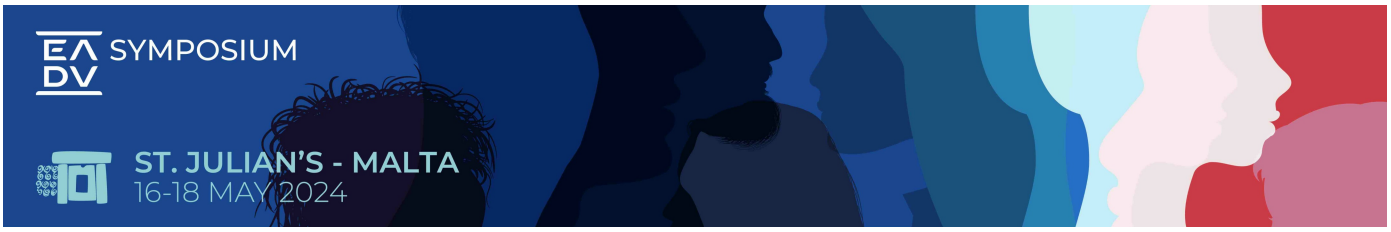

Abstract N°: 10

Comparison of efficacy of 40% mandelic acid with 30% salicylic acid peels in mild-to-moderate acne vulgaris

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Introduction & Objectives:

Introduction: Chemical Peel is a cosmetic procedure that is becoming a popular modality in treating acne vulgaris (AV). Mandelic acid (MA) is an upcoming peeling agent for AV due to its anti-inflammatory and antibacterial traits. Hence, it is worthwhile to appraise this newer agent's effectiveness and safety profile and compare it with a more traditional and established peeling agent, salicylic acid (SA), in the treatment of AV.

Primary objective - To compare the efficacy of 40% mandelic acid peel with 30% salicylic acid peel in South Indian patients suffering from mild-to-moderate facial acne vulgaris

Secondary objective - To compare the safety of 40% mandelic acid peel with 30% salicylic acid peel in South Indian patients suffering from mild-to-moderate facial acne vulgaris.

Materials & Methods:

Study Population : Patients with mild to moderate acne vulgaris (Grade 1 and Grade 2) in the age group of 15 to 45 years. Prospective comparative study sample size: 100 (50 in each group) Inclusion Criteria • Male and Female patients (Age group 15 - 45 years) • Patients with mild to moderate acne (Grades I and II). • Patients with facial lesions only Exclusion Criteria • Pregnant and lactating women • History of hypersensitivity to peeling agents • Patients with severe acne vulgaris (Grades III and IV) • Patients with hypertrophic scars or keloids

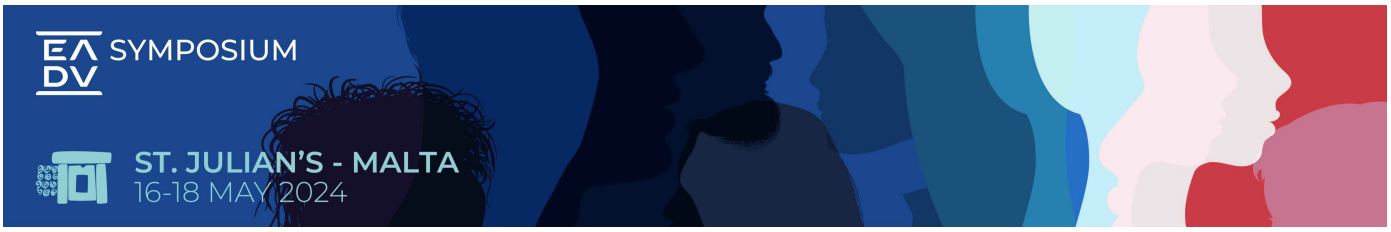
Results:

Both agents showed almost similar ability in improving mild-to-moderate AV. Salicylic acid was found better in treating inflammatory lesions, while MA had the upper hand in treating non-inflammatory lesions. Overall, there was no notable variation between the two peels in changing MAS and percentage reduction in MAS. However, adverse effects were higher with SA peel.

Conclusion:

The 40% MA peel was equally effective as 30% SA peel in mild-to-moderate facial AV. However, safety profile and tolerability were better in the MA peel group than the SA peel group.

Limitations - In our study there was no follow-up after 12 weeks of treatment to find out the long-term efficacy as well as reoccurrence rate of acne vulgaris. Therefore, long-term prospective studies, with a greater number of participants and with a follow-up period of at least six months is needed to substantiate our result.



Abstract N°: 13

Combination of intense pulsed light and radiofrequency therapy for Hidradenitis Suppurativa: a real-world study

Alexandra Strobel[1, 2], Michael Schultheis[3], Petra Staubach-Renz[3], Stephan Grabbe[3], Caroline Mann[3], Katharina Hennig[3], Jacek Szepietowski[4], Lukasz Matusiak[4], Piotr Krajewski[4], Esther Von Stebut-Borschitz[5], Simone Garcovich[6], Hans Bayer[7], Marcus Heise[8, 9], Maurizio Podda[10], Uwe Kirschner[11], Georgios Nikolakis*[12]

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Introduction & Objectives:

Hidradenitis suppurativa (HS) / Acne inversa (Ai) stands is a persistent, chronic and debilitating disease with limited therapeutic options. The device-based combination of intense pulsed light and radiofrequency (LAight therapy) gained European approval in 2017. The primary objective of this study was to gauge the impact of practical care involving at least one application of LAight therapy with focus on the disease activity and burden within a cohort of 3,437 patients.

Materials & Methods:

Criteria for inclusion comprised a confirmed diagnosis of HS and undergoing at least one LAight therapy session. Evaluation of endpoints, including the Hidradenitis Suppurativa Severity Score System (IHS4), pain assessment on the numeric rating scale (pain-NRS), and the Dermatology Life Quality Index (DLQI), was conducted utilizing a linear mixed model for repeated measures (MMRM) over a 26-week period of care incorporating LAight therapy. Additionally, responder rates were calculated for all endpoints, and the safety profile and patient satisfaction were assessed.

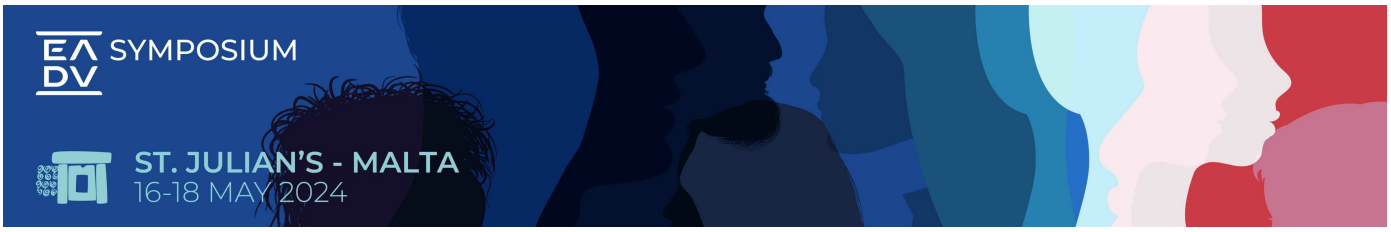
Results:

Over the 26-week care duration with LAight therapy, a noteworthy reduction in IHS4, pain-NRS, and DLQI

was evident. Notably, the baseline body mass index (BMI) demonstrated a significant adverse effect on the therapy response concerning pain-NRS and DLQI.

Conclusion:

These findings substantiate that LAight therapy can effectively improve the disease for all severity stages, positioning itself as a valuable augmentation to the therapeutic alternatives for HS.



Abstract N°: 114

Combination treatment on clinical improvement in rosacea patients

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Introduction & Objectives:

Rosacea prevalence, chronic recurrent course, pronounced psychoemotional disorders, and a decrease in the quality of life of patients with Rosacea contribute to further study of the improvement of therapy. Despite the methods used to treat rosacea, there are still difficulties in achieving a stable and pronounced effect, including combined ones with high therapeutic and preventive effectiveness. The aim of the study is to evaluate the effectiveness and safety of combination of topical, pulsed dye laser and botulinum therapy in patients with Rosacea.

Materials & Methods:

We observed 30 patients aged 18 to 58 years, with an established diagnosis of Rosacea erythemato-telangiectatic and papulopustular subtypes of mild severity. The 1 group of 15 patients received pulsed dye laser (PDL) 595 nm procedures and topical therapy with 15% azelaic acid gel in combination with 1% ivermectin cream. The laser treatment protocol included repeated passes over the treated areas of the face using subpurple settings with a spot size of 7 to 10 mm, a pulse duration of 3, 6, or 10 ms, and an intensity of 6 to 10 J/cm^2. Course was 3 procedures with an interval of 1 month. The 2 group of 15 patients received botulinum therapy procedures incobotulotoxinumA in combination with PDL 595 nm and topical azelaic acid therapy in combination with ivermectin. The course of treatment was three months, began with a daily applying 15% azelaic acid gel to the skin of the face, once a day, in the morning. In the evening ivermectin cream 1% was used. On the first visit, laser therapy was also performed on the PDL 595 nm device, on the third visit, eight weeks after the start of treatment, an injectable procedure of incobotulotoxinumA was performed immediately after laser therapy.

Results:

All patients tolerated the treatment satisfactorily; no side effects were registered, which indicates the possibility of combined use of azelaic acid and ivermectin preparations in combination with botulinum therapy with incobotulinumtoxinA and PDL 595nm.

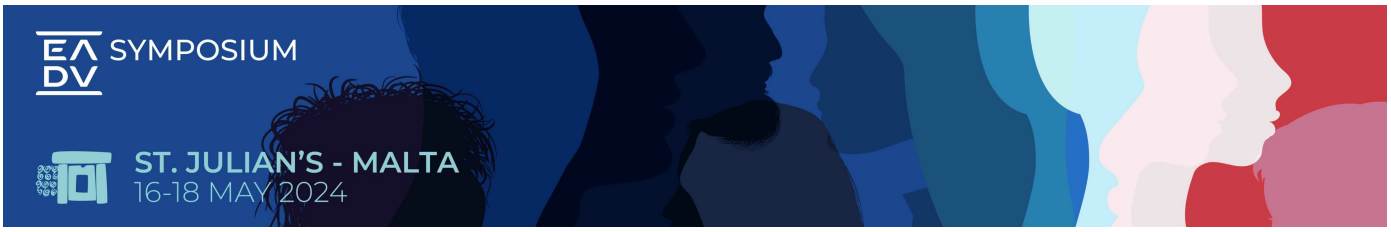
According to the total DISS index, the greatest effectiveness in relieving the vascular and inflammatory components was observed in the second group 89.1% (from 6,4 ± 1,7 to 0,7 ± 1,0, p <0.05), in the first group 70.2% (from 5,7 ± 1,4 to 1,7 ± 1,2, p <0.05) respectively. The best results in decreasing of inflammatory component were observed in the second group DISS index 80.0% and in the first group - 69.2%, p<0.05. According to the vascular component, in the second group erythema reduction was 84.2%, telangiectasia (TAE) 94.1%, in the first group erythema - 65%, TAE - 66.7%. After 12 weeks of therapy, 87.5% of patients in the second group achieved an IGA score of 0 - “clear skin and”almost clear skin", in the first group - 70.2%, (p <0.05). No side effects were reported.

The DLQI reduction before and after treatment was 93.4%, (from 7,6 ± 6,5 to 0,5 ± 0,9, p <0.05) in the second group and 89.6% (from 4,8 ± 4,7 to 0,5 ± 1,8, p <0.05) in the first group, respectively.

Conclusion:

According to the data of assessment of the dynamics of the DISS scale, the IGA index, DLQI the effectiveness of therapy of all treatment methods in relation to inflammatory, local and diffuse erythema is shown.

Combination therapies are effective against both vascular and inflammatory components, local and diffuse erythema and increase patient satisfaction, represent a promising approach to the treatment of patients with erythematotelangiectatic and papulopustular subtypes of Rosacea.



Abstract N°: 177

Spontaneous fluctuation of follicular lesions

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Introduction & Objectives:

The invisible microcomedone of the follicular canal in acne and hidradenitis suppurativa (HS) patients may spontaneously disappear, if it is not overstimulated by acne and/or HS lesion-inducing factors to further develop into a visible inflammatory lesion. While the hair follicle undergoes cycles of growth, the faith of the sebaceous gland during hair follicle cycling has not been studied. Indeed, an increase of the sebaceous gland volume has been observed in the telogene and catagene phases of the hair follicle.

The asynchronous cycling of human pilosebaceous units may result into a continuous fluctuation of inflammatory follicular lesions. This spontaneous procedure might explain the high placebo rates that have occurred in both acne and HS treatment studies.

Materials & Methods:

The left cheek of a 18 year-old male patient with untreated facial papulopustular acne was documented by light photography at the same time of the day on 4 consecutive days. The study protocol was approved by the Berlin Medical Association Ethics Committee. Topographical light photography detection of skin lesions was performed by a 3-D image analysis system (PRIMOS, GFMesstechnik GmbH, Berlin) able to capture the same lesion areas at different time points with a matching of approximately 100%. Subsequently, the four individual photographs (one photograph per each day) were processed to a 3 sec video film sequence. The inflammatory skin lesions in the identical skin rectangle assessed over four days were as percentage of total skin surface by ImageJ. On the other hand, 20 physicians from different countries used the IHS4 outcome measure to evaluate five untreated HS patients in two consecutive days at the EADV School 2020 in Athens. The prospective study was approved by the ethics committee of the University of Athens.

Results:

The video sequence provided the visual proof for the suspected daily fluctuation of inflammatory follicular lesions in acne. The inflammatory lesion skin area involvement in the identical assessment rectangle spontaneously declined from 29.4% to 24.5% into four days; the individual inflammatory skin lesions increased from 26 to 35 (Table 1). The inflammation area increased in 8 lesions (p=0.008), decreased in another 8 lesions (p=0.008) and remained unchanged in the last five lesions. The lesions whose size decreased with time covered 77.9% of the inflamed area on day 0 and decreased their surface to up to 57% into 4 days. In HS, the 0 to 22 detected inflammatory nodules and abscesses varied between 0 and 100% (p=0.00008) in the two consecutive days, while the 0 to 6 draining tunnels only varied between 0 and 20% (Figure 1).

Conclusion:

Our data corroborate a vivid, daily fluctuation of inflammatory follicular lesions in both acne and HS, providing evidence of the requirement for objective evaluation of individual lesions over time in clinical studies of pilosebaceous unit diseases.

Table 1. Development of inflammatory acne lesion area at a fixed facial skin rectangle on 4 consecutive days

Day	1	2	3	4	p
Lesions n=	26	31	34	35	
Cumulative area %	29.4	24.8	23.6	24.5	
Single lesion area %, median (quartiles)	0.22 (0.11-0.36)	0.11 (0.07-0.34)	0.13 (0.07-0.27)	0.23 (0.07-0.27)	0.84
Lesions with inceasing area over time, n=8					
Cumulative area %	22.9	18.0	13.3	9.9	0.008
Single lesion area %, median (quartiles)	0.41 (025-1.46)	0.36 (0.13-0.70)	0.10 (0.07-0.67)	0.16 (0.06-0.59)	
Lesions with decreasing area over time, n=8					
Cumulative area %	5.7	4.1	8.4	11.2	0.008
Single lesion area %, median (quartiles)	0.17 (0.10-0.41)	0.14 (0.09-0.51)	0.29 (0.13-0.54)	0.46 (0.25-0.59)	
Lesions without area change over time, n=5					
Cumulative area %	0.8	0.8	1.6	0.7	0.31
Single lesion area %, median (quartiles)	0.11 (0.07-0.25)	0.16 (0.07-0.21)	0.15 (0.07-0.27)	0.10 (0.09-0.23)	

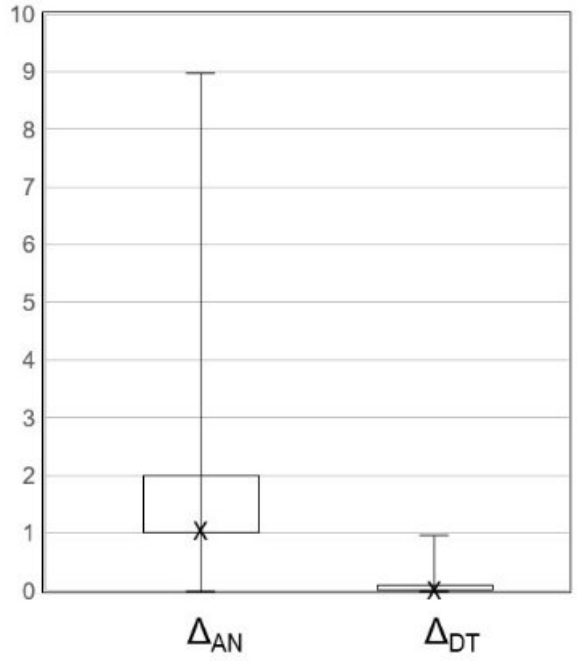
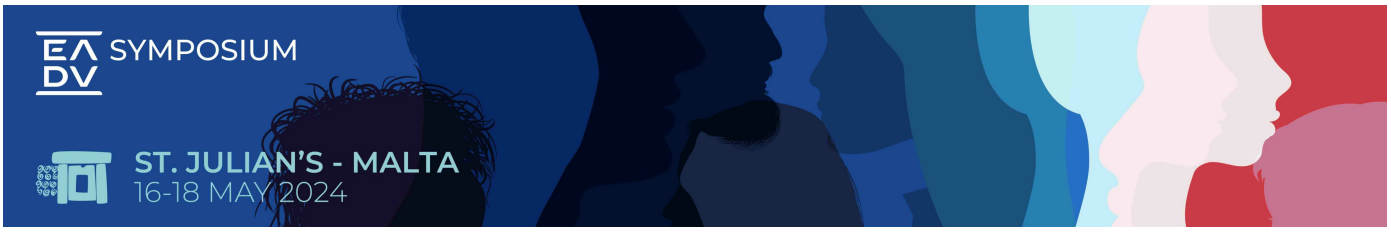


Figure 1. Variation (Δ) of the number of inflammatory nodules and abscesses (AN) and draining tunnels (DT) after double evaluation of 5 patients by 20 physicians with a time difference of 24 hours. The outmost values represent the maximum and minimum Δ, X represents the mean value and the bars represent the 3rd and 1st quartiles.



Abstract N°: 383

The Impact of Hidradenitis Suppurativa on Work Productivity and Performance: a Systematic Review and Meta-Analysis

Serena Merchant[1], Syed Shah[2]

[1]Maidstone and Tunbridge Wells NHS Trust, Tunbridge Wells Hospital, Tunbridge Wells, United Kingdom, [2]John Radcliffe Hospital, Oxford University Hospital NHS Foundation Trust,, Oxford, United Kingdom

Introduction & Objectives:

Hidradenitis suppurativa (HS) is an inflammatory skin disorder presenting as deep-seated lesions in the skinfold regions. HS can negatively affect patients' quality of life, including work activity. Although there is growing appreciation for the need to consider socioeconomic factors when assessing HS patients, knowledge regarding workplace productivity in HS remains limited. This systematic review and meta-analysis aimed to pool data from existing studies to characterise the relationship between HS and workplace functioning.

