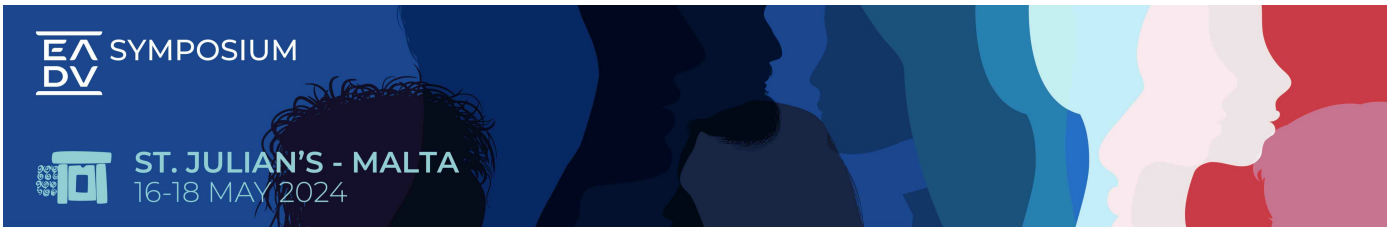
The findings of trichoscopic examination have been elucidated in table format below.

TRICHOSCOPIC FEATURES	NO. OF CASES (%)	NO. OF CONTROLS (%)	P-VALUE
YELLOW DOTS	19 (95)	2 (10)	<0.001
BLACK DOTS	17 (85)	0	NA
SHORT VELLUS HAIRS	19 (95)	0	NA
BROKEN HAIRS	18 (90)	0	NA
TAPERING HAIRS	10 (50)	0	NA
COUDABILITY HAIR	6 (30)	0	NA
PIGTAIL HAIR	7 (35)	0	NA

Histopathological examination revealed lymphocytic perifollicular infiltrate in all cases (20, 100%). Anagen hair follicles were seen in 13 cases (65%), catagen hair follicles in all cases (100%), and telogen hair follicles in 19 cases (95%). Amongst anagen hair follicles, 12 cases showed staining of '1-24%' (60%) while the remaining 8 (40%) cases showed no

staining with CD117. Amongst catagen hair follicles, 14 cases showed staining of ‘1-24%’ (70%) while the remaining 6 (30%) cases did not stain positively with CD117. Amongst telogen hair follicles, only 1 case (5%) showed no CD117 staining while the majority of cases (15, 75%) stained positively at ’25-49%’. 3 cases showed staining of ‘1-24%’ (15%) while remaining 1 (5%) case had staining of ’50-74%).

Conclusion: The pathogenesis of alopecia areata is multifactorial. Our study tries to correlate clinical, histopathological and peri follicular mast cell expression in patients of alopecia areata



Abstract N°: 1278

Anti-JAK: between safety and quality of life

Yousef Almheirat[1], Lamis Elyamani[1], Nassiba Zerrouki[1], Siham Dikhaye[1], Nada Zizi[1]

[1]Mohammed VI University Hospital of Oujda, Department of Dermatology, Morocco

Introduction & Objectives:

Alopecia is an autoimmune disease characterized by recurrent episodes of hair loss, which can lead to a decrease in quality of life. An increased prevalence of anxiety and mood disorders has been reported in patients with alopecia. Janus kinases (JAK) are tyrosine kinase proteins that bind to type 1 and type 2 cytokine transmembrane receptors and mediate cellular responses to many cytokines and growth factors. The use of JAK inhibitors in the treatment of alopecia has been explored in recent years. Baricitinib, a JAK inhibitor, was approved by the FDA on June 13, 2022, for the treatment of severe alopecia.

Materials & Methods:

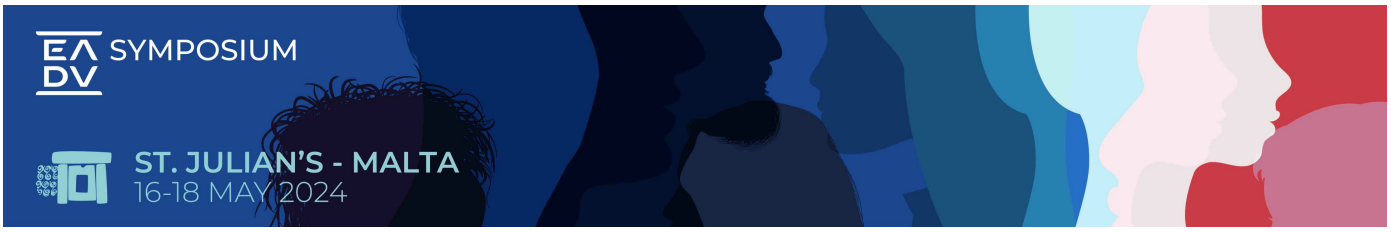
This is a cross-sectional analytical study conducted using an anonymous questionnaire designed with Google Forms software, which was distributed via social networks to patients with alopecia under JAK inhibitor treatment. The questionnaire included 47 questions aimed at evaluating the quality of life of patients after the introduction of JAK inhibitors.

Results:

Fifty-eight patients responded to the questionnaire. The patients were from 13 countries on 4 different continents: Europe, Asia, Africa, and America. The mean age was 34.8 [±15.19] years with a female predominance; 65.5% of the respondents were female. In terms of education, 82.6% of the patients had a university degree. The JAK inhibitors used by the patients were Baricitinib in 55.2%, Tofacitinib in 31%, and Deuruxolitinib in 13.8%. The average cost of treatment was $80 per month. Sixty-two percent of the patients were willing to purchase the treatment even if it cost more. The treatment with JAK inhibitors was suggested by a dermatologist in 51.7% of cases; the rest of the patients self-medicated after noticing a spectacular result of the treatment on social networks. As for the duration of treatment, 45% of patients had been under treatment for over a year, 34% for more than six months and less than a year, and 21% for less than six months. Regarding adverse effects, 93.1% of patients were aware of the adverse effects before starting the treatment, and 31% of patients reported adverse effects, including acne and dyslipidemia. Eighty-six percent of patients were willing to take and continue the treatment despite prior knowledge of the risk of cancer associated with the treatment, particularly lymphomas and pulmonary neoplasms. As for patient satisfaction, 79.3% were satisfied to very satisfied. In terms of treatment effectiveness, 51.7% of patients reported hair regrowth between 75-100%. Regarding the impact on quality of life, it was evaluated using the Dermatology Life Quality Index (DLQI). The average DLQI before starting treatment was 22, corresponding to a significant effect on patients' lives (group 1). The average DLQI after 6 months of treatment with JAK inhibitors was 5, indicating a low effect on patients' quality of life (group 2), with a statistically significant difference between the two groups (p <0.001

Conclusion:

Our study has demonstrated a spectacular improvement in the quality of life of patients with alopecia areata after treatment with JAK inhibitors. Further studies are needed to evaluate their long-term safety



Abstract N°: 1451

A historical case of onychogryphosis in an elderly individual

Bouchra Amine[1]

[1]CHU IBN ROCHD, Dermatology, casablanca, Morocco

Introduction & Objectives:

Onychogryphosis is a nail disorder that can damage nail plates, usually caused by repeated minor trauma to the foot. Onychogryphosis of the toe is commonly seen in clinical practice; however, optimal treatment of the condition is still the subject of debate.

Case report:

This is a 70-year-old patient, bedridden, with a history of alcohol and tobacco use, presenting with severe thickening, yellowing, and abnormal growth of both toes for the past 30 years. The condition has recently become more painful and encroached upon the second toe, making walking and wearing shoes difficult. The diagnosis was onychogryphosis based on the clinical appearance and was treated with nail avulsion with phenol matricectomy.

