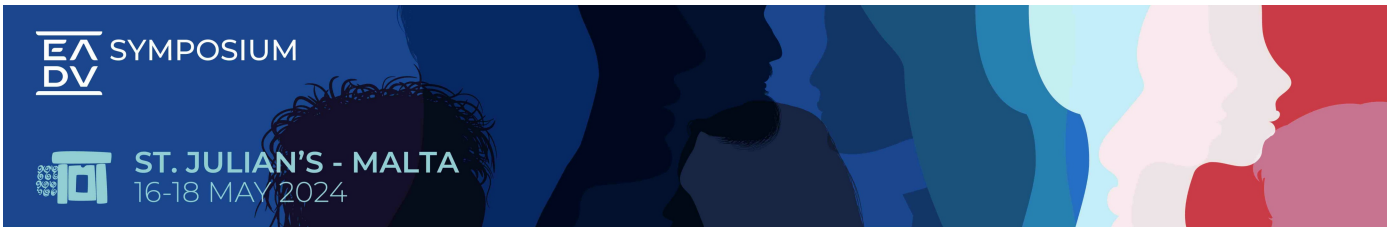


Abstract N°: 59

Efficacy of platelet-rich plasma in the treatment of vulvar lichen sclerosus resistant to Clobetasol propionate 0.05%

Meriem Cherif[1], Zaouak Anissa[1], Chamli Amal[1], Hammami Houda[1], Fenniche Samy[1]

[1]Habib Thameur Hospital, Dermatology, Tunis

Introduction & Objectives:

Vulvar lichen sclerosus (VSL) resistant to clobetasol propionate (CP) is a therapeutic challenge. The aim of our study was to evaluate the efficacy and safety of platelet-rich plasma (PRP) in this situation.

Materials & Methods:

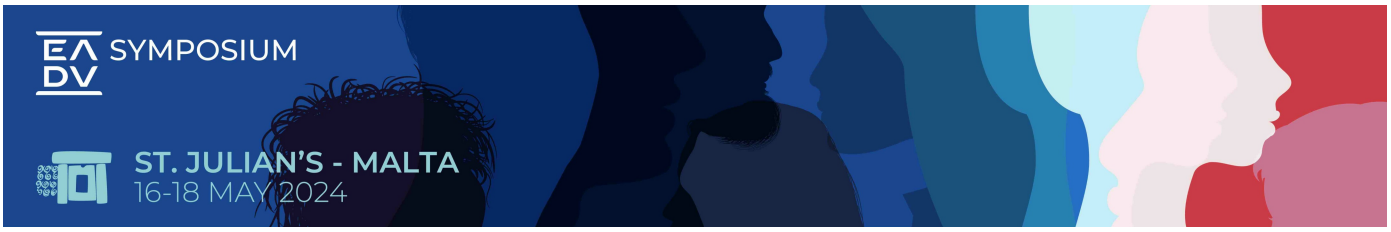
This was a prospective open clinical trial. Twice-monthly intradermal micro-injections of 3mL of PRP prepared after two cycles of centrifugation of whole blood collected in citrated tubes at a speed of 3500 rpm were performed on the affected areas. A maximum of four sessions were performed. A local anesthetic cream containing lidocaine and prilocaine 5% was applied one hour before the session. Evaluation of results was based on the visual analog scale (VAS) for pruritus and pain (from 0 to 10), the Arabic version of the Female Sexual Function Index (Ar-FSFI) for sexuality (from 2 to 36), a global assessment by the investigator of clinical improvement (Physician Global Assessement PGA) (from 0 to 10).

Results:

Seven patients with Clobetasol Propionate-resistant VLS taken for a mean duration of 4.3 years were included. Mean age was 56 years. The mean VAS-pruritus, VAS-pain, Ar-FSFI scores before treatment were 8/10, 5.6/10, 8.5/36 respectively. At the end of the protocol, we obtained a significant improvement in all functional signs to 1/10, 1/10, 19.3/36 respectively ($p < 0.05$), as well as a clear clinical improvement in achromia and genital atrophy. No adverse effects were observed. An evaluation after 6 months from the last session showed that remission was maintained in six patients, while in one patient, improvement was only partial and continued dermocorticoids were necessary.