Materials & Methods:

The review protocol was registered with PROSPERO (CRD42023468790) and Preferred Reporting Items for Systematic Review and Meta-Analyses guidelines were followed. Systematic searches of Cinahl, Embase, MedLine and PsycINFO were undertaken and results were screened by two reviewers independently. Studies were included that assessed workplace activity in HS patients using validated surveys. Following data extraction and quality assessment, relevant data were quantitatively synthesized through meta-analysis conducted in R (v4.1.2) to determine pooled mean scores for workplace activity outcomes. Fixed- or random-effects models were employed according to heterogeneity between studies.

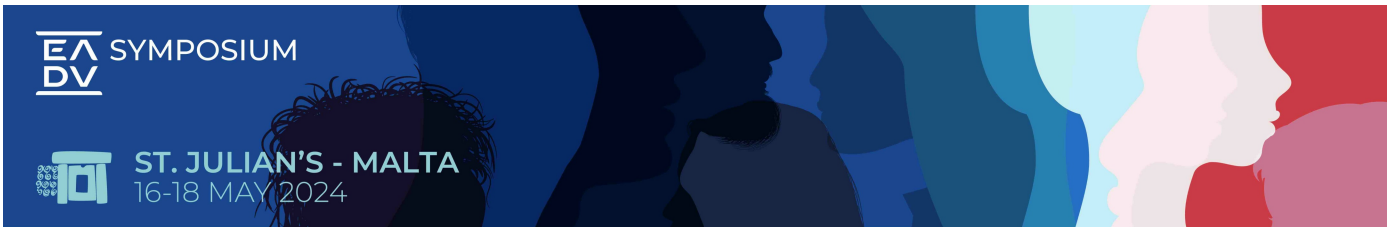
Results:

Initial searches yielded 1,932 results. Twelve studies were included for review, of which seven provided sufficient data for quantitative synthesis. Included studies were published between 2014 and 2023, comprising one cohort, seven cross-sectional, and four pre-post studies. Overall, included studies encompassed 5,187 HS patients and no controls. Quality assessment deemed one study to be of 'good' quality, five studies to be 'fair' quality, and six studies to be of 'poor' quality.

All included studies assessed workplace functioning using the Work Productivity and Activity Impairment (WPAI) questionnaire, which expresses outcomes as percentages for absenteeism, presenteeism, total work productivity impairment (TWPI) and total activity impairment (TAI). Pooled mean scores for HS patients were 10.17% (95%CI 8.68 – 11.66) for absenteeism, 31.13% (95%CI 25.02 – 37.23) for presenteeism, 34.25% (95%CI 29.37 – 39.14) for TWPI, and 42.23% (95%CI 38.56 – 45.89) for TAI. Analyses for all outcomes other than absenteeism demonstrated significant heterogeneity.

Conclusion:

To the best of our knowledge, this is the first systematic review to quantitatively assess work productivity in HS. We identified considerable impairment in workplace functioning for HS patients, pointing to a significant unmet treatment need with respect to improving working capability in HS. Such improvements have the potential to benefit patients' quality of life and to enhance financial productivity. Future studies with larger sample sizes, adequate follow-up durations, and appropriate control groups are needed to explore the mechanisms and risk factors underlying these effects. Investigators should be encouraged to assess work productivity within HS clinical trials to support the identification of effective therapies.



Abstract N°: 442

A 4-year old female patient with HS.

Aikaterini I. Liakou[1], Sotiria Lantzou[1], Efthymia Agiasofitou[1], Sultana Vladeni[1], Evangelia Konstantina Bompou[1], Angeliki Dragoutsou[1], Magdalini Kalamata[1], Ourania Kotsafti[1], Eleni Chatzidimitriou[1], Alexander Stratigos[1]

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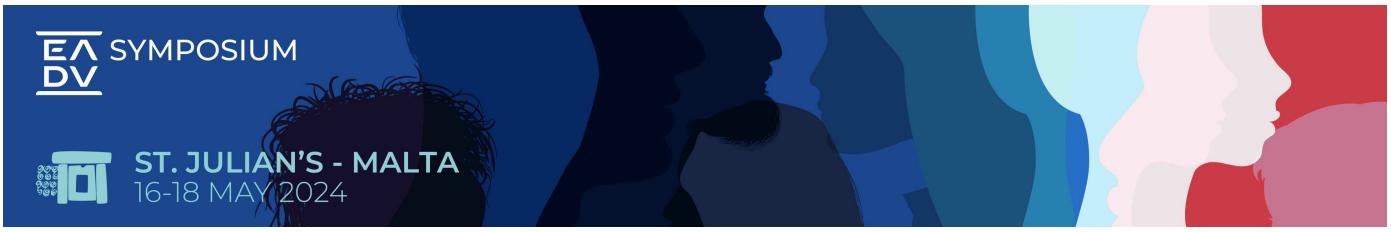
Introduction and Objectives: Hidradenitis suppurativa (HS) is a recurrent and inflammatory disease that affects intertriginous regions and is characterized by the presence of painful nodules, abscesses, and sinus tracts. Left untreated, HS leads to hypertrophic fibrotic scars and dermal contractures. HS is rarely reported in the pediatric population, with the onset generally happening after puberty between 20 and 24 years old. Prepubertal onset before the age of 11 occurs in 2% of patients with HS. Early onset of HS is also related to a positive family history, with a predominance of girls. The youngest patient ever diagnosed with HS was 5 years old. Our aim is to dictate the significance of the early diagnosis and management of pediatric HS by presenting our experience with a 4-year-old patient with a positive family history.

Materials and Methods: We are presenting the case of a 4-year-old female patient who was diagnosed with HS in our department. She has a positive family history from her mother's side. The patient was presented with perianal and gluteal lesions: inflammatory and non-inflammatory nodules, papules, papules and folliculitis. **

Results: Our department succeeded in managing her condition and downgrading her Hurley score, although our options were extremely limited due to her young age. **

Conclusion: HS is a disease that rarely affects children but has a high impact on their lives, causing great distress to both children and their families. A positive family history leads to an early onset of the disease as well as a more widespread form. Further study and research are essential in order to provide specific guidelines and therapeutic trials for the management of HS in the pediatric population.



Abstract N°: 462

Screening and Awareness of Cardiovascular Risk Factors Among Patients with Hidradenitis Suppurativa

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[1]University Hospital Limerick, Dermatology, Limerick, Ireland

Introduction & Objectives:

Hidradenitis Suppurativa(HS) is a chronic skin condition that poses an independent risk factor for the development of cardiovascular events, including myocardial infarction and stroke.1 The current British Association of Dermatologists(BAD) guidelines recommend screening for modifiable cardiovascular risk factors among HS patients to allow early intervention.2 This study aims to assess how often dermatology doctors screen for these risk factors during clinical review.

Materials & Methods:

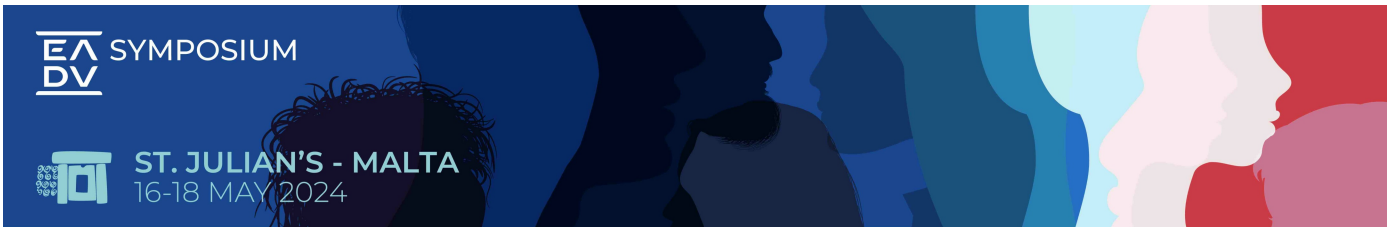
A retrospective cohort analysis of HS patients attending a tertiary dermatology clinic in Mid-West Ireland between September and December 2023 was performed. Screening or documentation for cardiovascular risk factors including obesity, smoking, hypertension, diabetes and hyperlipidaemia were assessed during their dermatology review. Patients who already had established cardiovascular diseases were excluded from this study.

Results:

A total of 30 patients were identified, with age ranges between 14 to 59. There were 9 males and 21 female patients. Twelve patients were on a biologic treatment for their HS, while 10 were on single or dual antimicrobial therapy. One patient was on a combination of biologic therapy, metformin and antibiotic. Six patients were on metformin monotherapy, and 1 patient was on biologic and antibiotics. The study showed that only 50%(n=15) of patients were screened for cardiovascular risks during their consultation. The most common risk factor identified was smoking and high BMI(30%, n=9), which is more prevalent in HS patients and a significant exacerbating factor to their disease. Other risk factors screened include hyperlipidaemia(13.3%, n=4) and diabetes(13.3%, n=4). Of the 15 patients, only 8(26.7%) had documented referral or intervention recommended to address their risk factors. These include liaising with patient's primary care provider to address weight loss, recheck fasting lipids or fasting glucose levels, monitoring blood pressure and smoking cessation advice. Among the 15 patients who were not screened, only 3 had been screened for risk factors in their clinical review during the year. Ten patients(33.3%) in total were screened at least once during the year. Two(6.7%) patients had no positive risk factors identified during their consultations.

Conclusion:

Cardiovascular risk factors are underrecognized among patients with HS, and screening done by healthcare providers is limited. The recommended frequency for screening is annually or more in higher risk patients. This study hopes to highlight this issue to improve screening among HS patients by dermatology doctors to allow early intervention and reduce mortality associated with cardiovascular diseases.



Abstract N°: 529

Rosacea in skin of color patients: a study on clinical and dermoscopic findings

Sussana Chen Qiu*[1], Alfredo Flores[2]

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Introduction & Objectives:

Rosacea is a chronic inflammatory skin disorder that primarily affects individuals with fair skin, and its prevalence and clinical findings, such as facial erythema, papules, pustules, telangiectasia, and occasionally ocular involvement, are well known. However, emerging evidence suggests that rosacea can also occur in individuals with skin of color (Firtzpatrick 4 - 6). Limited research has been conducted to understand its presentation and impact in this population. This study aims to investigate the signs and symptoms of rosacea in Indegenous and skin of color patients, focusing on symtoms, clinical and dermoscopic findings. The results of this study hopefully contribute to bridging the knowledge gap by examining the clinical features of rosacea in patients with a darker skin tone.

Materials & Methods:

A total of 41 patients diagnosed with rosacea were included in this study. Detailed clinical evaluations were performed, including clinical assessment and dermoscopy. The demographic characteristics, clinical features, and treatment history of each patient were recorded. Statistical analysis was conducted to determine the prevalence and significance of the observed findings.

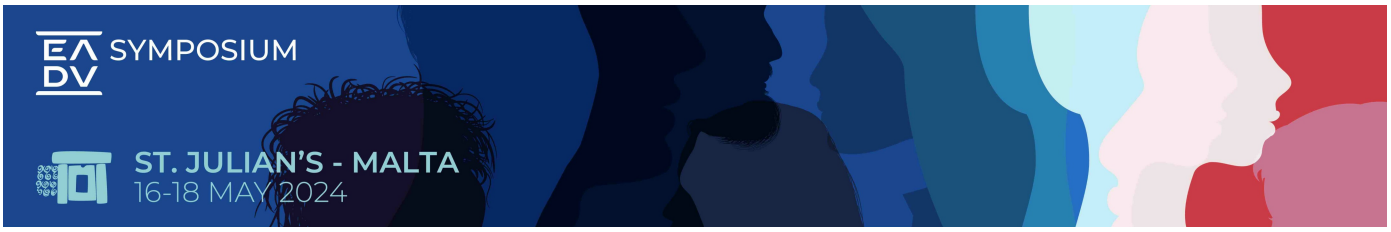
Results:

Our study revealed that hypersensitivity, characterized by stinging, burning, or itching sensations, was present in 85% of the skin of color patients with rosacea. Furthermore, erythema was observed in 80% of the cases (very mild in some patients), 24% presented papules, and 10% had phymatous findings. Upon dermoscopic examination, mild to sever erythema or pink coloration was present in 85% of the patients. Enlarged and tortuous blood vessels were observed in 56% of the cases, and enlarged or dilated pores were present in 29% of patients. Some patients had more than one of the clinical and dermascopic findings at a time.

Conclusion:

The results of this study suggest that rosacea may manifest differently in patients with darker skin tones, potentially leading to diagnostic challenges. The high prevalence of hypersensitivity and pigmentation, presented as mild erythema or slight hyperpigmentation, emphasizes the need for tailored treatment approaches in this patient population. Additionally, the dermoscopic finding of blood vessels provides valuable insights into the pathophysiology and proper detection of rosacea in Indigenous and skin of color patients.

An accurate diagnosis and individualized treatment plan for patients with darker skin tones are needed and should be suspected in patients with hypersensitivity and mild erythema and/or hyperpigmentation that present more blood vessels in dermoscopy. Further research is warranted to explore the underlying mechanisms and develop targeted therapeutic interventions for rosacea in skin of color patients.



Abstract N°: 594

Interest of scintigraphy in the monitoring of HS and SAPHO syndrome

Noureddine Abdous[1], Ounouri Lila[1], Ouerdane D[1], Belateche M[1], Ait Si Ali M[1], Chalouli L[1], Bouakaz R[1], Salhi Aicha[1], Assya Djeridane[1]

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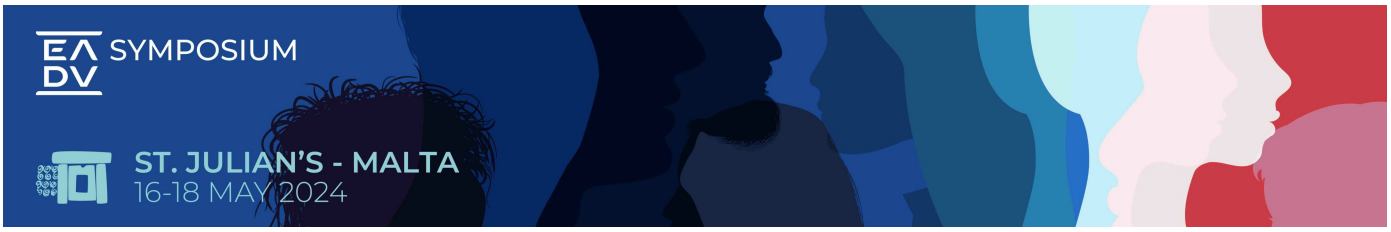
Introduction & Objectives: Hidradenitis suppurativa (HS)/acne inversa is a chronic inflammatory skin disease that remains largely poorly understood and poorly managed, Diseases associated with HS include disorders of the follicular occlusion tetrad, systemic inflammatory disorders and genodermatoses,SAPHO(synovitis,acné,pustulosis,hyperostosis and osteotis) Is a rare disease characterized by inflammatory lesions of the skin and bones

Materials & Methods: We report the case of a child admitted to our level for hidradenitis suppurativa associated with SAPHO syndrome treated effectively by adalimubab and surgery with satisfactory clinical and scintigraphic results.in hidradenitis suppurativa there is a score which measures the severity of the dermatological attack which is the IHS4 which helps the therapeutic decision and the monitoring of the treatment but in our case the association with SAPHO syndrome obliged us to seek an examination paraclinical to judge the effectiveness of the treatment which is bone scintigraphy, the onset of the symptoms seems to date back 4 years, marked by the appearance of nodulocystic acne treated with oral isotrtetinoid associated with local antibiotic treatment.2 years later the patient reported the appearance of a papulopustular lesion in the armpits, genital region, and painful nodules, discharge. The appearance of pain localized at the level of the sternoclavicular joint, a radiological assessment was carried out, the bone scintigraphy was objective Hyper fixation at the level of the two sternoclavicular joints as well as the manubriosternal joint, producing the appearance compatible with SAPHO syndrome,(Bull's Head),our patient is classified as severe stage according to IHS4; pain on palpation of the sternum and the sternoclavicular joint , An excision of the pilonidal sinus cyst was carried out followed a few months later by drainage of the axillary and genital abscess lesions After biotherapy assessment, the patient received 160 mg ADALIMUMAB,80 mg 15 days later and 40 mg/week from day 29,3 months after an improvement was observed with reduction in the number of fistulized abscesses and nodules painful A complete scintigraphy by spect CT scan done did not find fixation at the level of the sternoclavicular and manubriosternal joint

Results: HS lesional skin shows high levels of the proinflammatory cytokines TNF-alpha and IL-1b HS that strongly responds to anti-TNF-alpha therapy, The pathogenesis of SAPHO syndrome remains unclear; however, several similarities with auto inflammatory diseases were found, up regulation of IL8, IL17 IL18, TNF alpha and IL1 was demonstrated, our patient is classified as severe stage of IHS4 of 11 points (severe HS) and who has not responded to several treatments,adalimumab was started and drainage surgery for nodules and abscesses, A partial improvement of the hidradenitis suppurativa with an IHS4 score of less than 9 points (moderate HS) and to monitor the SAPHO syndrome a scintigraphy was done and which did not find fixations at the level of two sternoclavicular joints as well as the manubriosternal joint

Conclusion: a dynamic IHS4 severity score, which allowed us to score our patient on the level dermatological before and after treatment, our observation, highlights the interest of bone scintigraphy in the monitoring of HS associated with SAPHO syndrome



Abstract N°: 618

Ablative Fractional CO2 Laser Treatment With and Without Oral Isotretinoin: A Study on Side Effects and Acne Scars Improvement

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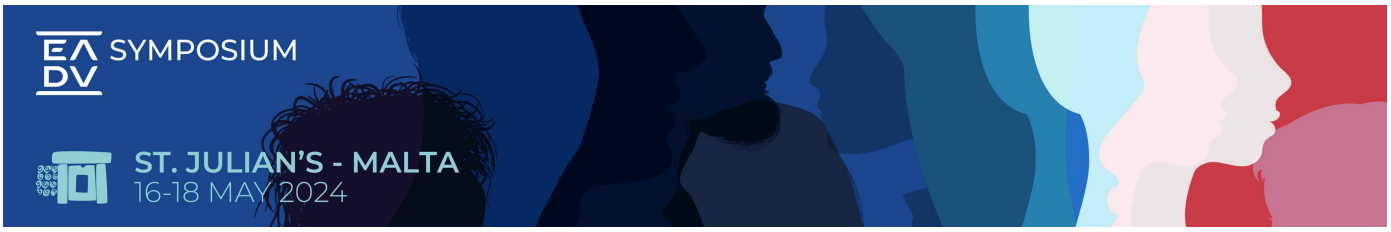
Introduction & Objectives: There have been concerns regarding combining procedural treatments concurrently with isotretinoin (ISO) for acne scars due to risks of delayed healing and adverse events. However, recent studies showed favorable outcomes of several procedures without the concerned side effects. We aimed to demonstrate the safety and efficacy of fractional ablative carbon dioxide laser (AFCL) in concurrence with ISO for acne scars.