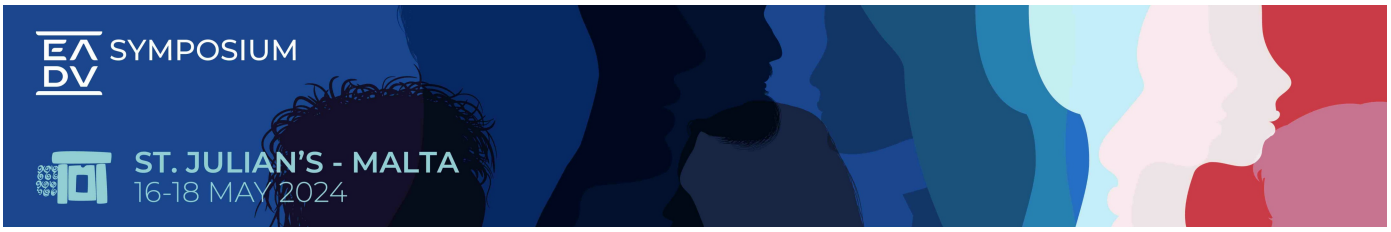
Discussion:

Onychogryphosis or onychogryposis is a hypertrophy of the nail plate, resembling a ram's horn, which can occur in elderly or homeless patients presenting signs of neglect.

This dystrophy reflects both hyperplasia of the nail bed and thickening of the nail plate, which becomes brownish, opaque, and marked by transverse streaks. The symptoms of onychogryphosis can manifest as thickening that makes the nail difficult to cut, deformation leading to bulging inwards and outwards, a change in color becoming irregular, and covered with multiple streaks, or a long, curved nail resembling a ram's horn that usually distorts the big toe.

Complications can result from onychogryphosis, such as the occurrence of ingrown nails, paronychia, secondary onychomycosis, inability to cut the nail due to increasing hypertrophy of the plate, and more rarely, subungual gangrene. The goal of treatment is to avoid excessive pressure on the nail bed. For patients with good vascularization, nail avulsion or removal of the thickened nail plate is recommended. For elderly patients with comorbidities such as vascular insufficiency or diabetes, conservative methods are used, including mechanical avulsion with nail clippers after chemical avulsion. In case of failure or recurrence, treatment is based on nail avulsion followed by matricectomy using phenolization.

Onychogryphosis is an important nail disorder to recognize and treat due to the pain and sequelae, including limitations in walking, with a risk of transformation in case of chronic irritation of the surrounding soft tissues. Depending on the patient's comorbidities, onychogryphosis can be managed conservatively or surgically.



Abstract N°: 1513

Gel Nail Polish: Side Effects and Recommendations

Hasnae Saddouk[1], Bensalem Sara[1], Kaddar Khadija[1], Nada Zizi[2], Siham Dikhaye[2]

[1]Department of Dermatology, Venerology and Allergology, CHU Mohammed VI, Oujda,[2]Laboratory of Epidemiology, Clinical Research and Public Health. Faculty of Medicine and Pharmacy, Mohammed Premier University, Oujda, Morocco, Department of Dermatology, Venerology and Allergology, CHU Mohammed VI, Oujda

Introduction & Objectives:

Gel nail polish has rapidly gained popularity due to its durable finish, easy application, and affordability. However, the potential adverse effects on nail health should not be overlooked. This study aims to investigate the side effects of gel nail polish and provide recommendations to minimize risks and promote safe practices during application and removal.

Materials & Methods:

This is a descriptive cross-sectional study. A 12-question survey was created on Google Forms and shared through social networks, targeting individuals using gel nail polish.

Results:

A total of 104 respondents participated in the survey, with 81 (78%) reporting side effects associated with gel nail polish use. All participants were women aged 15 to 52 years (mean age: 22 ± 5.8 years). Over 43% of them had applied gel manicures more than 10 times in the last 12 months. Eighty-four percent (n=68) experienced side effects after gel nail polish removal, 10% (n=8) while wearing the polish, and 6% (n=5) during application. The duration of wearing the polish ranged from 2 to 3 weeks for 73% (n=59) of the women. A break between gel manicures was reported by 32% (n=26) of participants.

The most reported mechanical/traumatic side effects included nail fragility and thinning (77%), brittle nails (16%), pseudoleukonychia (9%), dyschromia (28%), periungual wounds (63%), and ingrown nails (11%). Six percent (n=5) of participants described allergic reactions, while 27% (n=22) reported infectious adverse effects, including bacterial (n=9), fungal (n=11) confirmed by mycological sampling, and warts (n=2).

No UV-induced lesions were reported in our study. Regarding the carcinogenic risk of UVA lamp use, 58% (n=47) had no idea about this risk, and only 12% (n=10) applied sunscreen before exposing their hands to these lamps.

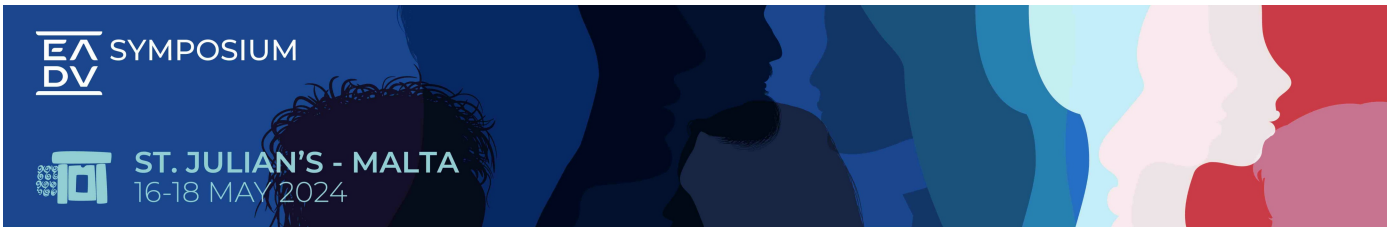
Conclusion:

Gel manicures can damage nails through instruments, the polish used, or the removal method. The observed side effects in our study align with those described in the literature, emphasizing the importance of responsible gel nail polish use to preserve nail health.

Preventive measures include using personal instruments, avoiding cuticle manipulation, refraining from cleaning under the nails with instruments, allowing nails rest periods between gel polish applications, limiting UV exposure, preferring LED, and protecting hands during UV exposure.

The recent advisory from the Academy of Medicine on UVA-emitting lamps used for nail polish drying, classifying them as carcinogenic, recommends applying sunscreen with UVA protection approximately 20 minutes before exposure to the rays. Although no cases of induced skin cancer were reported in our study, the majority of participants did not protect their hands before UVA exposure.

Lack of education leads to the uncontrolled use of gel nail polishes. Prevention of side effects is necessary for safe use.



Abstract N°: 1546

Clinical and trichoscopic evaluation of trichloroacetic acid 35% vs phenol 88% peels in the treatment of alopecia areata

Riham Morsy*[1], Doaa Mahgoub[1], Dina Saadi[1], Solwan El-Samanoudy[1], Sarah Ibrahim[1]

[1]Faculty Of Medicine Kasr Al-Ainy, Cairo University, Dermatology Department, Cairo, Egypt

Introduction & Objectives:

Among alopecia areata (AA) treatments, contact irritants (anthralin) and topical immunotherapies (diphenylcyclopropenone) have been successfully used. Chemoexfoliation can potentially be utilized, with peels acting as irritants and consecutively immunomodulators. Peels -via therapeutic wounding- provoke the release of growth factors and cytokines that may induce hair regrowth. This study aimed to evaluate and compare the efficacy and tolerability of trichloroacetic acid (TCA) 35% and phenol 88% peels in the treatment of patchy AA.