Conclusion:

Our study highlights the efficacy and tolerability of PRP intra-dermal injection in the treatment of VLS resistant to conventional Clobetasol Propionate therapy.



Abstract N°: 60

5% Simvastatin Ointment as Treatment for Congenital Hemidysplasia with Ichthyosiform erythroderma and Limb Defects (CHILD) Syndrome in a 4 year-old Female: A case report

Denise Marie David*[1], Koreen Blossom Chan[1], Carmela Augusta Dayrit-Castro[1]

[1]Philippine General Hospital, Dermatology, Manila, Philippines

Introduction & Objectives:

Congenital Hemidysplasia with Ichthyosiform erythroderma and Limb Defects (CHILD) syndrome is a rare X-linked dominant disorder, caused by mutations in the NADPH steroid dehydrogenase-like (NSDHL) gene.

A 4-year old female with CHILD syndrome, confirmed with a pathogenic variant of the NSDHL gene, c.130G>A (p.Gly44Ser), presenting at birth with the classic unilateral right-sided erythematous verrucous plaques without crossing the midline, and ipsilateral limb defects (syndactyly), consulted back in our institution via telemedicine. She is the youngest in a family of four, born to a healthy non-consanguineous couple of Filipino descent. This case was already published in BMJ last November 2018.

Materials & Methods:

A pathogenesis-based treatment is currently being used in patients diagnosed with CHILD syndrome, with more recent studies citing good efficacy and safety with monotherapy with HMG-CoA reductase inhibitors. The Pharmacy Department of the Philippine General Hospital was able to compound 5% simvastatin ointment, from 20mg/tablet of simvastatin and petroleum jelly as base.

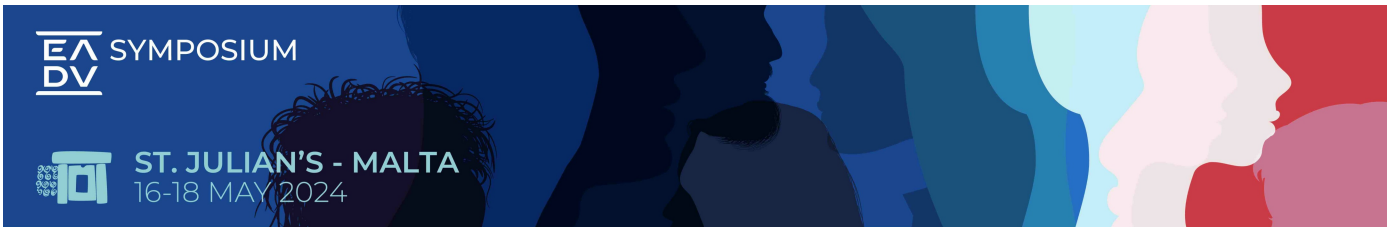
The 5% simvastatin ointment was applied directly on the plaques, twice daily for four months, except for the right inguinal area and labia majora where application started a month later, as per patient's mother request after expressing concern that the inguinal area may be more sensitive than the extremities and trunk. The patient came in for follow-up after the first 2 weeks, then every 4 weeks thereafter. The aim during each follow-up was to assess treatment response, to address any complications, and to refill medication. During every follow-up, serial photographs were taken per body region examined. A review of proper application of the ointment was also done.

Results:

Starting at week 2, there was pronounced rapid improvement and decrease in the erythema, crusting, scaling, excoriations, and pruritus of the plaques, most evident on the palm. The most responsive sites are the arm, chest, abdomen, inguinal and labia majora, while the foot was the most resistant. Starting week 10 onwards, there was resolution of the foul-smelling discharge, pruritus, and improvement in the verrucous plaques. Some of the plaques appeared lighter in color, even appearing as atrophic scars particularly on the forearms and thighs. The patient's mother reports significant reduction in pruritus, resolution of foul-smelling discharge and bleeding enabling the patient to walk more comfortably, and improvement in the patient's quality of sleep.