Materials & Methods: This prospective study enrolled 50 participants with acne scars of 2 or more based on the Qualitative Global Scarring Grading Score. Twenty-five participants were currently on ISO 30-70 mg/week. Investigators provided whole-face AFCL at baseline, 1-month, and 3-month follow-up visits. The adverse events, edema, crusting, and erythema, were graded after treatments. At 1-, 3- and 6-month periods, post-inflammatory hyperpigmentation (PIH) and acne scars were examined by clinical assessment, Visia ® and Antera3D®.

Results: Of Fifty participants, 5 participants dropped out treatment session. The post-laser edema and erythema showed no significant difference in the proportion of severity between both groups. Crusting after the first treatment, the non-ISO group had significantly more participants with severe crusting. (p-value = 0.006). The incidence of PIH was 23.81% vs 42.23% (p-value=0.024) in ISO and non-ISO groups, respectively. In both groups, depression volume and the QGSGS showed significant reduction compared to the baseline; however, there was no significant difference between groups.

Conclusion: AFCL can be safely used in acne scar patients who are currently on oral ISO with plausible benefits on PIH and scar improvement.



Abstract N°: 632

Optimizing acne management with skincare for diverse patient profiles and characteristics

Brigitte Dréno[1], Charles Lynde[2], Janet Angus[3], Anneke Andriessen[4], Wioletta Baranska-Rybak[5], Nilsel Ilter[6], Kasia Karolak[7], Sven Lanssens[8], Petra Staubach-Renz[9]

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Introduction & Objectives:

Acne vulgaris typically starts in adolescence and may persist in adulthood.

Studies increasingly reveal new insights into acne pathogenesis and the associated skin barrier dysfunction. Additionally, some acne therapies can induce alterations within the epidermis, leading to further disruption of skin barrier functions. This review offers insights into the evolving understanding of the significance of the skin barrier in acne treatment and its relevance for optimizing acne management through skincare for diverse acne patient characteristics.

Materials & Methods:

A panel of eight dermatologists with extensive experience and knowledge in treating acne patients convened for a meeting. Prior to the meeting, a structured literature review of guidelines, consensus papers, reviews, and clinical research studies explored the relationship between the skin barrier and current best practices. This review encompassed prescription and nonprescription acne treatment products and related skincare as monotherapy, adjunctive, and maintenance treatment for diverse acne patients with various characteristics. Searches on August 30, 2023, for articles in English [2010 to August 30, 2023] were performed by a dermatologist and a physician/scientist on PubMed and Google Scholar.

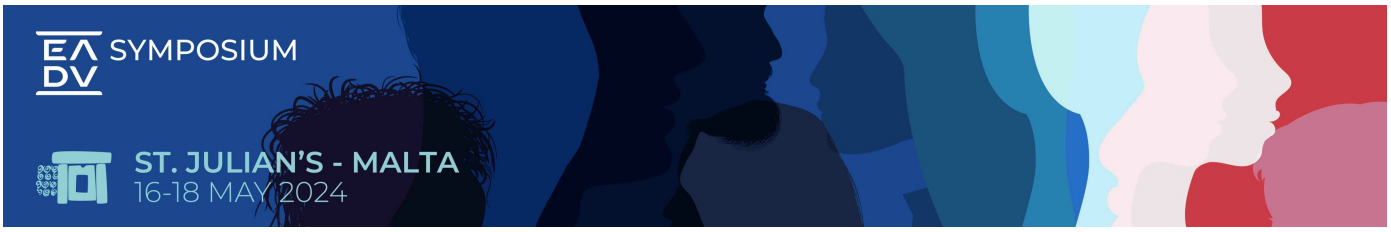
Results:

The selected 118 publications comprised eleven guidelines, algorithms, consensus papers, twenty-one clinical studies (15 randomized controlled trials [6 studies on skincare]), thirty-two systematic reviews, thirty-six reviews, five books, five quality of life, and eight epidemiology studies. Based on the literature, clinical experience, and expert opinion, the panel concluded that effective acne therapy should include recommendations for cleansers and moisturizers while considering various patient characteristics such as concomitant inflammatory skin conditions (e.g., rosacea or atopic dermatitis), age, gender, and sequelae associated with phototype: skin sensitivity and post-inflammatory erythema for phototypes I-III and post-inflammatory pigmentation for phototypes III-VI. Optimizing acne treatment for diverse patient profiles hinges on considering various factors, underscoring the importance of tailoring effective and personalized strategies with prescription treatment and skin care. Skincare monotherapy can reduce acne lesion counts and maintain clearance in patients with mild acne. Adjunctive skincare may enhance the efficacy and improve tolerability of acne treatment, reduce

pigmentary alterations, and improve skin barrier function.

Conclusion:

Studies increasingly show skin barrier dysfunction plays a role in acne. There are few international recommendations and clinical studies for nonprescription acne treatment and skincare. Adjunctive skincare selected for the needs of diverse patient profiles can enhance the efficacy and improve tolerability of acne treatment, reduce dyschromia, and improve skin barrier function. Tailoring skincare for diverse acne patients based on various characteristics may also improve adherence and tolerance to treatment and patient outcomes.



Abstract N°: 663

A study of association between severity of acne vulgaris and co existing acanthosis nigricans, hirsutism and metabolic syndrome

Deepali Tarate[1]

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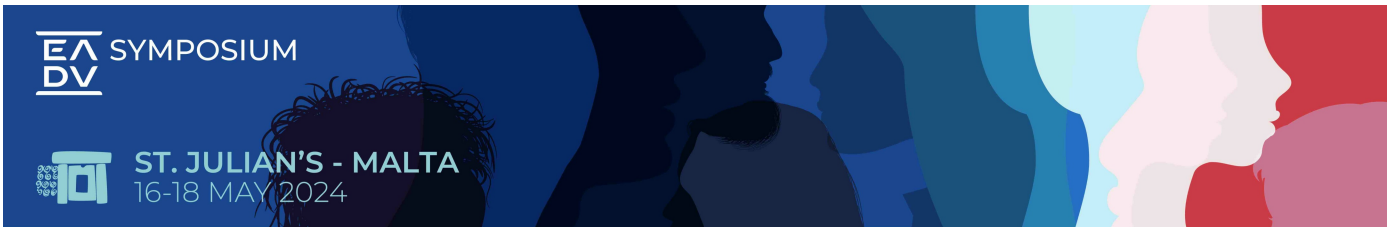
Introduction & Objectives: Hirsutism, acanthosis nigricans and metabolic syndrome can be the co presenting features with acne vulgaris. Also due to their underlying endocrinological changes, simultaneous diagnosis helps in better comprehensive management. There is a paucity of studies in the literature which have estimated the prevalence of associated factors with acne vulgaris. The objective was to find the association between severity of acne vulgaris and acanthosis nigricans, hirsutism and metabolic syndrome.

Material and Methods: A Prospective, cross sectional and analytical study was conducted over a period of one year (June 2016 to May 2017) in a tertiary care hospital in Delhi, after institutional ethical committee clearance. Consecutive 500 acne vulgaris patients>18 years were included in the study. The frequency of the presence of acanthosis nigricans, hirsutism and various risk factors of metabolic syndrome in all acne patients was correlated with the grades of acne severity. Statistical tests, mainly Chi-Square test and Kruskal Wallis test were done to compare the association between severity of acne vulgaris and co existing acanthosis nigricans, hirsutism and metabolic syndrome.

Results: In our study female predominance was seen in the incidence of acne. Mild acne (52.40%) was most common among both sexes, followed by severe acne. Very severe acne was more common among males (6.04%) compared to female patients(3.15%). Hirsutism was present in only 5.96% of acne patients which was most frequently associated with mild acne. Acanthosis nigricans was noted in 11.20% of acne patients and the most common site involved was the neck (67.86%) followed by axilla, groins, elbows, and knees. Most of the patients of acanthosis nigricans had mild grade of acne. Metabolic syndrome was seen in only 4.20% of acne patients in our study among whom moderate acne grade was most seen.

Conclusion: Our study concluded that there is no association between hirsutism, acanthosis nigricans, metabolic syndrome and the severity of acne.



Abstract N°: 705

Tranexamic Acid in Rosacea: A Case Series About Clinical Outcome and Quality of Life

Juliano Peruzzo*[1, 2], Paula Barea[1], Daniela Crusius[1], Arthur Fiegenbaum[1], Laura Brum[1], Otavio Cionek[1], Juliana Boza[2], Renan Bonamigo[1, 2]

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Introduction & Objectives:

Rosacea is a frequent cutaneous and ocular disease, with prominent vascular and inflammatory components; however its treatment can be challenging. Tranexamic acid (TA) is an antifibrinolytic agent that is supposed to act in rosacea suppressing inflammation and angiogenesis.

Materials & Methods:

We carried out a clinical study with 28 patients with mild to moderate rosacea. The participants were provided a 10% TA cream for overnight use for eight weeks. They were instructed to wash their face with neutral soap twice a day and photoprotection was advised. Patients were clinically evaluated before and at the end of the period through Rosacea Clinical Scorecard, Investigator Global Assessment of Rosacea Severity Score (IGA-RSS), Rosacea-Specific Quality of Life Scale (RosaQoL), and Dermatology Life Quality Index (DLQI). Photographic records were also done. The study was approved by the Ethics Committee of our institution and all patients consented to participate in the study.

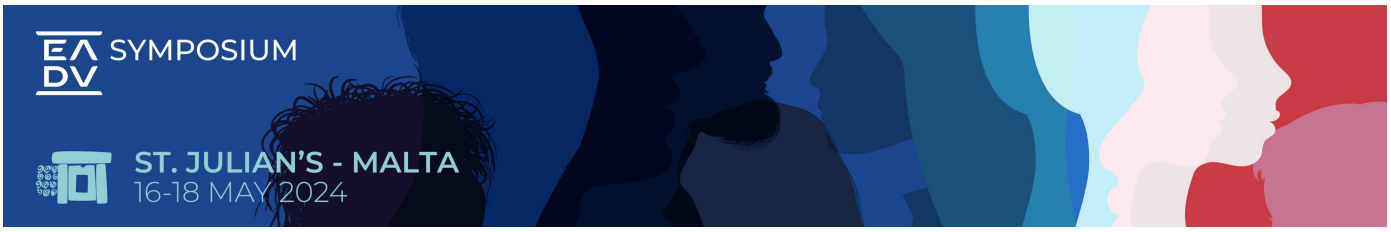
Results:

Of the 28 patients in the study, 24 were women and 4 were men. All the patients presented erythematotelangiectatic features, 21 (75%) papules or pustules, 3 (11%) had ocular symptoms and 11 (39%) had phyma. There were no relevant adverse events.

There was a significant reduction in the IGA score at the end of the treatment. The mean (SD) IGA before treatment was 2.75 (1.27) and after treatment was 2.04 (1.17) (p 0.001). An improvement in the severity of the papules and pustules (p 0.018), flushing (p 0.001) and burning sensation (p <0.001) was also observed, although no difference was seen in erythema or telangiectasias. Seven (25%) patients showed improvement in erythematotelangiectatic features and 13 (62%) in the papulopustular. Although some improvement was seen in the quality of life scores after the TA use, the changes were not significant.

Conclusion:

Our study demonstrated an improvement in the severity of rosacea with a 8-week use of TA, as well as in papules and pustules, flushing, and burning sensation. Although no improvement in erythema or telangiectasias was observed, there was a reduction in the erythematotelangiectatic features overall. These results demonstrate a possible benefit of using topical TA in the management of rosacea. Furthermore, the application of a TA cream formulation could improve patient adherence to treatment as well as provide an additional benefit of the moisturizing capacity of the vehicle. Our main limitations are the absence of a placebo group and the limited number of patients.



Abstract N°: 743

Outcome of hidradenitis suppurativa patients switched from originator to adalimumab biosimilar: a retrospective, observational study

Myranda Attard[1], Niamh Mcguire[2], Shahd Elamin[1], Michael Mcquaid[1], Kevin Mckenna[1]

[1]Royal Victoria Hospital, United Kingdom, [2]Craigavon Area Hospital, Portadown, United Kingdom

Introduction & Objectives:

As a cost saving measure, patients with hidradenitis suppurativa (HS) established on adalimumab originator were switched to a biosimilar agent. However, not all of these switches were successful, requiring switchback to the originator drug, another biosimilar or alternative biologic. We aimed to determine the incidence and reasons for biosimilar switch failure, as well as patient attitudes to switch.

Materials & Methods:

Patient cohorts were identified through biologics databases in liaison with departmental pharmacists. Electronic care records were reviewed to collect data on patient demographics, the impact of the switch on disease control, rate and reasons for switch failure and any characteristics of those who failed initial switch. Patient feedback was gathered through telephone interviews to gauge attitudes to biosimilar switch.

Results:

A total of 22 patients established on adalimumab originator for HS at Hurley stage II-III were identified. Patients had HS for an average of 15 years and had been on adalimumab for an average of 5 years. 16 cases were switched to a biosimilar in 2021, with 15 cases (94%) failing the switch within an average of 9 months. Of the latter, 73% were switched back to originator, 20% to an alternative biosimilar and 7% to an alternative biologic. The reasons for switch failure were loss of efficacy (LOE) in 60%, injection site pain (13%) or a combination of the two. A 16-point improvement was noted in average dermatology life quality index (DLQI) following switchback from biosimilar. However, 20% of patients did not regain disease control despite switchback. (Table 1) Notable characteristics of the switch failure group were that 93% were smokers and 87% had associated co-morbidity, most commonly mental health issues particularly depression.

When assessing patients' attitudes to original switch, 88% were happy to switch initially. Characteristics of the control cohort who remained on originator adalimumab had a higher average weight and a longer duration of HS with involvement of more sites. In the second control cohort, only one patient remained on biosimilar successfully. (Table 2)

Conclusion:

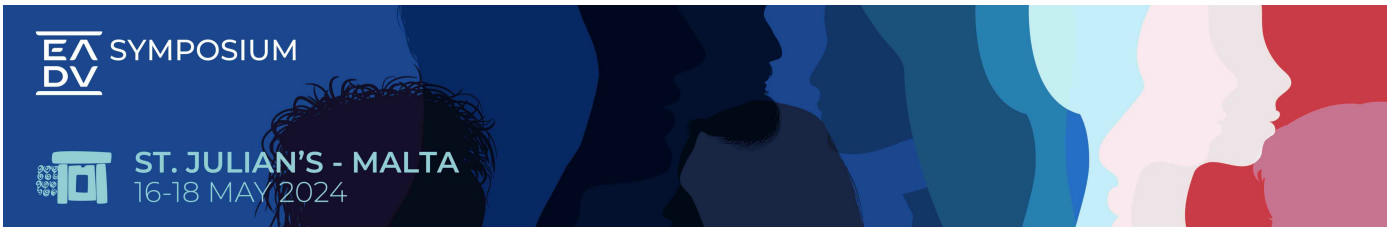
From this study, we identified a high rate of biosimilar switch failure in patients with HS on adalimumab, due to LOE or injection site pain. The vast majority of these patients were switched back to originator prompted by patient request, with 80% re-achieving disease control within one year. Interestingly, nearly all patients who failed switch were smokers with a high prevalence of co-morbidities and mental health issues. With such high baseline DLQI scores, we stipulate a general low tolerance to flares of this impactful disease. Similarly, the control cohort of patients who remained on originator had evidence of more severe disease. We recommend that when established on adalimumab originator, switch to adalimumab biosimilars for HS should be considered on a case-by-case basis.

Table 1: Summary of disease severity at different time points

		Prior to originator	On originator	On biosimilar	On switchback to originator/ alternative
Number of sites with active disease	*No active lesions/ disease stable*	0	9	2	7
	1	3	3	3	3
	2	3	2	4	3
	3	7	0	5	2
	4	2	1	1	0
Lesions present	*Nodules*	10	5	5	5
	Abscesses	13	3	11	3
	Sinus tracts	7	1	2	1
DLQI		21	12	23	7.4
Pain Score VAS (out of 10)		9	3	8	Not documented

Table 2: Comparison of characteristics between study and control cohorts

	Study cohort: Failed switch	**Control 1:** Successful switch	**Control 2:** No switch
Number of patients	15	1	6
Average age (years)	48	51	50
Male : Female	1:1	1:0	1:2
Average duration of HS (years)	15	15	23
Average weight (kg)	89	95	118
Smoker (%)	93	100	83
Mental health issues (%)	46	0	50
Hurley Stage	2-3	3	2-3
Baseline DLQI	22	27	25
Number of sites involved	3	2	4



Abstract N°: 753

Squamous cell carcinoma arising in hidradenitis suppurativa lesions during adalimumab therapy: a rare case

Margarita Gerolympou[1], Maria Politou[1], Marina Papoutsaki[1], Aikaterini Liakou[1], Panagiotis Kotitsas[1], Leonidas Marinos[2], Alexander Stratigos[1]

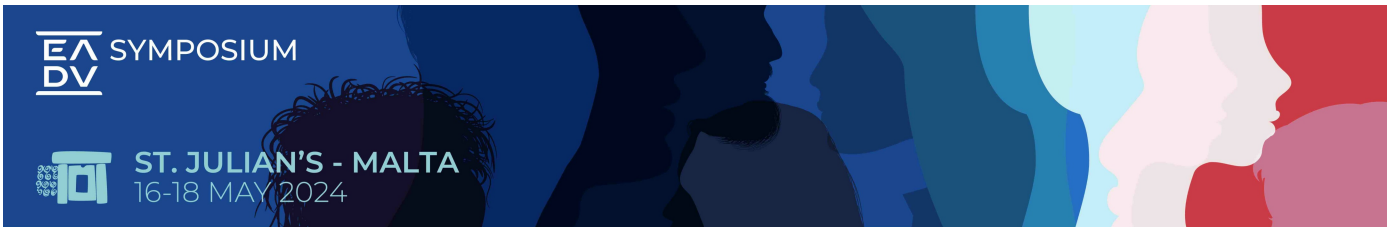
[1]Andreas Sygros Hospital, 1st Department of Dermatology and Venereology, Athens, Greece,[2]Evangelismos General Hospital, Haematopathology Department, Athens, Greece

Introduction & Objectives: Hidradenitis suppurativa (HS) is a chronic, recurrent inflammatory skin condition of the apocrine glands, which most commonly affects the axillae, submammary, inguinal and anogenital regions. Most severe among HS associated complications is the development of cutaneous squamous cell carcinoma (SCC) within longstanding HS lesions, with a prevalence of approximately 4.6%. Adalimumab is approved for the treatment of moderate to severe HS. Treatment with TNF-a inhibitor has been associated with an increased risk of developing non-melanoma skin cancer (NMSC) and there are some reports that describe a possible increase in the rapidity of the SCC onset in HS patients. Paradoxically, only a few cases of SCC in HS patients under treatment with TNF-a inhibitor have been reported. We report a case of a SCC with rapid growth, arising on chronic HS lesions of a patient under treatment with adalimumab.