Materials & Methods:

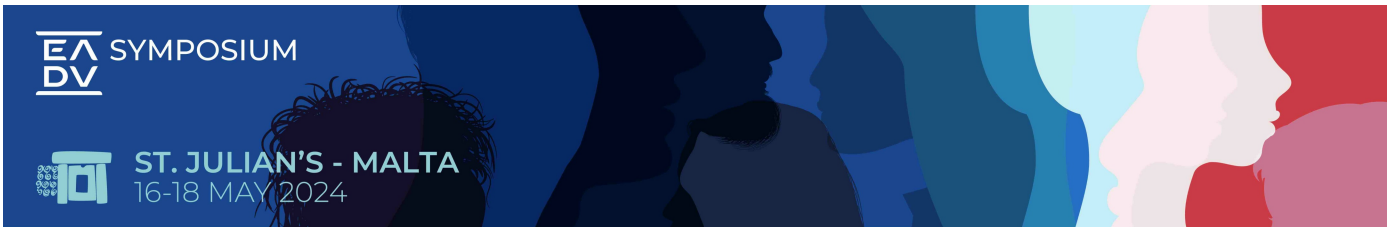
This comparative, randomized, double-blind study enrolled 20 patients with multifocal patchy AA. In each patient, 2 patches were selected and randomized into group I (20 patches: TCA 35%) and group II (20 patches: phenol 88%). A session was performed every 3 weeks for 9 weeks. Response was assessed by two blinded investigators as regards the percentage of clinical improvement, severity of alopecia tool (SALT), and trichoscopic scaled scores for dystrophic and terminal hairs, respectively. Patients were scheduled for follow-up visits over 6 months past treatment cessation.

Results:

A total of 19 patients completed the study and showed significant reduction in SALT score. TCA- and phenol-treated patches demonstrated significant improvement in the percentage of clinical improvement, as well as the trichoscopic scale of dystrophic and terminal hairs. However, TCA was superior to phenol as it showed significantly more reduction in the trichoscopic score of dystrophic hairs and significantly higher increase in terminal hairs. Phenol yielded significantly higher discomfort than TCA. No relapses were detected over the period of follow up.

Conclusion:

Trichloroacetic acid 35% and phenol 88% peels can be considered as effective and safe therapeutic modalities for patchy AA particularly in needle-phobic individuals. TCA 35% represents a treatment of choice in terms of efficacy and tolerability.



Abstract N°: 1583

Needle in a Haystack: Extramammary Paget's Disease as a Very Unexpected Cause of Alopecia

Gabriela Turcu[1, 2, 3], Cătălina-Ioana Naum[1], Andra Dinu[1], Andra Miu[1], Dan Mircioi[1], Roxana-Ioana Nedelcu[2, 3], Brinzea Alice[2, 3], Florentina Pantelimon[2]

[1]Colentina Clinical Hospital, Dermatology I, Bucharest, Romania,[2]Derma360 Dermatology Clinic, Bucharest, Romania, [3]Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Introduction & Objectives:

Extramammary Paget's disease (EMPD) is an infrequent intraepithelial adenocarcinoma predominantly affecting the apocrine-rich anogenital skin and less commonly the axilla. The tumor is rarely encountered in areas without apocrine glands, in which case it is termed ectopic EMPD.

Extramammary Paget's disease typically affects patients over 50 years of age and is more prevalent in Caucasians. It is categorized into primary and secondary disease: primary EMPD originates in the skin, while secondary EMPD associates a primary adenocarcinoma of a different origin in the body.

The mainstay of treatment implies surgical removal, either wide local excision or Mohs micrographic surgery. Non-surgical options range from radiotherapy, photodynamic therapy, cryotherapy and laser ablation to topical treatments like imiquimod or 5-fluorouracil cream.

Materials & Methods: ** We report the case of a 75-year-old female patient who presented for localized, extensive hair loss on the left parieto-temporal region progressing over the past 5 years, treated daily with topical corticosteroids for several months. Physical examination revealed a large alopecic, slightly scaly, well circumscribed plaque measuring almost 10 cm in diameter, with bright erythematous, telangiectatic areas interlaced with crisp white, atrophic regions.

The dermoscopic image showed loss of follicular ostia consistent with cicatricial alopecia, milky-red areas, polarizing white cloud-like structureless areas, a high density of arborizing vessels (attributable to the prolonged use of topical corticosteroids) and sparse glomerular vessels arranged in round clusters.

Results:

Chronic cutaneous lupus erythematosus, maltreated tinea capitis and extended squamous cell carcinoma of the skin were considered as differential diagnosis.

Histopathological and immunohistochemical evaluation established the diagnosis of EMPD (ectopic variant).

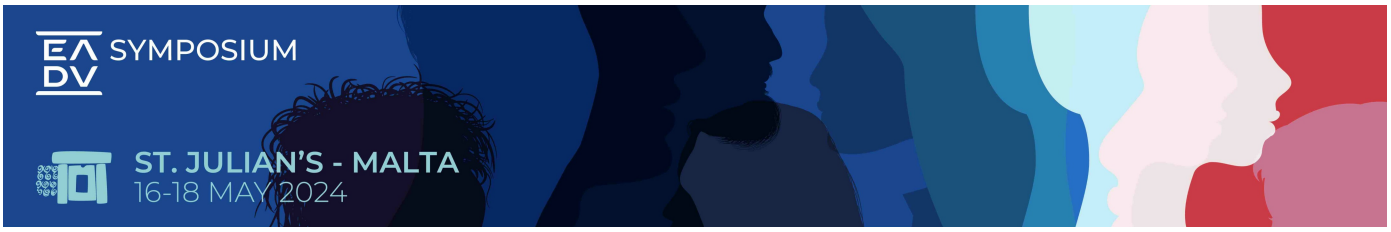
The patient categorically refused any surgical treatment and did not apply Imiquimod cream. However, she continued to come for regular check-ups and several ulcerations of 3 to 7 mm developed in the past year.

Conclusion: ** We opted to present this case to bring forward an extremely rare cause of scarring alopecia. To our knowledge, there have only been 10 cases of ectopic EMPD of the scalp described in the English literature, only half presenting with alopecia and none so substantial in size.

Although the clinical and dermoscopic features were not particular to EMPD, our case displayed some of the previously described findings, notably the 'cloud-like structureless areas' consisting of small, round white clods and unstructured areas which are thought to be relatively specific.

Histopathology and immunohistochemistry are essential in making the diagnosis. Ultimately, it is the patient who decides

whether to follow the therapeutic recommendations; in our case we witnessed an ongoing clinical decline in the absence of a viable treatment.



Abstract N°: 1604

frontal fibrosing alopecia and photoprotection

Loubaris Zineb[1], Amani Fliti[1], Nadia Ismaili[1], Laila Benzekri[1], Karima Senoussi[1], Meriam Meziane[1]

[1]chu avicenne rabat, RABAT, Morocco

Introduction & Objectives:

Frontal fibrosing alopecia is a scarring alopecia of unknown origin. The incidence of FFA seems to increase over time, suggesting a possible environmental trigger. A prospective, descriptive study was carried out over 12 months at the Ibn Sina University Hospital in Rabat, Morocco, with the aim of investigating a correlation between the incidence of FFA and a possible correlation between FFA and the use of sunscreens

Materials & Methods:

The objective was to analyze the frequency and timing of sunscreen use

in patients with frontal fibrosing alopecia in our population. This was a single-center prospective observational study conducted on 38 patients from the hair consultation department over a 12-month period. All consenting patients presenting with fibrosing frontal alopecia

diagnosed clinically, trichoscopically, and histologically in atypical cases.

Results:

A total of 38 patients with a confirmed diagnosis of FFA were included with

25 control subjects. The median age was 53 years. 60.5% were postmenopausal. 68.4% had phototype IV, 28.9% had phototype V and 2.6% had phototype III. 76.3% had linear FFA, 15.7% diffuse and 7.8% pseudo-fringe. 65.7% had eyebrow involvement.