Conclusion:

Monotherapy with 5% simvastatin ointment was able to decrease the thickness of the verrucous plaques seen in our patient. This highlights that the accumulation of toxic metabolites may play a more crucial role in disease pathogenesis. Close patient monitoring is necessary to tailor needed duration of treatment, and possibility of a maintenance phase, along with observation for side effects.



Abstract N°: 120

Kitchen salt as a novel therapy for hypergranulations - a case report

Milos Nisavic*[1], Ljuba Vujanović[1], Zoran Golušin[1], Biljana Gajinov[1], Irena Komljenović[2], Aleksandra Bukvić Šajinović[1]

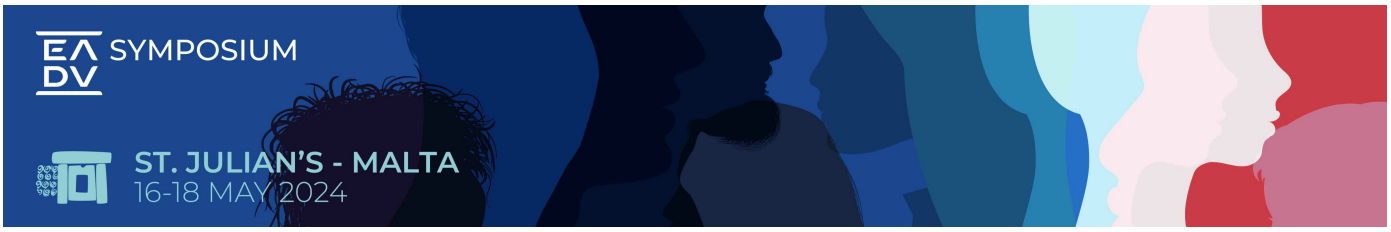
[1]Medical Faculty in Novi Sad, Novi Sad, Serbia,[2]Dom zdravlja "Novi Sad“, Novi Sad, Serbia

Introduction & Objectives: A 74-year-old male presented with itchy bumps on the trunk and arms which lasted for two years. His medical history included the use of pantoprazole, levothyroxine, acetilsalicylic acid, and methyldopa. Despite previous treatments with oral antihistamines, oral and local corticosteroids, leasions were persistent. Clinical examination revealed red papules and excoriations on the trunk and upper extremities. Dermoscopy revealed a peripheral keratotic rim resembling a double rail. A biopsy confirmed the diagnosis of Porokeratosis. Given the persistent nature of the lesions, the objective was to explore an alternative therapeutic approach.

Materials & Methods: In an attempt to address the Porokeratosis, the patient was administered Acitretin capsules 25 mg daily. Four months after the treatment, the patient developed periungual hypergranulations on the fingers of both feet and hands. Recognizing this side effect, a novel local therapy was initiated. Kitchen salt was applied daily in the evening with occlusion, while perilesional skin was protected with vaseline. This regimen was continued for a total of 14 days after which we evaluated its efficacy and safety.

Results: Following the 14-day local therapy with kitchen salt, a total resolution of the periungual hypergranulations was observed. The treatment proved effective without any adverse events reported. The hypergranulations, which posed a potential threat to the discontinuation of Acitretin therapy, were successfully addressed with this novel approach. Notably, the patient could maintain the ongoing Acitretin treatment without any need for cessation or dose reduction. Dermatological evaluation revealed no signs of recurrence, affirming the positive outcome of the local therapy.

Conclusion: The usage of kitchen salt as a local therapy for periungual hypergranulations associated with Acitretin treatment is a novel and successful therapy option. The absence of adverse events and the rapid resolution of hypergranulations make this approach a safe and effective option for managing such complications. This innovative local therapy not only addresses the side effects but also ensures the uninterrupted continuation of Acitretin therapy. Further studies are needed to confirm the efficacy and safety of this therapeutic option.