Materials & Methods: A 62-year-old Caucasian male patient was admitted to our clinic due to a large, ulcerative lesion of the posterior surface of the right thigh along with a satellite ulcerated nodule. Lesions presented in a setting of a 7-year history of Hurley stage III hidradenitis suppurativa of the gluteal, thighs and inguinal region. The patient was previously treated with antibiotics and surgical excisions with little to moderate improvement, while currently being on treatment with 40-mg adalimumab weekly for the last 2 years. The patient described initial presentation of the lesion 4 months ago, in the form of an abscess with gradual expansion and ulceration.

Results: Surgical biopsy of the ulcerated lesion revealed a well-differentiated squamous cell carcinoma. CT scans of the thorax, abdomen and pelvis indicated no evidence of metastasis.

Conclusion: To the best of our knowledge eight cases of cutaneous SCC developing on HS lesions in patients under treatment with TNF-a inhibitor have been reported, of which three patients received adalimumab. Time range from the onset of adalimumab treatment to the diagnosis of SCC was 16 months to 5 years. All were males with chronic, hurley stage III disease of the gluteal/groin region. A reanalysis of adalimumab efficacy and safety studies reported increased incidence of malignancy in patients with HS on adalimumab. Yet it is unclear whether TNF-a inhibitor therapy contributes and to what extent, to the development of SCC in HS patients or it is the pathogenetic mechanism of HS in individuals with predisposing factors which increases the risk of carcinogenesis. Our case confirms that dermatologists should always be alert for the development of NMSC in patients with HS, especially in male patients with chronic severe disease under treatment with TNF-a inhibitor.



Abstract N°: 768

Antimicrobial activity of alkyl polyglucoside – based emulsion with spironolactone against Cutibacterium acnes

Dušan Ilić[1], Maja Cvetković[1], Maja Grigorov[1], Snežana Mladenović-Antić[2], Dragana Pavlović[1], Nataša Blažević-Kamenov[3], Marija Tasić-Kostov[1]

[1]University of Niš - Faculty of Medicine, Department of Pharmacy, Nis, Serbia,[2]Public Health Institute Niš, Nis, Serbia, [3]Primary health center Niš, Nis, Serbia

Introduction & Objectives:

Acne is a chronic skin disease, characterized by comedones, pustules, nodules and papules. Androgens, after binding to androgen receptors localized in sebaceous glands, stimulate sebum secretion, which, alongside with *Cutibacterium acnes* infection, are key factors in the pathogenesis of acne. Antibiotics are the most commonly used drugs, both in systemic and local acne therapy, having numerous side effects. Recently, spironolactone (SP) is being used in dermatology as *off-label* topical acne therapy, due to its anti-androgen potential. Beside some assumptions, there are currently no data on antimicrobial activity of SP. This work's objective was to investigate the potential activity of topical emulsions with 5% SP against *C. acnes*.

Materials & Methods:

We prepared 5% SP emulsion with alkyl polyglucoside (APG) sugar emulsifier *Arachidyl glucoside and arachidyl behenyl alcohol* (Table 1).

Table 1. Ingredients of tested sample

Ingredient	**(m/m%)**
Arachidyl glucoside & arachidyl behenyl alcohol	10
Cetostearyl alcohol	2
Caprylic/Capric Triglycerides	10
Cyclomethicone	10
Glycerol	2
Spironolactone	5
Ethanol 96%	5
Preservative	0.5
Purified water	ad 100

Cutibacterium acnes (ATCC 6919) was used for antimicrobial bioassay; emulsions were first dissolved in DMSO. Minimum inhibitory concentration (MIC) was determined by a microwell dilution method according to the recommendations of the National Committee for Clinical Laboratory Standards. Vancomycin was used as positive, while emulsion without SP (placebo) was used as a negative control.

Results:

MIC is defined as the lowest concentration of an antimicrobial that will inhibit the visible growth of a microorganism after overnight incubation. APG-based emulsion with 5% SP showed certain antimicrobial potential against *C. acnes*; MIC value was 3.12mg/g. The placebo sample showed minor activity against the tested microbial strains, which confirms that antimicrobial activity depended on SP. On the other side, commercial antimicrobial drug vancomycin exhibited obviously higher antimicrobial activity than SP, as expected.

Conclusion:

APG-based emulsion with 5% SP showed satisfactory antimicrobial activity against *C. acnes*. This supports its use in acne therapy, particularly regarding topical treatment of this common skin disease, having in mind the increasing bacterial resistance to commonly used antibiotics. Further investigations should be conducted.

Acknowledgements:

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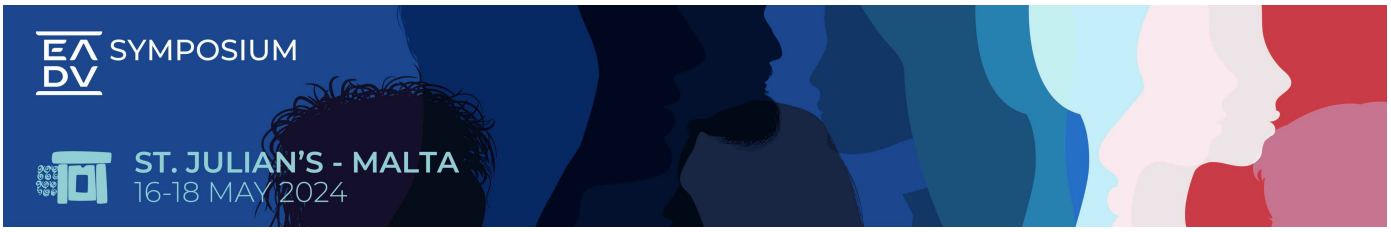


Abstract N°: 770

Combined laser assisted treatment for permanent hair removal in Verneuil's disease with Alexandrite 755 nm and ND:YAG 1064 nm lasers.

Lina Bessaad[1], Malek Ben Slimane[2], Faten Rabhi[2], Kahena Jaber[2], Mohamed Abderraouf Dhaoui[2]

[1]Military Hospital of Tunis, Dermatology, Tunis, [2]Military Hospital of Tunis, department of dermatology, Tunis

Introduction & Objectives:

Verneuil's disease (VD) is a chronic inflammatory skin disease caused by recurring chronic, painful, and suppurative lesions. This condition can have a significant impact on quality of life. Treatment is medical and surgical. Several therapeutic options exist. The Laser treatment gave good results. Our objective was to determine the effectiveness of combined laser hair removal (Alexandrite 755 nm and ND:YAG 1064 nm) in the treatment of VD.

Materials & Methods:

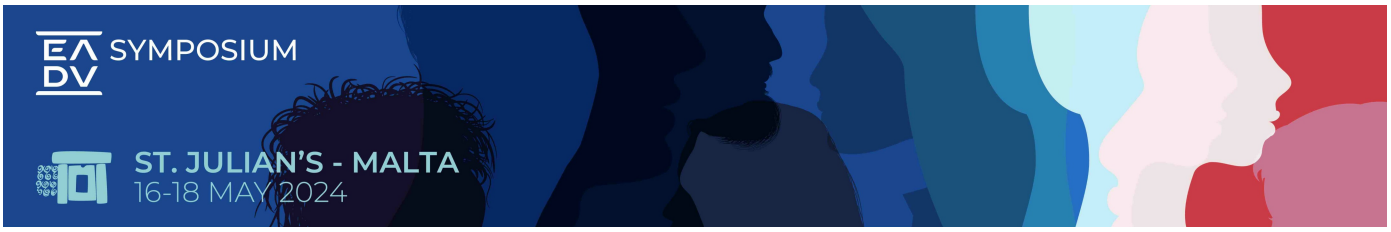
This is a retrospective study including patients with VD treated with combined laser hair removal over a period of 2 years (2021-2023).

Results:

We included 5 patients. The median age was 27 years. They were all male. The risk factors identified were smoking and overweight. Four patients were followed for VD stage II of Hurley and one patient had stage I of Hurley. The clinical presentation was painful nodules, abscesses with sinus tracts, and scarring. The location was the axillary folds in four patients, the intergluteal folds in three patients, and the inguinal folds in two patients. The parameters used were: spot size: 14mm, pulse duration: 20ms and the fluence varied between 7 and 10 J/cm2 for the Alexandrite laser and between 10 and 17J/cm2 for the Nd: YAG laser. All patients were treated with doxycycline. The combined laser was effective in four patients with spacing between disease relapses after an average of four sessions. One patient did not respond after two sessions of combined laser.

Conclusion:

VD often affects young adults with a female predominance. It is characterized by deep painful nodules affecting the large folds which can progress toward suppuration and abscessation. Several treatments have been proposed including systemic antibiotics and biological treatments. Surgical treatment may be indicated in certain cases. In the different series of literature, the hair removal laser has given good results. In fact, this treatment leads to a reduction in the number of monthly relapses as well as the number of severe relapses. The mechanism of action is related to a remodeling effect of the dermis associated with a depilatory action. It is useful in stages I and II of Hurley. Series comparing the Nd:YAG laser and the Alexandrite laser concluded that the Nd :YAG laser is more effective due to its wavelength allowing deep penetrance and minimal epidermal damage. In our series, the simultaneous use of two wavelengths makes it possible to optimize the results. The laser should be used in combination with other treatments.



Abstract N°: 800

Rosacea fulminans in a 65-year-old male patient

Inaya Mahmoud[1], Ivan Bogdanov[1], Zdravka Demerdjieva[1], Razvigor Darlenski[1], Nikolai Tsankov[1]

[1]Acibadem City Clinic Tokuda University Hospital, Dermatology and Venereology , Sofia, Bulgaria

Introduction & Objectives:

Rosacea fulminans, also known as facial pyoderma, is a rare cutaneous disorder, that is considered as an exacerbated form of rosacea. This condition occurs mostly in women aged 15-46, however there are sporadic reports in men and children. The etiology remains unknown. Nevertheless, it is believed that hormones contribute to the development of the lesions since the condition is much more common in females, especially during pregnancy, as well as immunological and vascular factors. The disorder can rarely be associated with other diseases, such as inflammatory bowel disease, thyroid disease, and liver disease. A 65 years old Caucasian man presents with a severely erythematous, inflamed and painful rash on the face that appeared five days ago. He has been diagnosed with rosacea for the past three years and has been treated locally with 20% azelaic acid. The patient was admitted in our Department for diagnosis and treatment.

Materials & Methods:

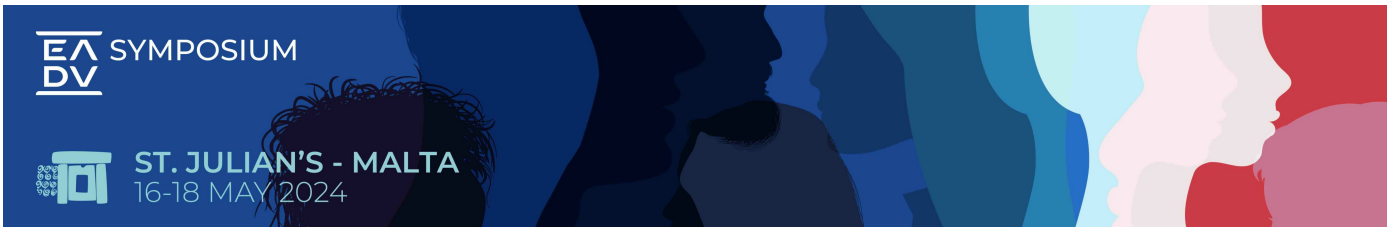
Dermatological status: The pathology changes affect the whole face, sparing the periorbital area, and present with a severly erythematous, papulo-pustular rash on an edematous base. The laboratory investigations revealed elevated erythrocyte sedimentation rate, CRP, lymphopenia and slight leuckocytosis. The patient’s axillary and inguinal lymph nodes were not enlarged upon palpation. The nails were without any pathological changes.

Results:

Therapy with Doxycycline 100 mg b.i.d in combination with local therapy that included Flagyl 250 mg ad Clotrimazole 10 mg 1 tub. daily was initiated. The patient’s therapy for hypertension (Ramipril/Amlodipine) was not discontinued. One week after the initiation of the local and systemic treatment, there was an adequate response to the therapy with alleviation of the pain and erythema locally and disappearance of the pustules and edema of the face.

Conclusion:

We presented a rare case of rosacea fulminans in a 65-year-old male patient with hypertension. The control of the disease has been sufficiently achieved by the adequate systemic and local therapy. Upon discharge the pateint will continue with the Doxycycline therpay at home – 100 mg p.o for thirty days, after which we will follow him for check up.



Abstract N°: 835

The efficacy and safety of Dermocosmetic cream containing Bakuchiol and Salicylic acid in the treatment of mild-to-moderate severity of acne vulgaris: a non-inferiority randomized controlled trial

Patcharapong Rujirawan[1], Chanat Kumtornrut[1], Anchalee Tassanakajon[2]

[1]King Chulalongkorn Memorial Hospital, Department of Medicine, Division of Dermatology, Bangkok, Thailand, [2]Chulalongkorn University, Biochemistry, Bangkok, Thailand

Introduction & Objectives:

In recent years, bakuchiol has emerged in dermocosmetics due to its potential as an anti-aging agent, similar to retinol. Despite the popularity, there needs to be more data regarding bakuchiol's efficacy in treating acne vulgaris. We aimed investigate the efficacy and safety of the dermocosmetic containing bakuchiol and salicylic acid (BSA) in managing mild to moderate acne vulgaris (AV).

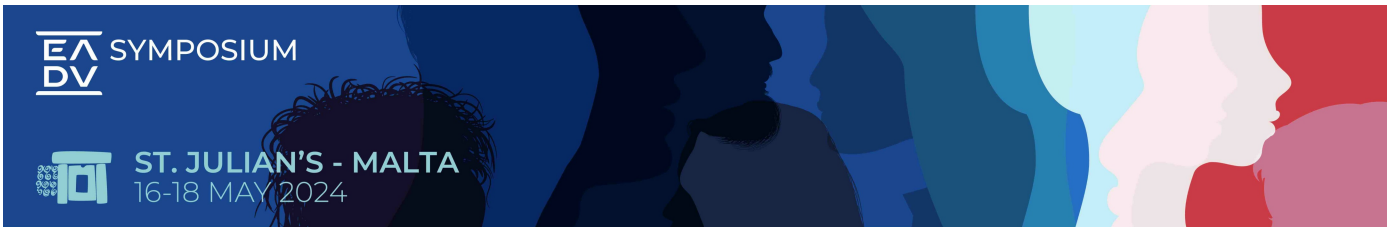
Materials & Methods:

In this 12-week, non-inferiority trial, 70 participants with mild-to-moderate AV (investigator global assessment [IGA] scores 1-3) were allocated randomly into two arms; the first applied BSA twice daily, and the second used 0.025% tretinoin cream once nightly. Dermatologists assessed participants at baseline and 4, 8, and 12 weeks, evaluating acne lesion counts and IGA scores and performing skin parameters (hydration, transepidermal water loss [TEWL], and skin surface lipid) measurement using Corneometer, Tewameter, and Sebumeter. Investigators recorded side effects throughout the study. The non-inferiority margin was defined as a 5-lesion reduction difference between groups.

Results: Sixty-six (94%) participants completed the study (three dropouts in the BSA group due to unreachability). The primary objective was within the non-inferior margin at week 12. Both treatment arms demonstrated statistically significant reductions in total acne lesion count compared to the baseline. Regarding IGA, both groups exhibited significant improvements compared to the baseline at all follow-up visits. Additionally, a significant difference in acne severity between the two groups was noted at week 4 due to acne flare in the tretinoin group ($p=0.023$). Regarding skin parameters, the tretinoin group showed a significant reduction in skin hydration at week 12 ($p=0.026$), while the BSA group did not show statistical significance. The TEWL increased significantly in the tretinoin group at week 4 compared to baseline ($p=0.028$), and both groups demonstrated significant intergroup differences at the end of the study ($p=0.038$). Skin surface lipid levels in the BSA group significantly decreased at week 8 and 12 compared to the baseline ($p=0.001$, <0.001) and differed significantly between groups at 8 and 12 weeks ($p=0.041$, 0.008). In adverse events, acne flare (34.38% vs. 58.82% p-value = 0.047) and dryness (8.13% vs. 52.94% p-value=0.040) were significantly less frequent in the study group compared to the standard group.

Conclusion:

The BSA was safe and effective in treating mild-to-moderate acne vulgaris.



Abstract N°: 836

Clinical Practices in Dermatology for the Management of Hidradenitis Suppurativa: A Survey Study

Taige Cao[1]

[1]Sengkang General Hospital, Singapore, Singapore

Introduction & Objectives:

Hidradenitis suppurativa (HS) is a chronic, inflammatory skin condition that presents significant challenges in clinical management. Given the complexity of HS and its impact on patients' quality of life, understanding the diverse approaches dermatologists take in assessing and treating this condition is crucial. This study aims to elucidate the current clinical practices among dermatologists for HS management, focusing on assessment methods, treatment preferences, and the consideration of patient well-being in routine care.

Materials & Methods:

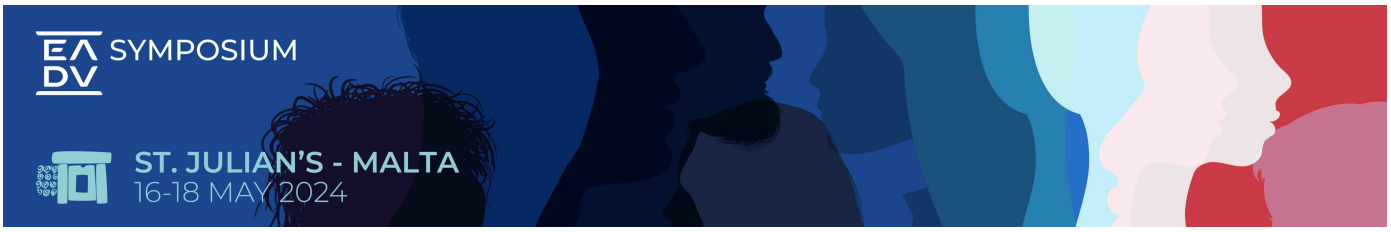
A structured questionnaire was conducted on 25 dermatologists, collecting data on various aspects of HS management, including assessment techniques, gender prevalence among patients, acute and chronic treatment strategies, and adjunctive care practices. The survey encompassed multiple-choice questions covering the use of staging systems, pharmacological treatments (including antibiotics, hormonal therapies, and biologics), surgical interventions, and laser/light therapies. It also inquired about practices related to patient counseling on lifestyle factors and monitoring of comorbid conditions.