Our study showed that FFA patients used sunscreens more often than control subjects. 84.2% of patients used photoprotection several years before the onset of the disease. The frequency

was an average of one application per day, with patients applying even to the forehead. The type of

photoprotection used was varied

Conclusion:

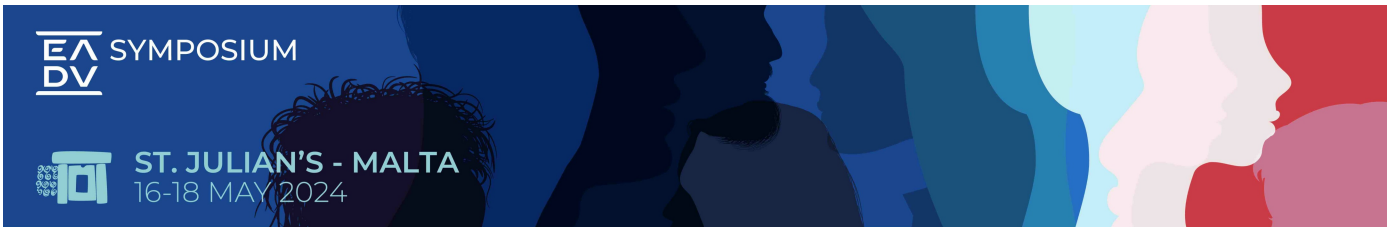
Several studies have suggested that the application of sunscreen to the scalp

may exacerbate the inflammation already present in fibrosing frontal alopecia. The

active ingredients in sunscreens, such as chemical or mineral filters

or mineral filters, can be irritating to the sensitive skin of the forehead and

inflammatory reaction.



Abstract N°: 1698

Presentation of a successful treatment protocol for androgenetic alopecia. A clinical study with 63 patients

Konstantina Mamali[1], Sevasti Afantenou[1], Amalia Tsiatoura[1]

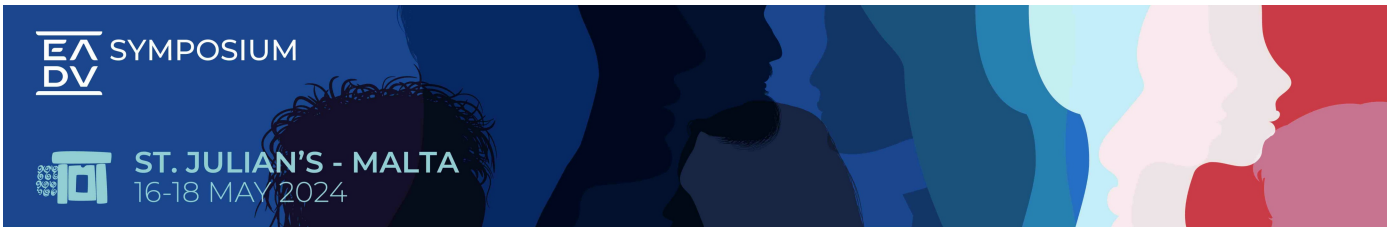
[1]Cosmetic Derma Medicine, Athina, Greece

Introduction & Objectives: Androgenetic alopecia (AGA) is the most common type of hair disorder, affecting both males and females. It is characterized by progressive hair loss, usually in a pattern distribution. Patients suffering from AGA may undergo significant impairment of quality of life. New treatments have been included in the European guidelines promising great effectiveness with minimal side effects. We tested a combination of medical agents and evaluated the outcome over 12 months.

Materials & Methods: Our study was based on the evidence-based (S3) guidelines for the treatment of AGA. We treated 28 post menopause women with mean age 59 y.o. and 35 men with mean age 43 y.o.. The majority of females was stage 2 according to Ludwig scale, while males were classified as stage II-IV in Norwood-Hamilton scale. All patients received a combination treatment consisting of Minoxidil 5% foam/lotion and finasteride 0,25% gel applied both twice daily, minoxidil 5% 2,5mg p.o. once daily as well as mesotherapy with dutasteride 0,025% at 3 monthly intervals. The study duration was 12 months. The evaluation of the patients performed at the beginning of the study as well as every month afterwards and included clinical assessment by the dermatologist, an objective hair count/density method and standardized photo documentation.

Results: All 63 patients responded positively to the treatment admitting high levels of satisfaction regarding the outcome after 12 months. Mean duration of the response was 3 months after treatment initiation. More than 50 patients observed cessation of hair loss after the second month while rough the majority showed thickening of affected hair and enhancement of overall density after 6 months. None of them mentioned relapse during the treatment while 5 of them complained about decrease of effectiveness after the tenth month. Among the most frequent declared side effects were irritating contact dermatitis to topical minoxidil (9/63), mild pain due to mesotherapy injections (40/63) as well as fatigue relating to the intake of minoxidil p.o. (13/63). All patients completed the study and were willing to continue the same treatment protocol.

Conclusion: Aim of the treatment of androgenetic alopecia is not only the stabilization of hair loss, the prevention of progression of hair thinning but also the induction of new hair growth, not to mention the improvement of quality of life of patients. It is highly recommended to find the best-suited individualized therapy, considering the evidence-based guidelines, the efficacy, the practicality for both patient and physician as well as the compliance. Our intention was to present a successful therapy concept, taking into account mainly its effectiveness and safety profile.



Abstract N°: 1742

Alopecia Areata in Austria – Insights into Treatment Landscape and Physician Perspectives

Stefanie Duller*[1], Manfred Windisch[1], Mojgan Hell-Pourmojib[1]

[1]Pfizer Corporation Austria Gesellschaft M.B.H., Wien, Austria

Introduction & Objectives:

Alopecia areata (AA) is an autoimmune disease with a prevalence of ~2% globally. Given that Alopecia areata may have a substantial impact on patients' lives, this survey aimed to gain insights into the treatment landscape of Alopecia areata and physicians' perspectives on this disease.

Materials & Methods:

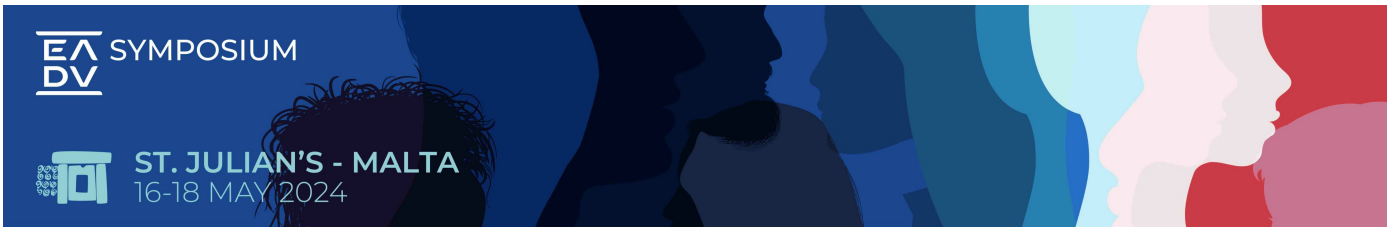
The survey was done by a medical-pharmaceutical market research company and was conducted between 21. August – 22. September 2023 in Austria. Thirty dermatologists nationwide in Austria, either exclusively practicing within a hospital setting (23%), or in private practice (47%) or both (30%), were asked to answer an online questionnaire consisting of open and closed questions. Questions were designed by the sponsor but sent out by the partner agency. The participants were anonymized to the sponsor. The survey was conducted in-line with local data protection regulations and the data were reported as percentage of respondents.