Abstract N°: 170

Efficacy of Topical 10% Tranexamic Acid in Topical Steroid Damaged Faces: a non-randomized interventional study

Shikha Thakur[1], Pranami Kashyap[1], Anita Marak[1]

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

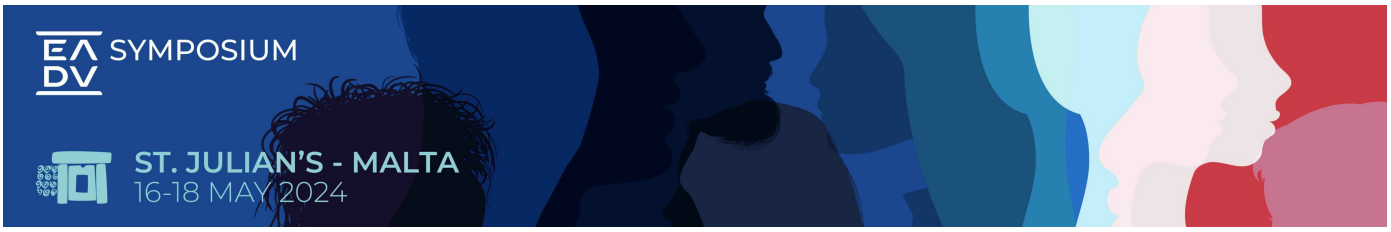
Introduction & Objectives: Topical corticosteroids (TC) have become an essential tool in the management of a vast range of inflammatory dermatoses. However, owing to the over-the-counter (OTC) status of these drugs, they are often misused by the prescribers and by the users, resulting in severe and sometimes irreversible cutaneous damage. Owing to the high prevalence of misuse, abuse or overuse of topical steroids in the Indian population, 'Topical Steroid Damaged/ Dependent Face' (TSDF) was described. Tranexamic acid (TXA) or trans-4-aminomethylcyclohexanecarboxylic acid is a synthetic lysine-like molecule, which competitively inhibits the conversion of plasminogen into plasmin, thereby inhibiting the plasmin mediated angiogenesis. Topical 10% tranexamic acid (TXA) has shown promising results in TSDF.

The objectives of our study were to establish the mean improvement in erythema measured by Clinician Erythema Assessment (CEA) scale in TSDF and document any side effects after using 10% topical TXA (Tranexamic acid) solution, and to study the clinico epidemiological features of subjects presenting with TSDF (Topical Steroid Damaged/ Dependent Face).

Materials & Methods: The patients with TSDF above 18 years of age and either sex attending the Dermatology outpatient clinic were included in the study after taking their informed consent. In each case a detailed history and a thorough general physical and cutaneous examination was carried out according to a pre-structured proforma. Erythema, the hallmark of TSDF, was assessed using the Clinician Erythema Assessment Scale (CEA) and graded accordingly from 0 to 4.

Results: Mean CEA score at day 0 was 3.33 which reduced to 0.33 at week 4. This reduction was statistically significant ($p<0.001$). The only side effect recorded in our study was mild dryness (20%). Female preponderance (F:M=4:1), Mean age was 32 years. Mean duration of topical steroid application was 13.33 months. Mometasone was most commonly abused (53.33% cases) followed by betamethasone (26.66%) and clobetasol (20%). Most common reason for steroid abuse was facial melanosis (66.66%) followed by acne vulgaris (33.33%). Other signs of TSDF seen in our study were acneiform eruption (73.33%), hypertrichosis (60%), photosensitivity (100%), dyspigmentation (93.33%), skin atrophy (53.33%) and telangiectasia (100%).

Conclusion: Topical tranexamic acid 10% is effective in treating TSDF with minimal side effects. Topical Tranexamic acid is a promising treatment in TSDF.



Abstract N°: 316

Periorbital Skin Rejuvenation with Combination of HIFU, Eye Booster and Botulinum Toxin A. A Case series of 53 Patients

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

[1]Cosmetic Derma Medicine, Athina, Greece

Introduction & Objectives:

In the present study, we examine the effectiveness of combined HIFU and eye booster treatment performed in a specific protocol plus botulinum toxin A, as a way to correct periorbital skin aging. As these treatments target structures that are located in different anatomical level, it is of great importance to evaluate the efficacy and interaction of them when combined together, as well as the safety and patient satisfaction.