Results:

The survey revealed a preference for the Hurley Stage (52%) as the primary method for assessing HS severity. In terms of gender prevalence, responses were evenly split between females and cases with no gender predominance (38% each), with males constituting 25%. For acute flares, antibiotics (28%) and antiseptic washes (24%) were the most common treatments, while clindamycin (68%) was the predominant topical therapy. Doxycycline (48%) led the systemic antibiotic choices, and metformin (50%) was notably favored for metabolic treatment, indicating a metabolic perspective in HS management. Isotretinoin (64%) was preferred over Acitretin (36%) among oral retinoids, and adalimumab was the most utilized biologic (91%). Surgical referrals were mainly for Hurley stage 3 cases (74%), and laser hair removal (38%) was the most common laser/light treatment. The survey also highlighted a holistic approach to care, with considerations for psychological and lifestyle factors, though these practices were less consistently applied.

Conclusion:

The survey underscores the heterogeneity in clinical practices among dermatologists for HS management, with a blend of traditional and innovative treatments tailored to individual patient profiles. The findings emphasize the reliance on the Hurley Staging System for severity assessment and a preference for antibiotic and antiseptic treatments for acute flares. The significant use of metformin and isotretinoin suggests a metabolic and retinoid influence in treatment strategies, respectively. Moreover, the results highlight the importance of a comprehensive care model that incorporates psychological and lifestyle interventions alongside medical treatments, reflecting an evolving paradigm in HS management.



Abstract N°: 958

New clinical approach in facial mild-moderate acne: Remodulation of skin microbiota balance with a topical biotechnological phytocomplex.

Carlos Raúl De Lucas[1], Helena Martinez Serrano*[2], Carlos Nieto[2], Aurora Guerra-Tapia[3, 4], Lola Bou-Camps[5], Montse Pérez[6]

[1]Hospital Universitario La Paz , Madrid, Spain,[2]Laboratorio Reig Jofre, Sant Joan Despí, Spain,[3]Universidad Complutense de Madrid (UCM), Madrid, Spain, [4]Consulta Dermatólogas Guerra, Madrid, Spain,[5]Consulta de Dermatología , Barcelona, Spain, [6]Clínica Dermatologica de Moragas , Barcelona, Spain

Introduction & Objectives:

Acne vulgaris is a highly prevalent chronic inflammatory skin condition. Multiple factors, including excessive sebum production, skin microbiome dysbiosis, disruption of keratinization within hair follicles, and local inflammation, are believed to trigger or aggravate acne. Furthermore, agglomerated bacteria as biofilms could act as a barrier against potential topical treatments. Therefore, the main goal of treatments should be to restore balanced cutaneous microbiota and avoiding biofilm formation. Our study was designed to evaluate the effect of a topical biotechnological phytocomplex on cutaneous microbiota in patients with mild-moderate acne and its clinical benefits.

Materials & Methods:

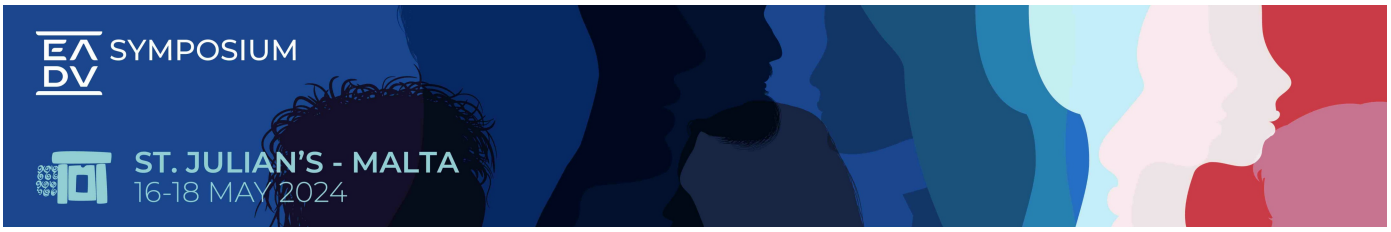
An open, prospective, clinical study in 44 subjects from 12 to 35 years old with mild-moderate acne lesions was carried out. All participants applied a facial gel containing *Camellia sinensis* callus lysate, *Morinda citrifolia* callus lysate, niacinamide and succinic acid twice daily for eight consecutive weeks. The study included 5 visits (baseline, D7, D14, D28 and D56). Skin samples were taken on D0 and D56 to analyze bacterial diversity by a 16S rRNA gene sequencing. Clinical effects were evaluated through the Investigator's Global Assessment (IGA) acne severity scale and counting of inflammatory and non-inflammatory lesions. Biometric measurements including activity of the sebaceous glands and anti-erythema effect were also carried out. Subjective satisfaction and safety evaluation through spontaneously reported adverse events were recorded at each scheduled visit. All the data analysis was done using Kruskal-Wallis or ANOVA test.

Results:

The skin microbiota analysis showed an increase in evenness-alpha diversity index (equity in species abundance in each sample) and beta diversity (between-samples diversity) at the end of the study ($p<0.01$). After 56 days of use a decrease in *Cutibacterium acnes* relative abundance was observed (48.99% vs 38.83%; $p=0.0006$). The clinical evaluation showed a statistically significant 18% decrease in the grading score of acne (IGA) at 28 days ($p<0.05$) which was maintained until the end of the study (27% decrease; $p<0.001$). The number of non-inflammatory and inflammatory lesions was significantly reduced, the last from day 28 onwards (respectively: 31.1%, $p= 0.05$; 31.4%, $p<0.001$). A decrease in the quantity of sebum (89% decrease, $p<0.01$) and erythema (15% decrease, $p<0.001$) was also shown from day 14. 93% of the participants had a satisfactory overall opinion of the product and 90% reported no feeling or greasy skin residues according to a subjective questionnaire. The product exhibited a good tolerability profile with only 6 subjects reporting mild adverse events.

Conclusion:

This new facial gel containing a biotechnological phytocomplex, niacinamide and succinic acid acts on the microbiota rebalancing it and inhibiting the formation of biofilms, reducing the number of mild-moderate acne lesions and sebum secretion, consequently improving the severity of the acne.



Abstract N°: 963

The efficacy and safety study of new whiteheads remover patch in vitro and in vivo studies

Eun Ju Hwang*[1], Chulhak Yang[2], Jieun Kim[2]

[1]the3.0clinic, Department of dermatology, SEOUL, Korea, Rep. of South, [2]The3.0co.Itd., Department of dermatology, Seoul, Korea, Rep. of South

Introduction & Objectives:

Since the whiteheads have clogged pores, they are difficult to remove the whiteheads quickly and painlessly. Only extraction with needle and extractor brings a quick removal effect and the other topicals didn't have that fast effect. The need for easier and painless ways of removing whitehead comedones is increasing. We have developed a new SOS technology that resolves the comedones and can remove whiteheads quickly without pain. We investigated the change of comedones in vitro studies and their effectiveness and safety in clinical studies.

Materials & Methods:

20 patients with comedones applied the patch on blackhead and whitehead for 30minutes daily for 3 consecutive days. Blackheads and whiteheads area counts, sebum change, Investigator's Global Assessment, patient's satisfaction and safety profiles were assessed compared to before.

Results:

After 3 days of use compared to before using the product, the numerical values were changed as follows.

1. Evaluate Blackhead and Whitehead Improvements by KongCamera, Image-pro 10

They were reduced statistically significantly by 39.21% ($p<0.05$) in the area of the blackhead and by 41.08% ($p<0.05$) in the area of the whitehead

1. Assessment of Sebum Improvement with Sebumemeter SM 815

The amount of sebum was significantly reduced by 65.89% ($p<0.05$).

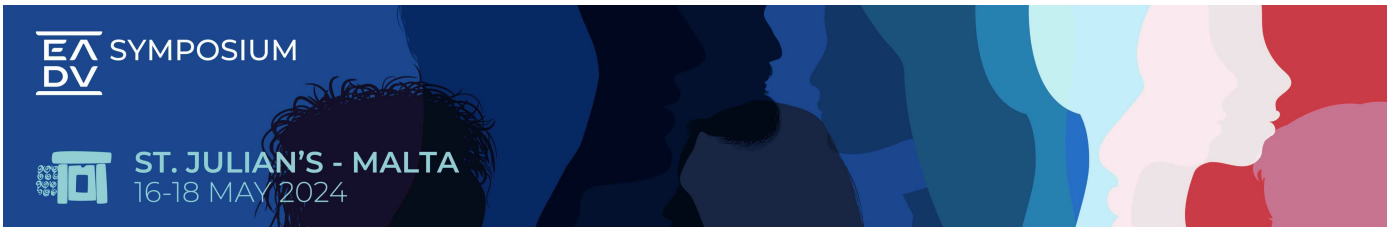
1. Subjective survey evaluation by study subjects

100% of the study subjects responded positively to the help of improving whiteheads.

1. no significant skin adverse reactions were observed.

Conclusion:

The patch is considered to help reduce blackheads, whiteheads, the size of pores, and sebum secretion just in 3 days. This patch melted comedones away just by putting it on without squeezing them. This patch has potential as new treatment options for early acne. Further large clinical trials comparing this new treatments with existing agents will be necessary in the future.



Abstract N°: 965

A new topical biotechnological phytocomplex for truncal mild-moderate acne restores skin microbiota balance.

Aurora Guerra-Tapia[1, 2], Carlos Raúl De Lucas[3], Helena Martinez Serrano*[4], Carlos Nieto[4], Montse Pérez[5], Lola Bou-Camps[6]

[1]Universidad Complutense de Madrid (UCM), Madrid, Spain,[2]Consulta Dermatólogas Guerra, Madrid, Spain,[3]Hospital Universitario La Paz , Madrid, Spain, [4]Laboratorio Reig Jofre, Sant Joan Despí, Spain,[5]Clínica Dermatologica de Moragas , Barcelona, Spain, [6]Consulta de Dermatología , Barcelona, Spain

Introduction & Objectives:

Most research efforts have been centered on facial acne, despite 48–52% of individuals with facial lesions exhibit involvement on the trunk.

Multiple factors, including excessive sebum production, skin microbiome dysbiosis or local inflammation, are believed to trigger or aggravate both facial and truncal acne. However, some distinctions have been observed such as lower sebum secretion on the trunk.

A new topical biotechnological phytocomplex with properties to balance skin microbiota has been developed. This study evaluates the beneficial effects of a body lotion containing this phytocomplex on clinical signs and skin microbiota dysbiosis in truncal acne subjects.

Materials & Methods:

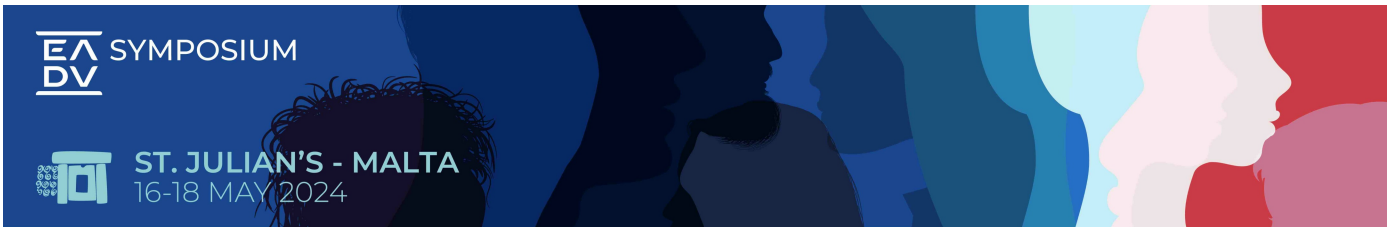
Open, prospective, clinical study in 43 subjects from 12 to 35 years old with mild-moderate truncal acne lesions (88.37% back acne). All participants applied a body lotion containing *Camellia sinensis* callus lysate, *Morinda citrifolia* callus lysate, niacinamide and succinic acid twice daily for eight consecutive weeks. The study included 5 visits (baseline, D7, D14, D28 and D56). Skin samples were taken on D0 and D56 to analyze bacterial diversity by a 16S rRNA gene sequencing. Clinical signs were evaluated through Investigator's Global Assessment (IGA) acne severity scale and lesions' counting. Biometric measurements included size and number of porphyrins as indicative of *Cutibacterium acnes* activity, and anti-erythema effect. Subjective satisfaction and safety evaluation through spontaneously reported adverse events were recorded at each visit. All data analysis was done using Kruskal-Wallis or ANOVA test.

Results:

The skin microbiota analysis showed an increase in in richness-alpha diversity index (number of species in each sample) ($p<0.01$) and a decrease in *C. acnes* relative abundance (66.43% vs 58.11%; $p<0.01$) at the end of the study. Clinical evaluation showed a statistically significant 19% decrease in IGA at day 28 ($p<0.01$) which was maintained until the end of the study (28%; $p<0.001$). A significative reduction in inflammatory lesions counting (52%, $p<0.01$) after 8 weeks of product use was also shown. Specifically, there was a significant decrease in papules and pustules, the last from 2 weeks (57%; $p=0.001$) until the end of the study (62%; $p<0.001$). Porphyrins secretion was significantly reduced in size and number from 2 weeks to D56 (23% and 22%, respectively; $p<0.05$). Erythema decrease was also observed from 7 days and maintained along the study ($p<0.01$). 83% of the participants had a satisfactory overall opinion of the product according to a subjective questionnaire. The product was well tolerated with only 5 subjects reporting mild adverse events.

Conclusion:

This new body lotion containing a biotechnological phytocomplex, niacinamide and succinic acid works on restoration of skin microbiota balance in the trunk. As a result, it diminishes the severity of truncal acne from the first month of product use by reducing the number of inflammatory lesions, porphyrins secretion and erythema with a good tolerability profile.



Abstract N°: 989

Interest of a dermocosmetic cream in the management of mild to moderate acne in 248 subjects from 9 countries in Europe

Helena Polena*[1], Floriane Gayraud[1], Aurélie Fauger[1], Benoît Cadars[1], Soumia Bayarassou[1], Marlene Chavagnac[1], Christelle Graizeau[1, 2], Michèle Sayag[1], Elodie Prestat-Marquis[1]

[1]NAOS Ecobiology Company (Bioderma – Institut Esthederm – Etat Pur), Research and Development Department, Aix-en-Provence, France, [2]NAOS Institute of Life Science, Aix-en-Provence, France

Introduction & Objectives:

Acne vulgaris is a very common skin disease that affects 80% of people aged from 11 to 30 years old worldwide and is often the primary reason for consulting a dermatologist. Acne management is therefore important especially to avoid blemishes and scars due to inflammation, particularly in darker skins. Hence, acne care is not to only based on drugs, but also on the use of specific dermocosmetic products such as moisturizers, cleansers, and sunscreens. The aim of this study was to evaluate the interest and tolerance of a specific dermoscosmetic product in subject presenting mild to moderate acne in Europe.

Materials & Methods:

It was an open, non-comparative and multicentric study, performed in 9 countries in Europe: Serbia (52 subjects), Lithuania (50), Bulgaria (32), Italy (25), Poland (22), Greece (20), Czech Republic (20), Slovakia (17), and Croatia (10), under dermatological control, involving teenagers (47.2%) and young adults (52.4%) with mild to moderate acne (Investigator's Global Assessment = 2 or 3) with a number of inflammatory lesions (papules and pustules) between 3 and 20 and with at least 10 retentional lesions (open and closed blackheads). They were 18.3 years old in average, 70.6% females predominantly with phototypes II (48.8%) and III (39.5%). They applied the cream on the whole face, or only on the concerned areas, twice daily (morning and evening) for 56 days, associated with an adapted sun protection if needed. At each visit, day(D)0, D7, D28, and D56, the investigators evaluated the global assessment using a 5-point scale, the number of retentional and inflammatory lesions, the seborrhoea intensity using a 4-point scale, and the clinical and functional signs using a 10-point scale. The subjects filled in a questionnaire regarding acne-related parameters at D7, D28 and D56, and were also asked to complete the Cardiff Acne Disability Index (CADI) to assess their quality of life at D28 and D56.

Results:

These results showed a significant improvement of skin condition after 7 days of the product application with a decrease of 7% of the IGA that continued to significantly decrease by 22% at D28 and 41% at D56. At D56, up to 64% of the subjects presented either none or only a few lesions. When compared to baseline, a significantly reduction of 14% of retentional and inflammatory lesions number was observed at D7, which continued to decrease significantly by 34% at D28 and 53% at D56. Moreover, significant decreases in the seborrhea intensity were assessed: -12% at D7, -32% at D28 and -44% at D56. All clinical and functional signs were significantly improved compared to D0 (Tables 1 and 2). Similarly, the acne-related parameters evaluated by the subjects evolved positively after the product application (Graph 1) as well as the CADI total score with -43% at D28 and -57% at D56. Finally, the product was very well tolerated for 98% of the subjects.