Results:

The survey of dermatologists, who encountered 17 patients with AA in the last year, revealed that more than 80% exhibited the patchy AA, with a ratio of 3 to 7 between adolescents and adults. While in total 50% of the surveyed dermatologists, with the highest proportion from the outpatient sector, perceived AA as a harmless condition, the presence of comorbidities such as thyroid disease, atopic dermatitis, vitiligo, and depression, was thought to justify therapeutic intervention. Dermatologists acknowledged the substantial effect on AA patients´ quality of life and the socio-ecological burden, along with considerations such as the extent of hair loss and disease activity, being the reasons why systemic therapy would be considered for 43% of the patients. However, less than half of these patients received systemic treatment due to refusals by the patients, unfavorable benefit-risk profile, and contraindications. Currently in Austria, the dermatologists predominantly use topical corticosteroids, with twice the frequency in private practice compared to clinics. Treatment behavior differences between dermatologists in private practice and clinics also extend to other topical therapies and JAK-inhibitor use. Further, less than a quarter of respondents use the SALT-score for severity assessment, despite systemic therapies are generally considered by the surveyed dermatologists as indicated from a SALT-score of Ø 20,8.

Conclusion:

The survey underscores the prevalence of AA and associated comorbidities and the impact on quality of life for these patients. Disparities in treatment approaches between dermatologists from private practice and clinics reveal complexities in nuances of AA management. This highlights the necessity for enhanced awareness and education for AA treatment and disease assessment in Austria.



Abstract N°: 1780

Scalp Micropigmentation: An Innovative Solution For Hairloss

Aditya Favade*[1]

[1]Amogh Skin & Hair Clinic, Dermatology, Pune, India

Introduction & Objectives:

Scalp Micropigmentation is a medical, non-surgical, cosmetic tattoo that gives an illusion of a close buzz cut hairstyle on a bald head or adds density to a thinning hair. The procedure can also be used to conceal scars from hair transplantation, hide the visual impact of burns or to treat hair loss through skin conditions such as Alopecia. The technique called scalp micropigmentation uses specialized techniques and conventional cosmetic tattoo instruments and pigments in a stippling pattern on the scalp.

Materials & Methods:

A special designed needle is used to gently inject natural pigment into the skin layer to replicate each hair follicle. To apply the treatment, the correct needle group is choosed. Then the bioresorbable pigment color is used which will blend well with the patient's scalp or existing hair. The utility of SMP is to act as a permanent concealer in such a way that the targeted artistic effect is similar to the visual effect of a stippled painting as dots are created between the pores of a balding scalp. A scalp micropigmentation treatment requires 2 to 3 outpatient sessions that are spaced a week apart. Each session takes a couple of hours depending on the size of the treatment area.

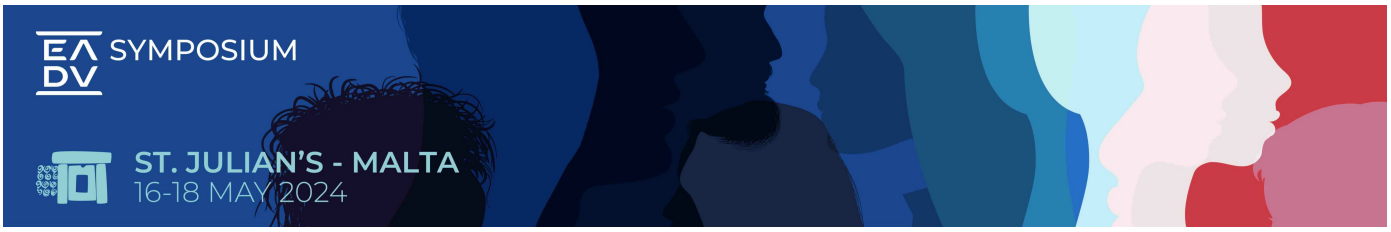
Results:

A variety of alopecias, refractory to treatment and hair transplant deformities, impact millions of men and women. Many of these deformities can be concealed with scalp micropigmentation, making the deformities minimally detectable. It is a great therapeutic option for both male and female patients with AGA, post transplant scars, posthair transplant to further augment results, and cicatricial alopecia (discoid lupus erythematosus, lichen planopilaris, folliculitis decalvans, inflammatory tinea capitis, dissecting cellulitis, central centrifugal cicatricial alopecia, acne keloidalis nuchae, keratosis follicularis spinulosa

decalvans).

Conclusion:

Unlike medical devices, scalp micropigmentation offers a tattoo-based, non-medical & cover-up that effectively hides unsightly conditions on the scalp and creates the illusion of thicker hair. Scalp micropigmentation is destined to become a standardized offering for physicians specializing in cosmetic office procedures.



Abstract N°: 1799

Synergic effect of Maslinic acid and riboflavin for the prevention and treatment of hair loss

Daniela Pinto*[1], Fabio Rinaldi[1], Giammaria Giuliani[1], Piero Tesauro[2]

[1]Giuliani Spa, [2]Plastic Surgeon, private practice, Milan, Italy

Introduction & Objectives:

In order to maintain high proliferation rates, hair fiber production and hair cycle-associated remodeling, the hair follicle (HF) requires energy and metabolite expenditure.

There is a high energy demand for human hair follicles (HFs) during the hair growth cycle, with a preference for aerobic glycolysis. Glycogen is a key energy storage site in HFs, with levels fluctuating during different phases of hair growth. Inhibition of the enzyme glycogen phosphorylase (PYGL) has been shown to promote HF elongation and extend the anagen phase in vitro. Pentacyclic triterpenes, recognized for their diverse biological properties, are mentioned as potential compounds with therapeutic benefits for various human diseases. These triterpenes could play a role in promoting HF growth and the anagen phase.

Authors recently reported that Maslinic acid and other related pentacyclic triterpenes could represent a new class of inhibitors of PYGL. Another natural compound, riboflavin, has been reported to be able to inhibit PYGL.

The present work supports the use of Maslinic acid from Olea Europea and Riboflavin for the prevention and treatment of hair loss through the inhibition of PYGL enzyme.

Materials & Methods:

We have studied the synergic effect of the compounds (ratio 3:1), on human scalp HFs and human HF dermal papilla cells by measuring hair shaft elongation and the relative gene expression of pYGl by mean of qRT-PCR.

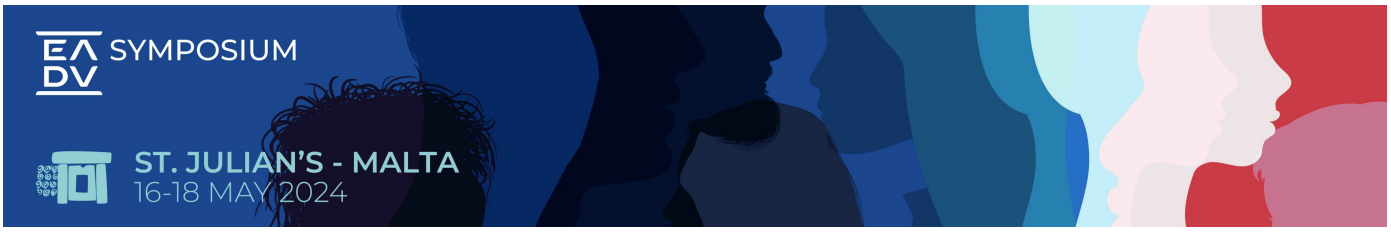
Results:

Under tested conditions, Maslinic acid (18µg/mL) and Riboflavin (6µg/mL) promoted hair shaft elongation and prolonged hair growth (anagen).

In primary human follicle dermal papilla cells, both compounds separately but especially in combination promoted down-regulation of PYGL gene expression.