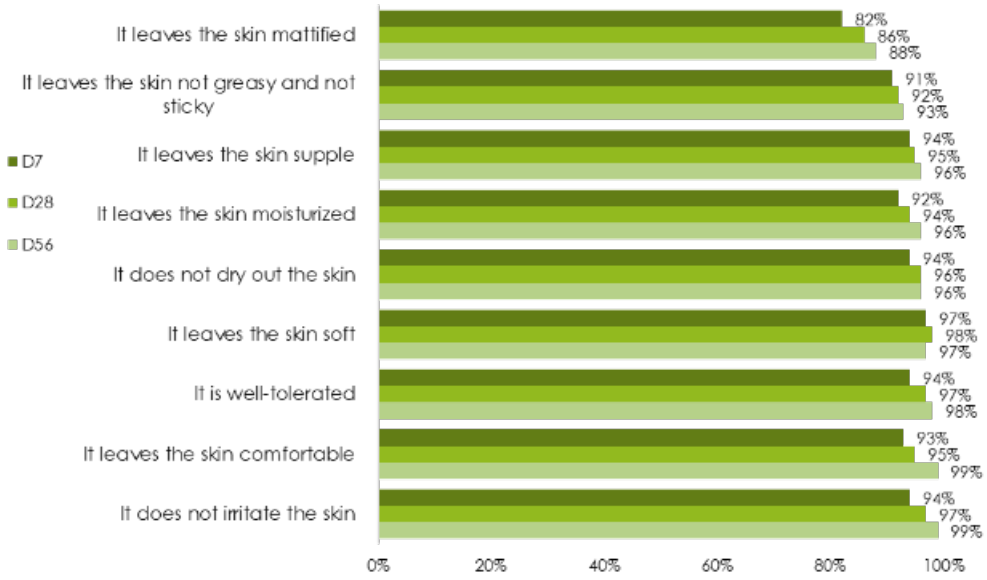
Table 1: Clinical signs improvement compared to D0 (***p<0.001)

Clinical signs	D7-D0 (% improvement)	D28-D0 (% improvement)	D56-D0 (% improvement)
Erythema	-27%***	-52%***	-69%***
Desquamation	-16%**	-51%***	-71%***
Roughness	-34%***	-62%***	-77%***
Dryness	-20%***	-58%***	-78%***
Residual marks	-30%***	-50%***	-60%***

Table 2: Functional signs improvement compared to D0 (***p<0.001)

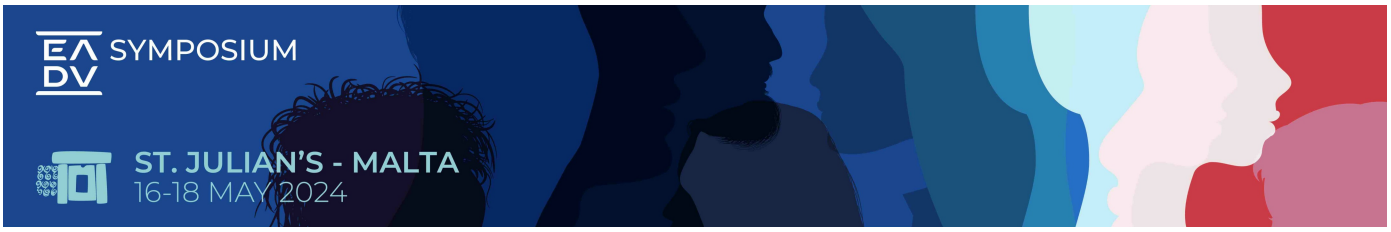
Functional signs	D7-D0 (% improvement)	D28-D0 (% improvement)	D56-D0 (% improvement)
Cutaneous discomfort	-38%***	-72%***	-84%***
Pruritus	-23%**	-60%***	-78%***
Tightness sensations	-31%***	-64%***	-83%***
Burning sensations	-28%***	-61%***	-77%***

Graph 1: Subjective evaluation of acne-related parameters



Conclusion:

Altogether this study shows that in the countries involved, the use of a dermocosmetic intended for acne significantly improves acne condition and subjects' quality of life. The involvement of new countries with subjects of darker phototypes, would produce novel source of data in terms of worldwide efficacy of the product.



Abstract N°: 1024

Syndromic hidradenitis suppurativa - a case report of PASS syndrome

Aikaterini Liakou*[1], Evangelia Konstantina Bompou[1], Angeliki Dragoutsou[1], Magdalini Kalamata[1], Efthymia Agiasofitou[1], Sultana Vladeni[1], Eleni Chatzidimitriou[1], Ourania Kotsafti[1], Alexandros Stratigos[1]

[1]National and Kapodistrian University of Athens, Andreas Sygros Hospital, 1st Department of Dermatology- Venereology, Faculty of Medicine, Athens, Greece

Introduction & Objectives:

Syndromic hidradenitis suppurativa is a rare phenotype of the disease. PASS syndrome, an autoinflammatory condition, is characterized by the clinical tetrad: pyoderma gangrenosum, acne, suppurativa hidradenitis (HS) and spondyloarthritis. This entity was first described in 2012 and the pathogenesis of the disease remains unknown. Consequently, the therapeutic approach and management of these patients is based on few case reports.

Herein we present an interesting case of a 30-year-old patient with clinical manifestations of PASS syndrome and good response to treatment with adalimumab, a TNF-a inhibitor.

Materials & Methods:

A** 30-year-old Caucasian male with a history of nodulocystic acne was admitted to the hospital because of a painful, malodorous, necrotic ulcer over his anterior left lower limb. The lesion appeared as a small papule and turned into an ulcer with a rapid progressive course over the last 3 months. Based on Paracelsus score a high likelihood of pyoderma gangrenosum was indicated.

Furthermore, the physical examination of the skin revealed typical HS lesions with inflammatory nodules, draining tracts and scars on his left buttock and on his left lateral thigh. The disease started at the age of 24 years old.

Laboratory findings evidenced an elevation in the erythrocyte sedimentation rate (66mm/h) and C reactive protein (70,2mg/l). In pus culture, Proteus mirabilis was isolated.

Treatment with systemic antibiotics (clindamycin) and systemic corticosteroid with prednisolone at a maximum dose of 30mg/day (0,5mg/kg/day), coupled with local antiseptic and antibiotic treatment, was administered with a good clinical response.

The patient also reported chronic back pain with spinal stiffness in the morning hours so a pelvic radiograph was performed and showed bilateral sacroiliitis. After rheumatology consultation, axial spondyolarthritis was diagnosed, according to ASAS classification.

The patient was discharged on a 10-day course of amoxicillin/clavulanic acid based on antibiogram and clindamycin (300mg bid), while prednisolone tapering down to 10mg/day was recommended. The patient' s condition however deteriorated after treatment with amoxicillin/clavulanic acid was discontinued.

Using as bridge therapy a double antibiotic regimen and prednisolone tapering, the patient was initiated on biologic treatment with adalimumab, taking into account a sterile second pus culture.

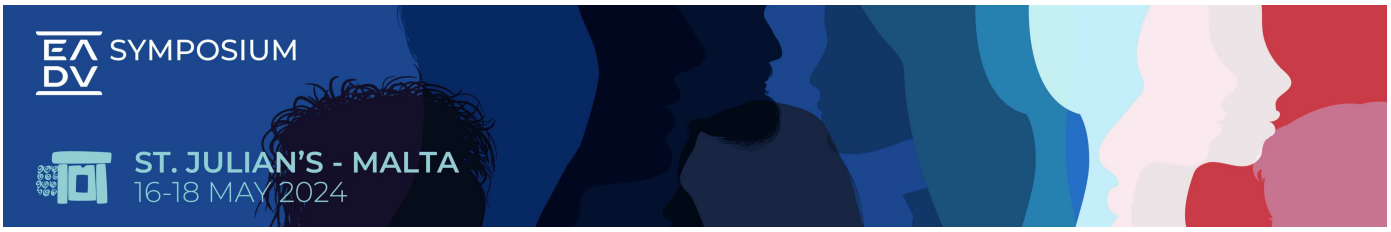
Results:

Considering the symptom constellation of the patient, PASS syndrome is the most likely diagnosis. At week 16 of treatment with adalimumab, dosed at 40mg per week, a complete remission of inflammatory acne lesions, HiSCR and a re-

epithelization of the ulcer was achieved. The treatment also resulted in favorable effects regarding spondyloarthritis.

Conclusion:

Syndromic HS is rare and therefore often underdiagnosed, mainly as a result of limited awareness of the disease among physicians. Diagnostic delay can lead to irreversible disfigurement and negative effects on patient's life quality. During medical interviews, clinicians should focus on detailed medical history about musculoskeletal and gastroenterological disorders as well as acne history, so that syndromic HS can be early recognized. Management of patients with syndromic HS can be challenging. Good response has been reported with biologic treatments with TNF therapies, anti-IL-1 and anti-IL-17 agents.



Abstract N°: 1164

Association Between Hidradenitis Suppurativa and Hypertension: A Systematic Review and Meta-analysis

Parkin Paramiraksa*[1], Metavee Boonsiri[2], Poramin Patthamalai[2], Amarit Tansawet[3]

[1]Faculty of Medicine Vajira Hospital, Navamindradhiraj University, Faculty of Medicine Vajira Hospital, Bangkok, Thailand, [2]Dermatology Unit, Department of Internal Medicine, Faculty of Medicine Vajira hospital, Navamindradhiraj University, Dermatology Unit, Department of Internal Medicine, Bangkok, Thailand, [3]Department of Surgery, Faculty of Medicine Vajira hospital, Navamindradhiraj University, Department of Surgery, Bangkok

Introduction & Objectives:

The association between hidradenitis suppurativa (HS) and metabolic syndrome has been increasingly reported. The data regarding the association between HS and hypertension, however, remains inconsistent. Therefore, a systematic review and meta-analysis is warranted. This study aims to identify the association between HS and the risk of hypertension.

Materials & Methods:

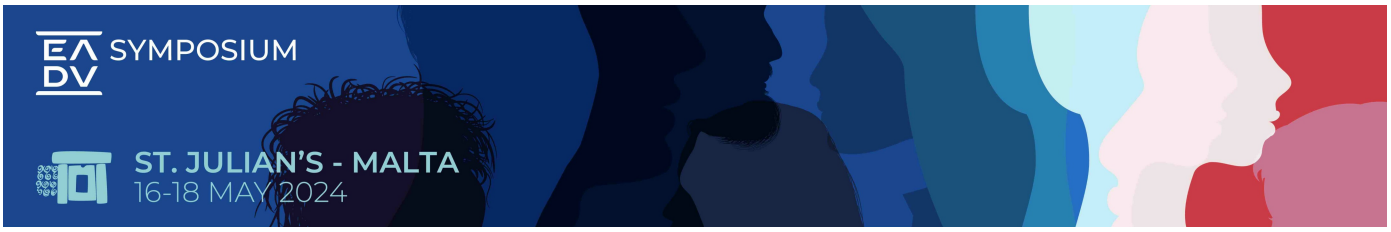
Two investigators independently conducted a systematic search of MEDLINE, Scopus, EMBASE, Cochrane Library, and medRxiv through February 2024 to identify eligible observational studies examining the odds of hypertension among patients with HS versus healthy controls. The eligible studies were independently extracted the key study characteristics and outcomes. If consensus is required, a third reviewer will be consulted. Quality assessments were performed according to the Newcastle-Ottawa Scale (NOS). The PRISMA and Meta-analysis of Observational Studies in Epidemiology (MOOSE) reporting guidelines were followed. Subgroup analyses were conducted according to the study design. The reported odds ratio (OR) were pooled using the random-effects meta-analysis. Publication bias was evaluated by funnel plot and Egger's test.

Results:

Four studies (two cohort studies and two cross-sectional studies) with a total of 982,917 participants met the inclusion criteria and were included in the meta-analysis. The pooled odds ratio (OR) of hypertension in patients with HS versus non-HS comparators was 1.18 (95% CI, 1.15-1.21; I2=0%). Subgroup analysis according to the study design revealed persistent significantly higher odds of hypertension among patients with HS in both the study design of cohort studies (pooled OR, 1.26; 95% CI, 1.03-1.53, I2 = 59%) and cross-sectional studies (pooled OR, 1.16; 95% CI, 1.03-1.32, I2 = 0%). Quality assessment of the included studies was high (range: 6–8 points).

Conclusion:

The results from this study suggest that patients with HS have an increased odds of hypertension. These findings suggest that patients with HS may benefit from the screening for hypertension. Additional well-designed cohort studies and basic science research determining the underlying pathophysiology are warranted for a better understanding of the relationship between HS and hypertension.



Abstract N°: 1176

Vulvar hidradenitis suppurativa : about three cases

Emelie Simone Okouango*[1], Hali Fouzia[1], Baghad Bouchra[2], Soumiya Chiheb[1]

[1]CHU Ibn Rochd, Dermatologie, Casablanca, Morocco,[2]CHU Ibn Rochd , Dermatologie, Casablanca, Morocco

Introduction & Objectives:

Hidradenitis suppurativa (HS) is a chronic, recurrent inflammatory dermatosis affecting the hair follicles. HS manifests as painful skin nodules and abscesses, progressing to suppuration, fistulization, and scarring, preferentially located in the large folds. The ano-genital region is often involved, affecting patients' quality of life. We report three patients with HS with severe vulvar involvement.

Case reports :

Case 1:

A 23-year-old nulliparous patient presented painful ulcerated nodules of the axilla, left submammary, intergluteal, and genito-inguinal regions for 5 years, with aggravation in the premenstrual period and general deterioration . Clinical examination of the vulva revealed ulcerated nodular lesions on the pubic mound and labia majora, of variable size and consistency, and fistulized abscesses with purulent seroma on pressure. The perilesional skin is indurated and infiltrated with retractive and hypertrophic scars. The proctological examination and fecal calprotectin were normal. The patient were treated by systemic tri-antibiotic therapy (Ceftriaxone, Levofloxacin, and Gentamicin) with local care.

Case 2:

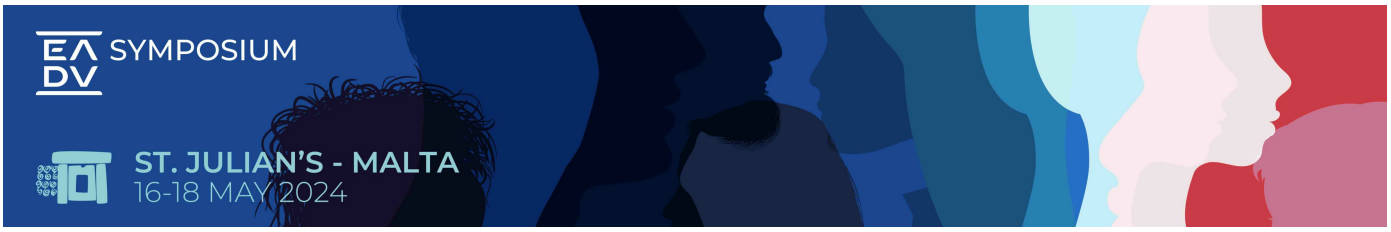
A 20-year-old nulliparous patient presented a painful nodule-like lesion on the left labium majus for a year. The lesion developed intermittently in the premenstrual period, in the context of apyrexia and maintenance of general health. A clinical examination of the vulva revealed a nodular, indurated lesion measuring approximately 1 cm. Colonoscopy and fecal calprotectin were normal. The patient received systemic Doxycycline, topical fusidic acid, and laser hair removal with a positive clinical outcome.

Case 3:

A 25-year-old nulliparous patient presented for 7 years a relapsing-remitting pustular lesions of the axillary and inguinal folds and a vulvar mass progressively increasing in size, associated with constipation. Clinical examination of the vulva revealed an ano-vulvar lymphedema. Colonoscopy revealed celiac disease. Fecal calprotectin was normal. The patient received systemic metronidazole and intralesional Betamethasone.

Conclusion:

Our observations illustrate a rare localization of HS. Vulvar localisation is often confused with other pathologies due to clinical similarity. Hormonal fluctuations associated with menstruation increase the severity of HS. Involvement of the ano-genital region has a severe impact on patients' quality of life, leading to impaired mental health. Management remains multidisciplinary (dermatological, gynecological, surgical), with long-term follow-up. Finally, early recognition of the diagnosis and treatment of vulvar HS could essentially prevent complications and impairment of quality of life.



Abstract N°: 1260

a cross section analysis of baseline prescribing of isotretinoin amongst Irish dermatologists and assessing compliance and satisfaction with current guidelines.

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[1]St James's Hospital, Dermatology, Dublin, Ireland

Introduction & Objectives ** Since it's approval by the Food and Drug Administration in 1982, isotretinoin remains the most effective anti-acne therapy available. The Commission of Human Medicine Isotretinoin Expert Working group recently published recommendations altering isotretinoin prescribing practices in the U.K. These include the introduction of two prescribers for patients <18 years old, counselling and monitoring of sexual dysfunction and assessment and monitoring of psychiatric dysfunction on isotretinoin. Concerns have been raised regarding the validity of these recommendations and recent studies have refuted these claims. In the Republic of Ireland, isotretinoin prescribing regulations are issued by the Health Products Regulatory Authority (HPRA), which in turn is goverened by the European Medicines Agency.

Our aim was to establish if there was a consensus approach in these areas and to assess overall satisfaction with current regulations.

Materials & Methods

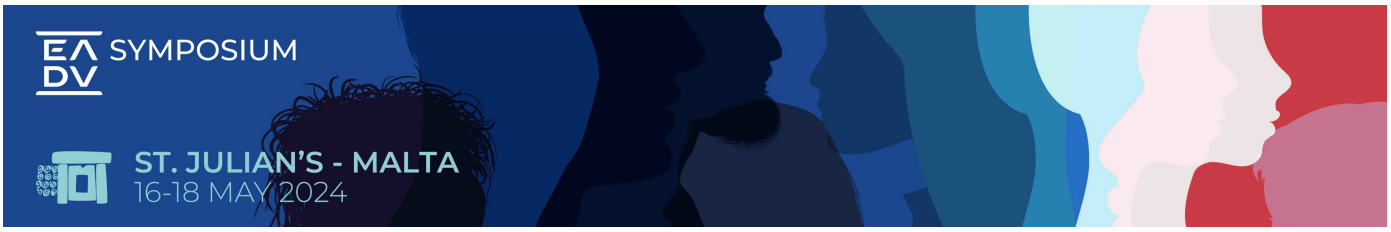
We distributed a questionnaire to the Irish Association of Dermatologists clinician prescriber list This was a mix of case-based scenarios and multiple-choice questions, focusing on contraception recommendations, the use of contraception opt-out forms, the use of psychiatric evaluation tools and assessment of sexual dysfunction.

Results

Forty-eight percent of respondents were consultants and of these, 36% had more than 20 years expereince. Seventy-five percent reported satisfaction with current prescribing regulations. Fifty-five percent routinely reviewing paediatric patients. Eighty-five percent were not in favour of introducing a second named prescriber for patients <18 years old. For patients with active mental health issues 40% reported that they would 'always' request a psychiatry consult prior to initiating treatment, whilst 60% would 'sometimes' request a psychiatry review. Eight-five percent do not routinely counsel patients on sexual dysfunction as a side effect, however over half do inquire about sexual activity at every consultation to assess pregnancy risk. Ninety-three percent routinely request patients of child-bearing potential to sign the HPRA acknowledgment of risk form and 63% would be in favour of non-gendered language on this form. For transmasculine patients, 80% never undertake an organ inventory assessing reproductive potential and 85% were not familiar with the term. Half reported that their department currently had an 'opt-out' form for patients who did not wish to be on contraception during treatment. Of this group, 70% were clinicians who see paediatric patients. The majority indicated that they would be satisfied for patients of child-bearing potential to sign a contraception waiver whilst still providing regular pregnancy tests. This is in line with new UK clinical guidance.

Conclusion

This study establishes current isotretinoin prescribing practices amongst dermatologists in the Republic of Ireland. Overall, there are very high rates of satisfaction and compliance with current guidelines. Prospective long-term population-based data is required to definitively establish the incidence and long-term prevalence of both mental health and sexual dysfunction in patients prescribed isotretinoin. Until such data are available, we favour an evidence-based approach and do not advocate further restrictions in the regulations governing isotretinoin prescribing.



Abstract N°: 1318

Topical anti acne complex in acne vulgaris

Dumitrita Gugulus[1], Adriana Ionela Pătrașcu[2], Dan Vata[2], Mădălina Mocanu[2], Ioana Adriana Popescu[2], Laura Gheuca Solovastru[2]

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Topical anti acne complex in acne vulgaris

Introduction & Objectives:

Acne vulgaris is a chronic inflammatory disease of the pilosebaceous units. Acne vulgaris affects 85% of teenagers, and a high percentage continue to experience symptoms into adulthood. It is associated with a significant negative impact on mental well-being, feelings of positivity and self- esteem.

Materials & Methods:

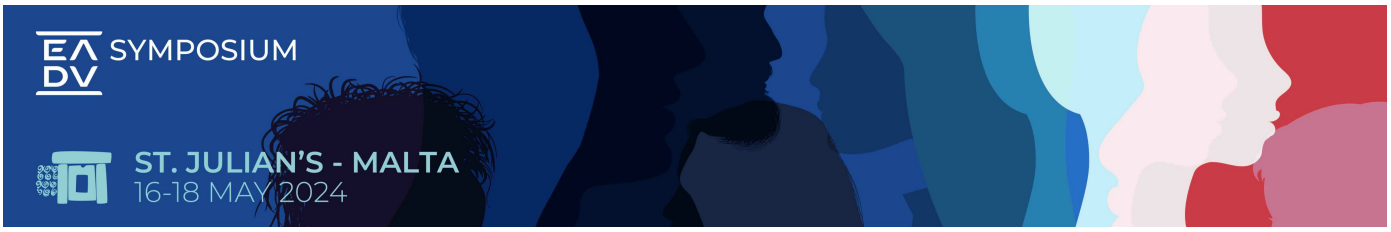
A 20-year-old woman patient, without comorbidities, presented with recurrent papules and nodules on the face persisting for a duration of 2 years. She was orally treated with Doxycicline 100 mg/day for 5 weeks and Zinc supplements 40 mg/day for 6 months. Topically, she was treated with Azelaic acid 15% gel twice per day, and for cleansing she used cleanser with salicylic acid twice per day for 1 year, without any improvement. One year ago, he was treated with Tretinoin gel, but due to skin irritation, she stopped the treatment without medical advice. Currently, she is refusing another treatment with topical retinoids for acne. The patient had recurrent papules and nodules on the face, and he complained about the negative psychosocial impact, experiencing psychological issues such as social phobia, low self-esteem, anxiety, and depression. The psychosocial impact of acne and post-acne scars was evaluated using ACNE-QoL and DLQI questionnaire at the first visit and three month later.

Results:

Then, the patient was treated with topical antiacne complex: Azelaic-Salicylic Acid Vitamin PP- AHA-s in a concentration of 12%, applied twice per day (morning and evening). For washing the face, she used Cleanser 9% AHA-BHA complex: Glycolic-Salicylic-Azelaic Acid- B Derm, also applied twice per day. The dermatologist stopped any previous systemic and topical treatments.The acne began to improve within 4 weeks, and no side effects were reported. We observed a good adherence to treatment and after three months of treatment GAGS and IGA decreased significantly.

Conclusion:

Thus, the psychological, emotional and social consequences associated with acne outline the perspective that acne is no longer considered only a solely aesthetic impairment. We want to emphasise the importance of maintaining good communication with our patients. Sometimes to ensure good adherence to treatment, we need to prescribe simple treatment, as consistency is key in acne.



Abstract N°: 1392

Acne and Obesity in Adolescents

Hasnae Saddouk[1], Nada Zizi[2], Siham Dikhaye[2]

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Introduction & Objectives:

Acne is a chronic inflammatory dermatosis of the pilosebaceous follicle, prevalent and common among adolescents, often with significant psychological implications. Studies suggest that individuals with a higher Body Mass Index (BMI) are more likely to exhibit increased Insulin-like Growth Factor 1 (IGF-1), which has been implicated in acne pathogenesis. Our objective was to assess the prevalence and severity of acne in adolescents based on their BMI.

Materials & Methods:

This retrospective, descriptive, and monocentric study included all adolescents who consulted the dermatology department at Mohammed VI University Hospital in Oujda between May 2020 and May 2023. We analyzed demographic characteristics, BMI, acne type (inflammatory, retentional, mixed), and severity using the Global Acne Evaluation (GEA) scale for acne patients.

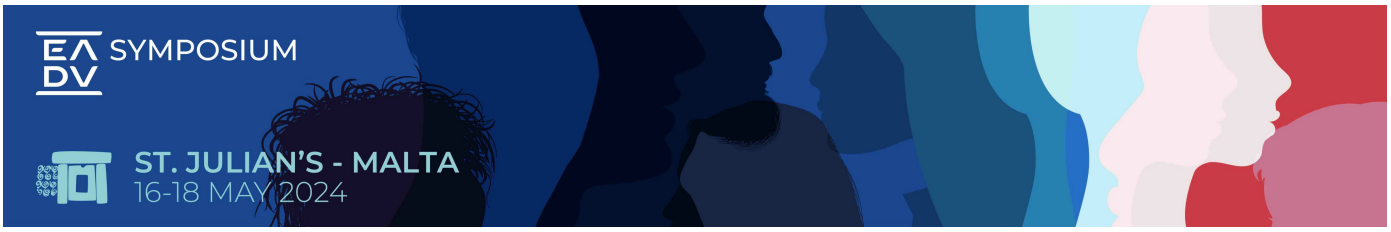
Results:

The study involved 328 adolescents aged 12 to 20 years, with a mean age of 16 years ± 2.3 years, predominantly female (female-to-male ratio of 2.3). The prevalence of acne was 56.7% (n=186), with a mean age of 15 years ± 1.6 years and a clear female predominance (female-to-male ratio of 3.1). The average BMI of acne-afflicted adolescents was higher than that of non-acne individuals (20.3 ± 3.4 kg/m2 // 18.1 ± 2.9 kg/m2). Acne prevalence was 52% in adolescents with BMI < 18.5 kg/m2 (underweight), 58.5% in those with BMI 18.5-25 kg/m2 (normal weight), and 73.1% in adolescents with BMI ≥ 25 kg/m2 (overweight or obese). Overweight or obese adolescents with acne (BMI ≥ 25 kg/m2) tended to have an inflammatory form of acne more than a retentional form (81.3%) compared to those with normal weight (67%) or underweight (61%). In patients with moderate to severe acne (GEA stages 3 to 5), the average BMI was higher (19.8 ± 3.2 kg/m2) than in those with mild acne (stages 1 and 2) (18.9 ± 3.6 kg/m2).

Conclusion:

The association between acne and obesity may be attributed to the presence of hyperandrogenism, manifested by dermatological symptoms such as acne, seborrhea, and obesity. Our results demonstrate a higher prevalence of acne in the "overweight/obese adolescents" group (73.1%), supporting findings by Anaba et al., showing that adolescents with a high BMI are more likely to have common acne with a prevalence of 81.7% (P<0.001), although BMI was not significantly associated with acne severity (P=0.830). Another Tunisian study also revealed a high prevalence (83.3%) of acne in adolescents with obesity or overweight. Sas et al. observed a high prevalence (89.7%) of acne in adolescents with BMI ≥ 25 kg/m2, with significant correlations between BMI and acne severity (P<0.001) and a greater number of skin areas involved in acne (P<0.01). In contrast, Snast et al. found that overweight and obesity are inversely associated with acne, contrary to our results.

It is evident that the link between acne and BMI should be considered in acne management, incorporating measures for weight reduction, adopting healthy eating habits, and engaging in regular physical activity.



Abstract N°: 1461

Very Low-Calorie Ketogenic Diet (VLCKD): A Therapeutic Nutritional Tool for Acne? Results of a Pilot Study

Mattia Proganò[1], Ludovica Verde[2], Evelyn Frias-Toral[3], Sara Cacciapuoti[4], Daniel Simancas-Racines[5], Matteo Megna[4], Giuseppina Caiazzo[6], Luca Potestio[4], Maria Maisto[7], Giancarlo Tenore[7], Annamaria Colao[8], Silvia Savastano[8], Giovanna Muscogiuri[8], Luigi Barrea[9]

[1]Centro Italiano per la cura e il Benessere del Paziente con Obesità (C.I.B.O), Unità di Endocrinologia, Diabetologia e Andrologia, Università degli Studi di Napoli Federico II, Dipartimento di Medicina Clinica e Chirurgia, naples, Italy, [2]university of naples federico ii , Department of Public Health,[3]Universidad Católica Santiago de Guayaquil, School of Medicine, [4]University of Naples Federico II, Section of Dermatology - Department of Clinical Medicine and Surgery, [5]Universidad UTE, Centro de Investigación de Salud Pública y Epidemiología Clínica (CISPEC), Facultad de Ciencias de la Salud Eugenio Espejo, [6]Università degli Studi di Napoli Federico II, Dipartimento di Scienze Biomediche avanzate, [7]University of Naples "Federico II", Department of Pharmacy,[8]Università degli Studi di Napoli Federico II, Unità di Endocrinologia, Diabetologia e Andrologia, Dipartimento di Medicina Clinica e Chirurgia, [9]Università Telematica Pegaso, Dipartimento di Scienze Umanistiche

Introduction & Objectives:

Acne, a chronic inflammatory disease impacting the pilosebaceous unit, is influenced significantly by inflammation and oxidative stress, and is commonly associated with obesity. Similarly, obesity is also associated with increased inflammation and oxidation. The role of diet in acne remains inconclusive, but the very low-calorie ketogenic diet (VLCKD), known for weight loss and generating anti-inflammatory ketone bodies, presents promising potential. Despite this, the effects of VLCKD on acne remain underexplored. This pilot study aimed to investigate the efficacy of a 45-day active phase of VLCKD in reducing the clinical severity of acne in young women with treatment-naïve moderate acne and grade I obesity.

Materials & Methods:

Thirty-one women with treatment-naïve moderate acne, grade I obesity (BMI 30.03 - 34.65 kg/m2), aged 18 - 30 years, meeting inclusion/exclusion criteria, and consenting to adhere to VLCKD were recruited. Baseline and post-intervention assessments included anthropometric measurements, body composition, phase angle (PhA), trimethylamine N-oxide (TMAO) levels, and reactive oxygen metabolite derivatives (dROM) as markers of inflammation, dysbiosis, and oxidative stress. A comprehensive dermatological examination, incorporating the Global Acne Grading System (GAGS) and the Dermatology Life Quality Index (DLQI), was conducted for all women.

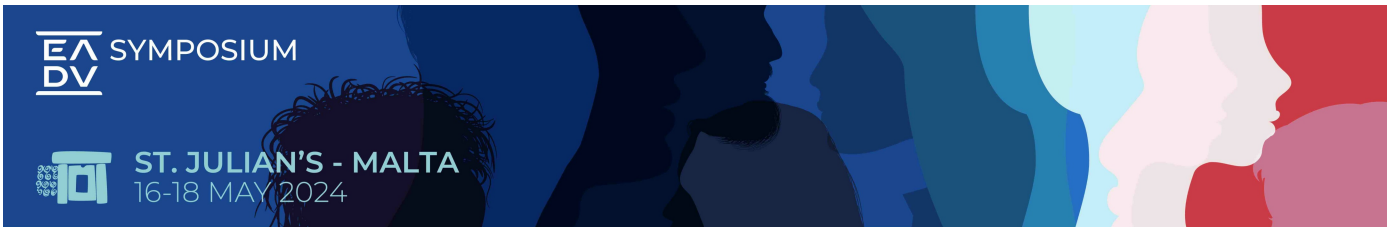
Results:

VLCKD resulted in general improvements in anthropometric parameters and body composition. Significantly, there were significant reductions in both the GAGS score (Δ%: -31.46 ± 9.53, $p<0.001$) and the DLQI score (Δ%: -45.44 ± 24.02, $p<0.001$) after the intervention. These improvements coincided with significant decreases in TMAO ($p < 0.001$) and dROMs ($p < 0.001$) levels and a significant increase in PhA (Δ%: 8.60 ± 7.40, $p<0.001$). Changes in the GAGS score positively correlated with changes in dROMS ($p<0.001$) and negatively with PhA ($p<0.001$) even after adjusting for Δ% FM. Changes in the DLQI score positively correlated with changes in dROMS ($p<0.001$) and negatively with PhA ($p<0.001$) even after adjustment for Δ% FM.

Conclusion:

Given the side effects of drugs used for acne, there is an increasing need for safe, tolerable, and low-cost treatments that can be used for acne disease. The 45-day active phase of VLCKD demonstrated notable improvements in acne severity,

and these improvements seemed to be attributable to the known antioxidant and anti-inflammatory effects of VLCKD.



Abstract N°: 1507

Impact of Acne on Quality of Life

Hasnae Saddouk[1], Kaoutar Sof[1], Hanan Ragragui Ouasmin[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:

Acne is a visually prominent dermatosis, and its management should consider the compromised psychosocial well-being often associated with it. Our objective was to assess the impact of acne on the Quality of Life (QOL) of patients in the general population.

Materials & Methods:

This was a descriptive cross-sectional study using a questionnaire comprising 30 questions created with Google Forms and shared through social networks. The Global Acne Evaluation (GEA) scale was used for the clinical assessment of acne severity, while the Cardiff Acne Disability Index (CADI) and SKINDEX-16 scores were employed to evaluate QOL.

Results:

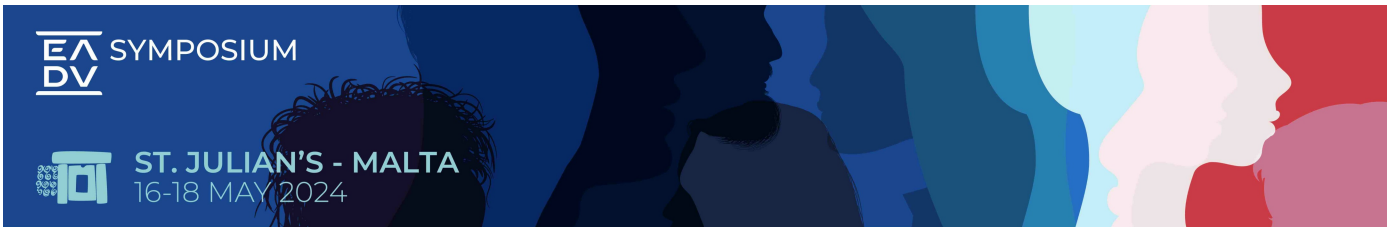
A total of 122 individuals responded to our questionnaire, with a mean age of 23 years ± 4.6 years. There was a clear female predominance, with a female-to-male ratio of 3.3. Psychiatric comorbidities were found in 14.5% of our patients, predominantly anxiety and depression. Clinically, 50.8% of participants had mixed-type acne, 25.8% retentional acne, and 23.4% had an inflammatory form of acne. Acne lesions predominated on the face in 93.2%, followed by the upper back (45.8%), arms (24.6%), and décolleté (15.3%).

According to the GEA scale, 5% of participants were classified as stage 0, 20% as stage 1, 38% as stage 2, 25% as stage 3, 12% as stage 4, and 1% as stage 5. The CADI score ranged from 1 to 15, with an average of 5.4 ± 3.9, indicating impaired quality of life in 36% of participants. Quality of life impairment was considered mild in 54% of surveyed patients, moderate in 31%, and severe in 15%. The median score of SKINDEX-16 was 19.1, with 38.5% of patients experiencing low impact on their QOL (< 10), 46.8% with moderate impact (between 11 and 49), and 14.7% having a significant impact on QOL (> 50). Patients with severe to very severe acne according to the GEA scale had impaired quality of life in 66.6% according to CADI and 58.2% according to SKINDEX-16.

Conclusion:

Numerous studies have aimed to quantify the Quality of Life of acne patients, relying on specific scales, particularly the CADI. In our series, the average CADI score was close to that of a Moroccan study and lower than others from Morocco and Cameroon. Few studies have used SKINDEX-16 to evaluate acne and its psychological and emotional impact. In our study, there was an impairment of QOL in all patients with a median SKINDEX-16 score of 19.1. A strong positive correlation has been proven between SKINDEX-16 and CADI scores in the literature. Based on our results, we observed that patients with severe and very severe acne had more impairment in QOL according to both scores, consistent with other series.

Our study emphasizes the significant impact of acne on the Quality of Life of patients, justified by the visibly prominent and aesthetically challenging nature of the condition.



Abstract N°: 1533

The use of dermocosmetics in patients receiving a systemic treatment for acne : a comparative real-word study

Charbel Skayem*[1], Charles Taieb[2], Jean Daniel Daumont[3], Charles Ribeyre[4], Bruno Halioua[5]

[1]APHP Ambroise Parré, Dermatology, Boulogne Billancourt, France, [2]European Market Maintenance Assessment, Patients Priority, Paris, France, [3]DGI Tech, Digital , Paris, France, [4]Cerave, Scientific communication, Levallois Perret, France, [5]Dermatologist, Paris

Introduction & Objectives:

Acne affects many adolescents and adults and has a significant psychological and social burden on patients. Appearance-related stigma and impact on quality of life underline the importance of effective therapeutic strategies that are well accepted by patients.

Materials & Methods:

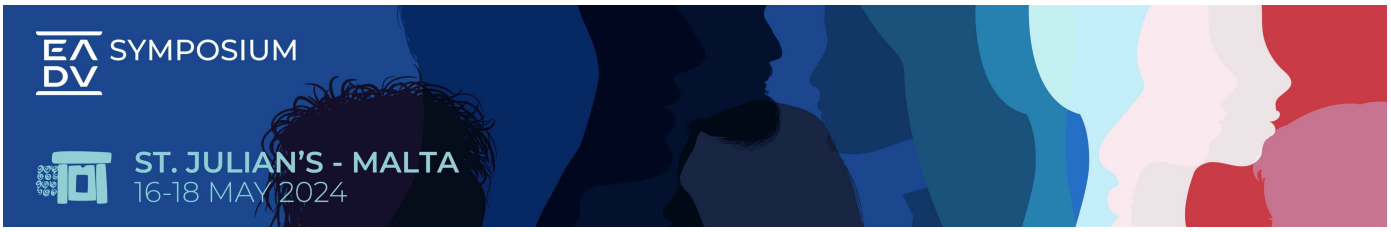
Prospective observational study, approved by the Ethics Committee of the Ile de France VII [2022-A02154-39] . We included patients with moderate and severe acne who will receive only a systemic treatment of acne and a dermocosmetic. from over 30 dermatologists in France. Patients who did not object to the project completed an initial questionnaire on day zero, followed by a second questionnaire on day 28. The use of PROs such as AI-ADL and PUSH-D allowed accurate assessment of disease burden and stigma respectively. A questionnaire was administered to assess patients' priority expectations of a dermocosmetic. Acne severity was diagnosed by the dermatologist [GEA scale]. We compared those receiving a dermocosmetic containing essential ceramides, hyaluronic acid and niacinamide or salyclic acid, vitamin PP and kaloin clay [group exposed] to those receiving another different dermocosmetic [group no exposed]

Results:

141 patients were recruited (76% women). 77% reported moderate and 16% severe acne. 91 patients completed both questionnaires [77% female, 77% reported moderate acne and 15% severe acne]. Patients were divided into two groups: an exposed group ( ) comprising 62% of patients and a non-exposed group (other dermocosmetic). The primary expectations of the patients were that the dermocosmetic should be comfortable, leave a non-greasy finish and be fast-acting. For these 91 patients, the AI-AD and PUSH-D scores were 30±15.8 and 22.4±19.9, respectively, on inclusion day and 19.1±14.4 and 14.3±14.8 on day 28. Dermocosmetic evaluation showed a statistically significant improvement in both burden and stigma scores in both groups. In the exposed group, burden improved by 40% versus 30% in the unexposed group, while stigma improved by 37% versus 32.7% in both groups. It should be noted that patients' priority expectations were significantly met.