Conclusion:

Taking together, the results suggest that the combination of Maslinic acid and Riboflavin can act as potent anti-hair loss ingredients through the inhibition of the key enzyme, PYGL, improving the glycogen metabolism of the hair follicle and stimulating HF growth.



Abstract N°: 1874

"Folliculitis Decalvans and Lichen Planopilaris Phenotypic Spectrum": Three cases report

Amani Fliti[1], Meryem Elomari Alaoui[1], Karima Senouci[1], Meriem Meziane[1]

[1]Department of Dermatology, Mohamed V University of Rabat, Ibn Sina University Hospital, Rabat, Morocco

Introduction & Objectives:

folliculitis decalvans and lichen planopilaris are two primary scarring alopecias recently associated in a phenotypic spectrum in which they occur simultaneously or in a bi-phasic presentation, in the same or in different areas of the scalp. We report 3 cases of the "folliculitis decalvans and lichen planopilaris" phenotypic spectrum (FDLPPPS) as a new presentation of this spectrum.

Materials & Methods:

We report 3 cases of FDLPPPS with clinical, dermoscopic and histological findings

Results:

	Case 1	Case 2	Case 3
Gender/Age	42-year- old woman	37 year-old woman	20 year-old man
Physical examination	two vertex keloid patches of alopecia linear frontal hairline recession and eyebrow depilation	Alopecic plaque of vertex with pustules, hemorrhagic crusts and scales.	Several alopecic plaques on the vertex with crusts and pustules
Trichoscopy	Vertex : tufts, follicular pustules, hemorrhagic crusts, milky-red areas, and dilated vessels - Linear frontal hairline : peripilar hyperkeratosis and erythema, tubular hair casts, and yellow dots	peripilar hyperkeratosis and erythema, tubular hair casts tufts, follicular pustules, hemorrhagic crusts, milky-red areas, and dilated vessels	peripilar hyperkeratosis tubular hair casts milky-red areas, Des croutes , and tufts
Histology	FD + Frontal Fibrosing Alopecia (FFA)	FD+LPP	FD+LPP
Metabolic analysis	No anomalies	No anomalies	No anomalies
Treatment	Isotretinoine Intralesional corticosteroid injection Tacrolimus 0.1% Fusidic acid the day before showering	Hydroxychloroquine Doxycycline Propionate of clobetasol 0.05% Fusidic acid the day before showering	Diprostene IM injection 1injection /month Doxycyline 100mg/j Fusidic acid the day before showering
Evolution	Stable for 1 year	Evolutionary	Growth in 8 months

FD and LPP were classified into two distinct categories: “neutrophilic” primary scarring alopecia and “lymphocytic” respectively, and it was not until 2020 that Yip et al identified a phenotypic spectrum of FD and LPP with the physiopathological hypothesis of an abnormal inflammatory response of the hair follicle due to a dysbiosis of the microbiome.

Between 2018 and 2023, only 39 cases of this spectrum have been reported in the literature, including only 3 cases of AFF+FD.

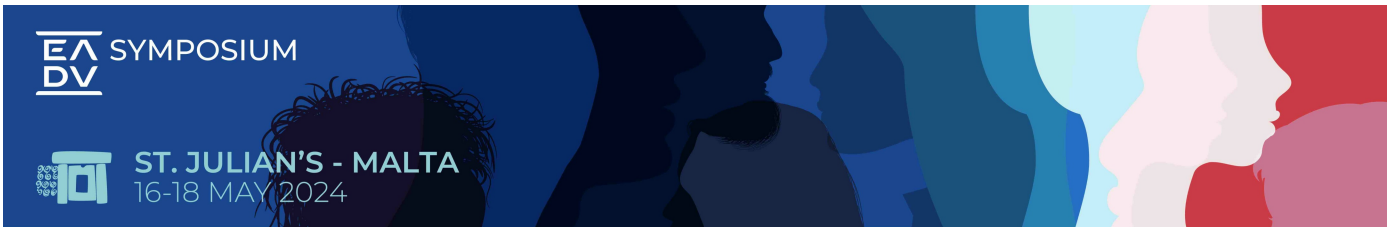
FDLPPS is a combination of the clinical and histological features of FD and LPP.

Early diagnosis is essential for appropriate management, based on anti-inflammatory agents combined with antibiotics.

Conclusion:

FDLPPS is a combination of the clinical and histological features of FD and LPP.

The emergence of new variants within FDLPPPS, such as FD-FFA, underlines the need for further case series to better characterize this spectrum.



Abstract N°: 1876

Scalp psoriasis and lichen planopilaris - a rare colocalization: from diagnosis to treatment.

Yulia Romanova[1], Aida Gadzhigoroeva[2], Maksim Bobrov[1]

[1]Moscow Scientific and Practical Center of Dermatovenerology and Cosmetology, Clinical Dermatology and Cosmetology Department, Moscow, Russian Federation, [2]Moscow Scientific and Practical Center of Dermatovenerology and Cosmetology, Laboratory of Skin Pathomorphology, Moscow, Russian Federation

Introduction & Objectives:

Materials & Methods:

Results:

Lichen planopilaris (LPP) is a primary lymphocytic scaring alopecia presenting with scaling and erythema. Erythema and scaling are common features of many skin diseases. Colocalization on scalp in two scaling conditions could be quite challenging for diagnostics.

A 49-year-old female reported more than 1-year history of hair loss with intensive scalp pruritus. Physical examination revealed diffuse pattern alopecia predominantly at the vertex and parietal scalp presented as numerous small irregular alopecic patches, with signs of flamboyant perifollicular erythema and hyperkeratosis with diffuse slight interfollicular scaling. One lesion at parietal scalp was different – a round-shaped well-demarcated erythematous scaling plaque was present. The pull-test was negative. Symmetrical round, scaly lesions were also observed on the skin of the elbows.

Dry trichoscopy of alopecic patches revealed decreased hair density with absence of follicular openings, peripilar hyperkeratosis with perifollicular erythema. A differential trichoscopy picture was seen in the round plaque. After exfoliation twisted red loops vessels and red dots were revealed.

4-mm punch biopsy from 2 points with trichoscopy control was performed.

Biopsy 1. Histopathology revealed reduced number of terminal hairs, epidermal atrophy of follicular ostia, atrophy of the sebaceous glands, concentric perifollicular fibrosis, lymphohistiocytic infiltration at the level of the isthmus.

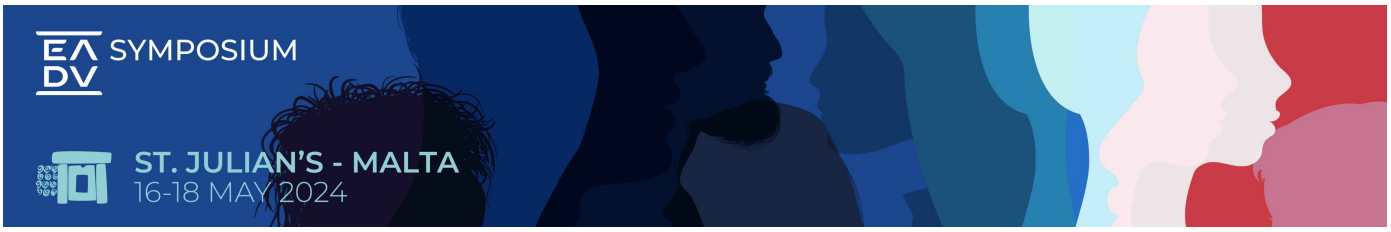
Biopsy 2. Epidermis with parakeratosis, accumulations of neutrophils in the stratum corneum and upper parts of the stratum spinosum, acanthosis, agranulosis. In the upper parts of the dermis there are perivascular lymphohistiocytic infiltrates, thinning of the papillary derma.

Based on clinical, trichological, histological examination we diagnosed a LPP and psoriasis colocalization.

Therapy included intralesional injections of triamcinolone acetonide monthly, topical minoxidil foam 5% once daily, finasteride 2.5 mg daily for LLP lesions. Topical application of gel calcipotriol/betamethasone for psoriasis plaque once daily. There was an improvement in the form of psoriatic plaque resolution after 1 month therapy and decrease in perifollicular erythema and scaling after 4 months of therapy.

Conclusion:

We demonstrate a case of rare scalp colocalization - of LPP and psoriasis. Less than 5 cases have been reported in the literature. Trichoscopy helped to suspect the presence of two diagnosis and choose the right place for the biopsies. Treatment of LPP accompanied with psoriasis can be challenging - some LPP therapy, such as hydroxychloroquine, can trigger psoriasis.



Abstract N°: 1883

Fast and effective clinical response to ritlecitinib in a patient with persistent alopecia areata

Katarina Peljhan*[1, 2], Larisa Prpić Massari[1, 2], Marija Kastelan[1, 2]

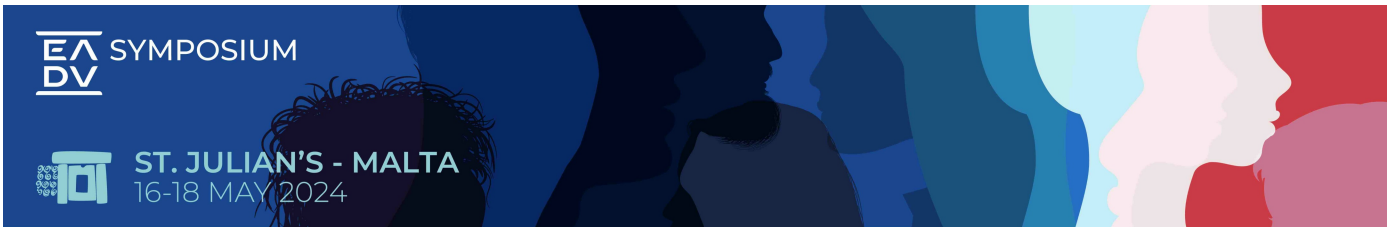
[1]Clinical Hospital Centre Rijeka, Department of Dermatovenereology, Rijeka, Croatia,[2]University of Rijeka, Faculty of Medicine, Rijeka, Croatia

Introduction & Objectives: Alopecia areata (AA) is a chronic autoimmune disorder of the hair follicles resulting in non-scarring hair loss, which typically presents as one or multiple circular patches of hair loss on the scalp, beard, eyebrows or any hair-bearing area on the body. In its most severe forms, AA can cause complete loss of scalp hair or all body hair. Disease course is unpredictable, with possible spontaneous hair regrowth as well as relapses, progression and sometimes persistent alopecia.

Materials & Methods: A 45-year-old patient presented with multilocular scalp AA lasting for about 8 months. On clinical examination there were four smooth, circular hairless areas in parietal, occipital and both temporal regions of the scalp, with positive light pull test. Previous treatment included topical minoxidil and seven intralesional corticosteroid (CS) applications, with no improvement. Laboratory blood tests revealed elevated levels of thyroid peroxidase antibodies (75 IU/mL) and testosterone (1.96 nmol/L), with normal levels of thyroid hormones and no significant abnormalities in complete blood count and standard biochemical tests. Despite topical treatment with minoxidil solution and CS cream, in the following 4 months the patient reported three new hairless patches. Although systemic CS were considered, the patient did not come for control until 3 years later when severe disease progression was noted, with multiple coalescing areas of AA affecting majority of the scalp. Given the severity of alopecia, methotrexate (MTX) 15 mg/week was introduced into therapy along with folic acid 5 mg/week, while previous topical treatment was continued. The first improvement was observed 6 months later, with visible hair regrowth in temporal regions and soon in frontal scalp region. Nevertheless, the parietal patches of AA persisted and the patient experienced no further hair regrowth. Due to incomplete treatment response after 18 months of therapy, MTX was replaced by JAK inhibitor ritlecitinib 50 mg/day. At the time, the patient's SALT score was 70. She was coming for monthly controls, with significant improvement in the very first month of therapy. After 4 months of treatment, there was complete regrowth of hair on the entire scalp with no reported side-effects.

Conclusion:

AA is a chronic condition with significant psychological burden. Treatment options include topical and intralesional CS, topical immunotherapy and minoxidil solution for limited disease, as well as systemic CS, MTX, azathioprine and cyclosporine with variable efficacy in cases of widespread AA. Recently, JAK inhibitors baricitinib and ritlecitinib have been approved for treatment of AA affecting more than 50% of hair follicles, with promising results making them a valuable treatment option for patients with extensive AA. Finally, our case demonstrates the efficacy of ritlecitinib as a new treatment option for AA.



Abstract N°: 1946

Cost-Effective Solutions: Assessing Low-Cost Test Tubes for Platelet-Rich Plasma Therapy in Hair Restoration

Artina Pajaziti*[1], Besa Gacaferi-Lumezi[2], Ardita Kafexholli[3]

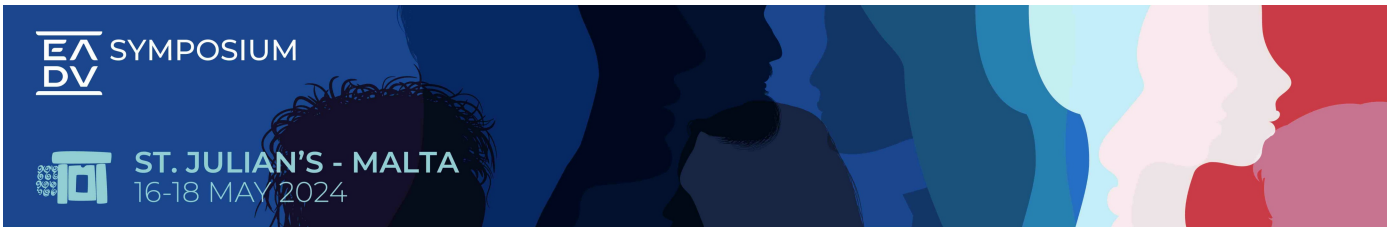
[1]University Clinical Center of Kosovo, Dermatovenerology, Prishtina, Kosovo,[2]University Clinical Center of Kosovo, Physiology, Prishtina, Kosovo, [3]University Clinical Center of Kosovo, Surgery, Prishtina, Kosovo

Introduction & Objectives: : Hair loss, in the forms of androgenetic alopecia and chronic telogen effluvium, represents two highly prevalent forms worldwide. The search for effective treatments has led to the exploration of Platelet-Rich Plasma (PRP) therapy, which involves the injection of autologous platelet-rich plasma into the scalp to stimulate hair growth. However, measuring the efficacy of PRP treatment in low-cost test tubes and in these conditions represents a novel challenge. The aim of this study was to use digital trihoscopy in evaluating the efficacy of PRP-treatment in low-cost test tubes in patients with androgenetic alopecia and chronic telogen effluvium.

Materials & Methods: This is a randomized controlled trial, including 30 patients with androgenetic alopecia and chronic telogen effluvium. Diagnosis was made through digital trichoscopy. The Hamilon-Norwood scale was used as classification method for the degree of androgenetic alopecia in males, and the Ludwig scale was used as a classification method for the degree of androgenetic alopecia in females. Meanwhile for chronic telogen effluvium, the patients having had a history of diffuse hair loss for more than 6 months were included. The patients went through digital trichoscopy using the Fotofinder Vexi 2021 camera, with the Mediacam 1000s video camera using CrystalView technology with a 20x magnification. The program used was TrichoLAB. Patients went through 4 sessions of PRP, every 4 weeks. Digital trichoscopy was done just before the first PRP, and 6 months later.