Conclusion:

A significant improvement of disease burden and stigma was observed at day 28 in both groups. However, the improvement was significantly higher in the exposed group compared to the unexposed group. Further studies are needed to assess the benefits of using dermocosmetics in patients receiving a systemic treatment. Although the indication of dermocosmetics with systemic treatments is still debatable, our preliminary results suggest that if a dermocosmetic were to be used, a formulation containing essential ceramides, hyluronic acid and niacinamide or salyclic acid, vitamin PP and kaloin clay more significantly improves patients' expectations and quality of life compared to o ther dermocosmetics.



Abstract N°: 1591

Nevus Comedonicus: Uncommon facial presentation in a child.

Anass Abbour[1], Fatima Zahra Elfatoiki[1], Farida Marnissi[2], Fouzia Hali[1], Soumiya Chiheb[1]

[1]Ibn Rochd UHC, Dermatology, Casablanca , Morocco, [2]Ibn Rochd UHC, Anatomic Pathology, Casablanca , Morocco

Introduction & Objectives:

Nevus comedonicus (NC) is a rare cutaneous disorder thought to be caused by hamartomatous pilosebaceous tissue proliferation. It manifests as grouped and elevated follicular openings filled with dark keratin plugs, giving the appearance of open comedones. It is usually present at birth but can begin in adolescence and, in rare cases, adulthood.

We report a case of a facial NC in a 6-year-old child.

Materials & Methods:

Results:

A 6-year-old male child presented with cribriform rounded patch formed of blackish plugged lesions over the left cheek evolving for 6 months and gradually increasing in size. Cutaneous examination showed multiple, comedo-like openings with 1-3 mm size darkly pigmented keratic plugs over the left cheek associated with few hypertrophic and atrophic scarring areas. Dermoscopic examination revealed multiple, sharply demarcated keratinous plugs surrounded by dark-to-light brown structure-less homogeneous circular areas.

There was no ocular, neurologic, or skeletal abnormalities.

Clinical diagnosis of nevus comedonicus was confirmed by histological examination of the skin.

The patient was treated with topical retinoids with slight resolution.

Conclusion:

NC is a rare skin disorder belonging to the spectrum of the epidermal nevi syndrome. Usually involving the face and neck area. Most of the time, it manifests shortly after birth with the most of the cases presenting before the age of 10. Two types of NC have been identified: Nonpyogenic NC with acne-like characteristics and a second type characterized by the formation of cysts, papules, pustules, and abscesses in various stages of development.

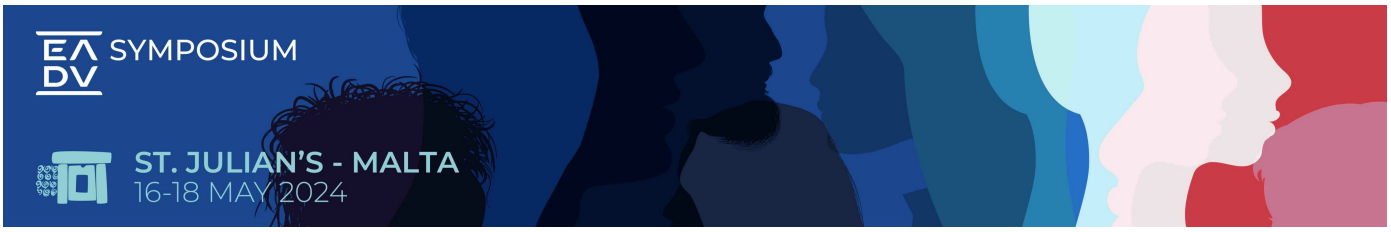
It has been also described in association with various extracutaneous manifestations which is termed as “NC syndrome” with skeletal, ocular and neurologic abnormalities.

The diagnosis is predominantly clinical, with biopsy only indicated in rare cases.

In our case, the main differential diagnosis was cutaneous mucinosis given the clinical presentation, but the histopathology and the negativity of the alcian blue staining enabled us to rule it out.

In terms of treatment, topical keratolytics and retinoids associated with multiples procedures, such as salicylic acid, dermabrasion and manual extraction, can be useful but does not treat. Complete surgical excision seems to be the most appropriate treatment.

Hereby, we wish to raise clinicians’ awareness in the diagnosis of NC, which can help subvert the need of an invasive investigation, in turn, avoiding further trauma to the child and parents.



Abstract N°: 1660

Unveiling the Uncommon: A Case of Hidradenitis Suppurativa Manifesting in Rare Sites

Madalena Correia[1, 2], Ivânia Soares[1], Inês Pereira Amaral[1], Paulo Filipe[1, 2]

[1]Hospital de Santa Maria, Dermatology, [2]Faculty of Medicine, University of Lisbon

Introduction & Objectives:

Hidradenitis suppurativa (HS) is a chronic inflammatory skin disease characterized by inflammation of the follicular epithelium in areas rich in apocrine glands. While commonly affecting areas such as the axillae, groin, and buttocks, HS can also manifest in rare sites, posing diagnostic challenges and necessitating tailored therapeutic approaches.

Materials & Methods: Case report and review of articles in Medline

Results:

A 52-year-old man was evaluated in a dermatology consultation for a 25-year history of painful nodules with spontaneous rupture and purulent drainage in the inguinal folds, perineal, malar, and mandibular regions. Resolution led to scarring and occasional drainage of purulent exudate. Additionally, progressive edema and erythema of the left auricular pavilion were described in the last year. He underwent multiple cycles of beta-lactam antibiotic therapy and surgical intervention for drainage of nodules and two fistulotomies in the perianal region, without benefit.

Objective findings included pseudocomedones, centimeter-sized soft and painful nodules with purulent drainage in the maxillary regions, inguinal folds, scrotum, and perineum. On the left buttock, there was swelling with fluctuation, with a palpable fistula to the scar from fistulotomy. The left auricular pavilion was swollen, erythematous, warm, and tender to palpation, with nodularity and purulent drainage.

Pus was collected from the auricular pavilion (3 samples), with Schaalia turicensis (Actynomyces spp.) identified in one, a commensal or potentially pathogenic agent causing skin infection. Histopathology showed only nonspecific chronic inflammatory reaction.

He completed 3 months of directed antibiotic therapy with amoxicillin without improvement. Improvement occurred only after the introduction of systemic corticosteroid therapy, suggesting the etiology of the lesions to be autoinflammatory rather than infectious. Following treatment with adalimumab, there was a decrease in the number of inflammatory nodules and episodes of purulent drainage from all locations.

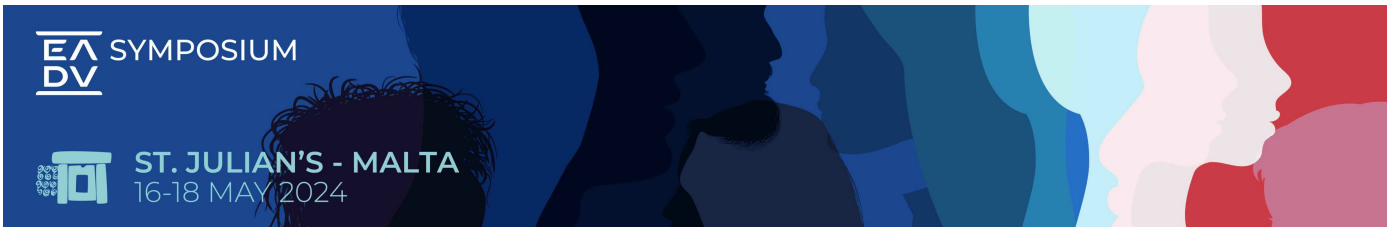
Conclusion:

This case highlights the atypical presentation of HS involving rare locations such as the face, gluteal area, and ears, with the auricular pavilion being a previously unreported site of involvement.

Although the chronicity of the disease and the similarity of lesions in a patient with this diagnosis may shorten the diagnostic pathway, it is crucial to consider its differential diagnoses for appropriate therapeutic management.

The pathogenesis of HS involves dysregulation of the immune response, follicular occlusion, and bacterial colonization, underscoring the need for multimodal therapeutic strategies targeting inflammation, bacterial overgrowth, and follicular occlusion.

HS can manifest in rare sites beyond the typical regions, necessitating a high index of suspicion and comprehensive evaluation for accurate diagnosis and management



Abstract N°: 1701

Modulating Cutaneous Microbial Interactions and Inflammation in Acne acting on skin and gut microbiome - Clinical and Molecular Insights

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Introduction & Objectives:

The manipulation of the skin microbiome represents a promising avenue for addressing immune-mediated inflammatory skin conditions such as acne. However, the impact of functional ingredients on skin microbiota balance requires careful consideration. This study examines the potential of topically applied *Lactiplantibacillus plantarum* contained in SkinDuoTM to modulate cutaneous microbial interactions and inflammation in acne, with a focus on clinical observations.

Materials & Methods:

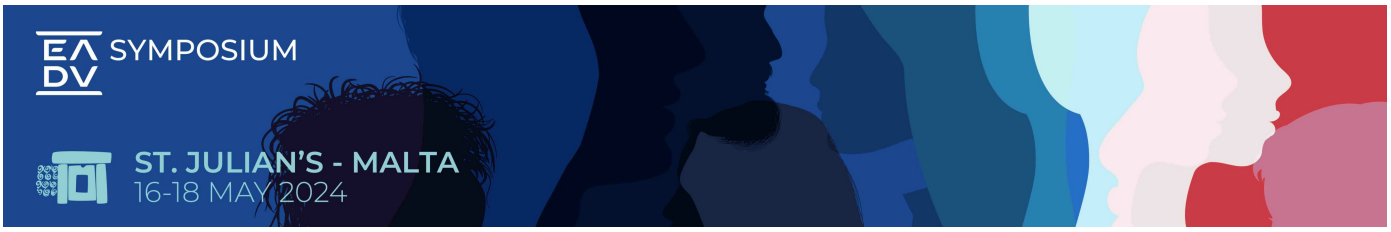
Strain viability was initially evaluated using in vitro human skin models. Subsequently, the anti-acne properties of SkinDuoTM, containing *Lactiplantibacillus plantarum*, were assessed through clinical observations involving a cohort of at least 50 patients with acne. The clinical study involved topical and oral administration of SkinDuoTM for four weeks under dermatologist supervision. Moreover, patients were taking also oral probiotics containing microencapsulated probiotic microorganisms: *Bifidobacterium animalis spp lactis* BS01, *Lactobacillus plantarum* LP01, *Lactobacillus rhamnosus*. Additionally, next-generation sequencing (NGS) analysis for 16S and 18S was performed to assess bacterial and fungal community composition.

Results:

In vitro studies demonstrated increased viability of *Lactiplantibacillus plantarum* over time. Clinical observations on the cohort revealed significant reductions in acne symptoms following four weeks of treatment with SkinDuoTM. Among the observed improvements were reductions in closed comedones by 39%, open comedones by 34%, papules by 25%, pustules by 61%, sebum production by 40%, erythema by 64%, dryness by 67%, desquamation by 50%, and burning sensation by 88%. NGS analysis showed alterations in bacterial and fungal community composition, indicating a potential beneficial impact on skin microbiota.

Conclusion:

SkinDuoTM, formulated with *Lactiplantibacillus plantarum* and natural enhancers, demonstrates promise as an effective anti-acne treatment. The observed clinical improvements in acne symptoms, combined with in vitro data supporting strain viability and NGS analysis indicating alterations in microbial communities, suggest that SkinDuoTM could serve as a valuable addition to acne management strategies.



Abstract N°: 1731

Tolerability, Drug Utilization Pattern and Effectiveness of Minocycline Oral Formulations in India: A Real-World Retrospective Study from Electronic Medical Records

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Introduction & Objectives:

Minocycline, a semisynthetic tetracycline, possesses antibiotic and anti-inflammatory properties and is indicated for dermatological conditions like acne vulgaris. There is limited real-world evidence on tolerability and effectiveness of minocycline oral formulations in India. This study assessed the real-world tolerability, effectiveness, and usage pattern of minocycline oral formulations in Indian patients.

Materials & Methods:

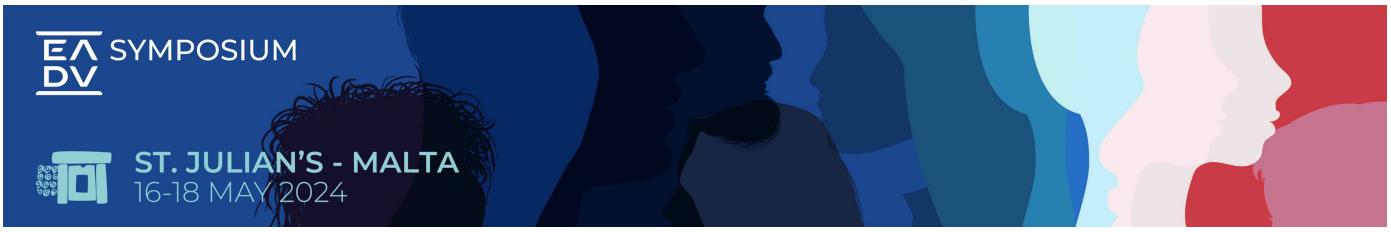
This was an electronic medical record (EMR) based, retrospective, multicenter, observational real-world study. Data of patients aged ≥12 years of age who were prescribed with oral minocycline formulations and had ≥1 follow-up visit data from index date (first prescription) of oral minocycline formulations was retrieved. Baseline data about demography, symptoms, diagnosis, comorbidities, dose, frequency and duration of oral minocycline formulations along with concomitant medications was retrieved. Data on adverse events (AEs) or any clinically detectable/intolerable events from follow-up visit was retrieved. For effectiveness, data on resolution of symptoms in patients with acne recorded during the treatment period was retrieved. Primary endpoint was proportion of patients with AEs during the treatment period with minocycline oral formulations. Secondary endpoints included assessing drug utilization pattern of minocycline oral formulations and proportion of acne patients with symptom resolution during the treatment period.

Results:

Data of 2,161 patients who were prescribed with oral minocycline between 2017-2023 was analysed. Most patients were females (62.6%) and were in the age group of 18-39 years with mean age 30.1 years. The mean duration between visits was 30.4 days (Range: 1 – 210 days). Adverse events were reported in 29 (1.3%) patients (hyperpigmentation: 9 patients [0.4%], itching/pruritus: 8 patients [0.4%], urticaria: 4 patients [0.2%] and dizziness/giddiness: 3 patients [0.1%]). The most common comorbidity was dermatitis (4.4%) followed by folliculitis (2.6%), alopecia (2.4%), and melasma (2.2%). Acne (56.9%) was the most common indication for prescription of oral minocycline. Minocycline 100 mg once daily was prescribed to most patients. Most patients (28%) received minocycline for the duration of 11 to 20 days, while around 25% patients received minocycline for 21 to 30 days. Among different dose strengths prescribed for acne with one follow-up visit, minocycline 100 mg was the most prescribed (19.76%) followed by minocycline 65 mg (16.2%). For dermatitis, and folliculitis also, minocycline 100 mg was the top choice (1.1%, and 1.2%, respectively). The most common concomitant medication prescribed along with minocycline oral formulations was topical antibiotics (43.8%) followed by retinoids and their combinations (31.9%). Of the 2,161 patients, symptom resolution was captured in 160 patients and all of them showed symptom resolution at follow up. Similarly, among 1,230 patients prescribed with minocycline for acne, symptoms resolution at follow-up was seen in all 143 patients for whom symptom resolution data was recorded.

Conclusion:

Overall, minocycline was well tolerated. Acne was the most common indication for minocycline oral formulation and 100 mg once daily was the most common dosage and frequency. Minocycline was effective in overall symptom resolution and symptoms resolution in patients with acne. (Clinical Trial Registration: CTRI/2023/08/05633)



Abstract N°: 1738

The outcomes of employing combination therapeutic strategies for a severe case of pseudo-acne fulminans

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The outcomes of employing combination therapeutic strategies for a severe case of pseudo-acne fulminans

Introduction & Objectives:

Acne fulminans is an uncommon and severe condition marked by the abrupt emergence of nodular and ulcerative acneiform lesions, accompanied by systemic symptoms. Some individuals experience a sudden exacerbation of acne, particularly during oral isotretinoin treatment, yet lacking pronounced systemic involvement. The widely acknowledged cause behind the development of pseudo-acne fulminans is presumed to be a hypersensitivity reaction triggered by bacterial agents of *Cutibacterium acnes* released during oral isotretinoin therapy. It is hypothesized that alterations in innate immunity lead to variations in interleukin production and heightened neutrophilic activity, resulting in the formation of necrotizing ulcerative skin lesions. Also referred to as "pseudo-acne fulminans", we report a case exhibiting these characteristics to emphasize the importance of promptly recognizing and managing this manifestation.

Results:

A 22 years old female patient, was referred to our department with a sudden onset of erythematous papulo-pustular acneiform lesions, with multiple yellow crusts and scabs, and severe, tender, dome-shaped inflammatory nodules on the face and neck. The patient recalled an abrupt worsening of previously present acneiform lesions after she undergone one-week of oral isotretinoin (30mg/day). There was no report of fever, arthralgias or other systemic symptoms and the laboratory exams remained within normal parameters with the only exception of a mild iron deficiency. Bacteriological examination was positive for *Cutibacterium acnes*, *Staphylococcus epidermidis* and *Staphylococcus capitis*. Based on the clinical presentation, laboratory findings and the exacerbation after one week of therapy we made the diagnosis of isotretinoin-induced acne fulminans without systemic symptoms.

In terms of therapeutic approaches, the absence of randomized clinical trials hinders the identification of the most effective treatment for isotretinoin-induced acne fulminans. Therefore therapeutic strategies were combined in this case. Oral therapy included methylprednisolone 16mg/day for 30 days, oral clindamycin 600mg/day for 30 days, and rifampicin 600mg/zi for 30 days. Local treatment encompassed ointment with metronidazole, corticosteroids, neomycin, and fusidic acid. The patient has also undergone autovaccine, phototherapy with blue light, photodynamic therapy, fractional laser along with triamcilonon acetonide intralesional injections in some nodules with significant improvement of acneiform lesions and no onset of new ones.

Conclusion:

Identifying individuals within this subgroup, characterized by the abrupt onset of severe acne without systemic symptoms, is essential. Prompt management is necessary to prevent the development of disfiguring scars. Based on the existing evidence, it is suggested as a preventive measure for pseudo-acne fulminans to initiate early treatment for macro-comedones and start isotretinoin therapy at low doses, either alone or in conjunction with oral corticoids, until complete symptom remission.