Results: : In the frontal region, post-treatment analysis revealed statistically significant enhancements in the average number of hairs ($p = .005$), cumulative hair thickness ($p < .001$), total follicular unit count ($p = .045$), and improvements in the derived Sinclair Scale ($p = .025$), following platelet-rich plasma (PRP) injections. Conversely, within the temporal region, the alterations were statistically significant solely in the proportion of single follicular units ($p = .022$) and in the proportion of triple and larger follicular units ($p = .029$). Parameters not reaching statistical significance ($p > .05$) suggest a lack of detectable change attributed to the treatment. It is crucial to distinguish between statistical significance and clinical relevance, as the former does not necessarily confer a tangible therapeutic benefit. Therefore, while the quantitative findings indicate a probable biological response to PRP therapy, the clinical implications of these changes warrant further evaluative scrutiny to ascertain their therapeutic impact in the context of alopecia management.

Conclusion: Results showed statistically significant improvements in various parameters in the frontal region following PRP injections prepared in low-cost test tubes, indicating a probable biological response to the treatment. However, changes in the temporal region were less pronounced, with some parameters showing statistically significant alterations while others did not. In conclusion, while this study suggests promising outcomes using low-cost test tubes for Platelet-Rich Plasma therapy in hair restoration, further larger-scale studies are warranted to provide more robust and conclusive results.



Abstract N°: 1949

The epidemiology, clinical features, and treatement of onychomycosis :a retrospective study of 2209 cases

Lemyaa Es-Solh Marhraoui[1], Hali Fouzia[1], Maha Soussi[2], Soumia Chiheb[1]

[1]Dermatology and verenology department - IBN ROCHD University Hospital of Casablanca,[2]Parasitology and mycology department - IBN ROCHD University Hospital of Casablanca

Introduction :

Onychomycosis is the most common nail infection worldwide. It is caused by a variety of organisms, but most cases are caused by dermatophytes. Accurate diagnosis involves physical and microscopic examination and culture.

The objective of this work is to establish the clinical and mycological profile of onychomycosis at the Ibn Rochd University Hospital in Casablanca.

Matériels et méthodes :

This is a retrospective descriptive study of patients treated for onychomycosis at the dermatology department of the University Hospital of Casablanca over a period of 17 years : between April 2006 and December 2022**.**

Résultats :

- A total of 2209 onychomycosis patients were enrolled in this study. The mean age was 49,9 years, with a female predominance in 61,9% of the cases and a sex ratio males to females of 0.61.

- Diabetes was associated in 23,5% of the cases (521cases), microtrauma in 9,5% (211 cases), atopy in 7,15% (158 cases) and sports activity in 4,7% (106 cases).

- Fingernail onychomycosis was found in 17,5% (388 cases), toenail onychomycosis in 72% (1592 cases) and both fingernail and toenail onychomycosis in 14% (310 cases).

- The most common clinical type of onychomycosis was pachyonychia in 56,4% of the cases (1246 cases), xanthonychia in 46,3% (1024 cases), onycholysis in 31,9 %(705 cases), paronychia in 15% (332 cases), subungual hyperkeratosis in 9,1% (202 cases) and leukonychia in 7,6%(170 cases)

- Tinea pedis was associated in 56,5% of the cases (1250 cases), toe web intertrigo in 47,3% (1047 cases), and erysipelas was the most common complication in 13,6% of the cases (301 cases).

- Trichophyton rubrum was the most frequently isolated pathogens found in 62,6% of the cases (1383 cases), followed by Candida albicans in 11,2% (249 cases) and Scytalidium dimidiatum in 5 %.

- Systemic treatment was prescribed in 67,4 % of the cases, the most frequently prescribed molecule was terbinafine in 55,8% (1233 cases), folllowed by fluconazole in 11,6%.

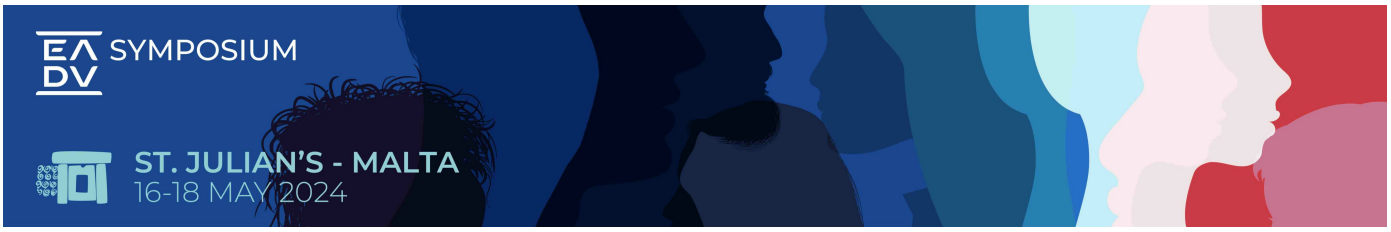
- In addition to oral medications, Topical antifungal treatement was prescripted to all our patients, combined with chemical nail avulsion in 46,2% of the cases and surgical nail avulsion in 9,5% of the cases.

Discussion:

Our study has shown that onychomycosis is a frequent cause of consultation, with the predominance of prevalence among women and among elderly subjects around 50s.

The mycological examination is crucial for diagnostic confirmation and treatment orientation. The most common pathogen identified was *Trichophyton rubrum* and the most prevalent site involved was the toenails.

Multidisciplinary approach of dermatologists and mycologists is required in solving the problem of onychomycosis, which is the dominant nail disease



Abstract N°: 1960

Successful hair regrowth in a patient with alopecia universalis following tofacitinib treatment

Adouani Sarra[1]

[1]El Djazair, Dermatology , El Djazair, Algeria

Introduction & Objectives: Alopecia universalis is an autoimmune inflammatory disease that results in a sudden non-scarring alopecia of all hairs (scalp hair, eyelashes, eyebrows, beard, and body hair), causing aesthetic and psychosocial damage and is often resistant to treatment. Several therapeutic avenues have been explored to date. We report a case of alopecia universalis treated with tofacitinib.

Materials & Methods: A 30-year-old woman with no particular medical history, presented four years ago with alopecia areata. From 2019 to 2021, she received methotrexate and corticosteroid infiltrations. There was good regrowth but 02 months after treatment withdraw the patient relapsed with alopecia universalis. In March 2022, the patient started tofacitinib at a dose of 5mg twice a day associated with corticosteroid infiltrations and 2.5% minoxidil. Regrowth was observed after 3 months of treatment. Currently, she has been on tofacitinib for 15 months, we note a uniform regrowth of scalp hair, eyelashes, and eyebrows as well as body hair. The patient had four episodes of flu without complications since the start of treatment during which she interrupted treatment for few days. The blood count, liver function, and lipid profile checked each month are correct.

Results: Since the first case described in 2014 of a patient fortuitously treated for his alopecia universalis by tofacitinib, several cases have been described. Our patient, who had a relapse of her alopecia after stopping methotrexate, seems to respond favorably to tofacitinib; which is an inhibitor of Janus kinase 1 and 3. She did not present any notable side effect either biologically or clinically except for some episodes of flu. Currently, she is at 15 months of treatment at a dose of 5mg twice a day. Given the absence of a codified protocol for tofacitinib in universal alopecia, we plan to continue treatment at the same dosage until 24 months to attempt definitive cessation. **

Conclusion: Janus kinase inhibitors seem to be a good therapeutic alternatives in various dermatoses with good biological and clinical tolerance verified in case series. The case of severe universal alopecia that our patient presents illustrates the efficacy and safety of tofacitinib in this pathology.