High-intensity focused ultrasound (HIFU) treatment heats the reticular dermis and SMAS to greater than 60 oC, provoking the contracture of denatured collagen and promoting neocollagenesis.

Specific eye boosters improve under eye and lateral canthal wrinkles, sagging skin, dark circles and the tear valley.

In this study, we used Onabotulinum Toxin A injected in crow's feet and the lower eyelid, combined with eye booster (0.5ml per eye, consisting of hyaluronic acid 2mg/ml, amino acids, niacinamide and glutathione). In addition, HIFU was performed, involving 2 mm depth transducers at 0.4J/mm2.

Materials & Methods:

53 patients (39 women, 14 men, mean age 46) with medium to severe skin aging were included in the study. All patients had undergone Botulinum toxin A in the past as monotherapy.

Neurotoxin was performed in crow's feet in all patients (15iu on orbicularis oculi) and in the lower eyelid (4iu in the inf. pretarsal portion) in 15 patients.

In 15 days, 3 monthly eye booster sessions were initiated, performed on day 15,45 and 75 after neurotoxin.

HIFU was performed in 3 monthly sessions on days 30, 60 and 90 after neurotoxin.

Photographs were taken on day 1 and 2 months after the last session.

Results:

A significant reduction of lateral canthal and under eye wrinkles was noticed 15 days after the last treatment, with a patient satisfaction rate of up to 85% on month 4, compared with 55% when neurotoxin was used alone.

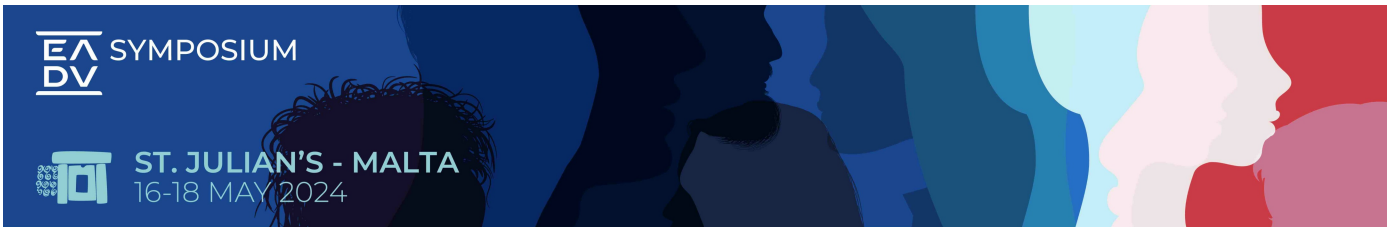
The patients reported better results in static wrinkles, duration of the result, skin elasticity, sagging and dark circles. Nearly all patients mentioned a better appearance in the skin tone, hydration and tired – eye effect, whilst none of them complained about any severe side effects, except for a mild erythema after HIFU and minimal bruising after injectable eye booster.

Conclusion:

The combination of HIFU plus eye booster with botulinum toxin A is a safe, minimally invasive therapeutic approach with great results in periorbital skin rejuvenation. The combined protocol targets all periocular structures that contribute to

periorbital skin aging.

In addition, botulinum toxin A seems to have better performance and longer duration when applied as part of Energy Based Device and injectable booster protocol.



Abstract N°: 328

Expediency of cosmeceuticals with topical probiotics application for patients with fixed centrofacial erythema phenotype of rosacea.

Khrystyna Nykolaichuk[1], Oleksandr Aleksandruk[1]

[1]Ivano-Frankivsk national medical university, Dermatology and Venereology , Ivano-Frankivsk, Ukraine

Introduction & Objectives:

Rosacea has long been more than just a dermatological problem. The vast majority of patients initially visit a cosmetologist, considering facial erythema and the presence of eruptions as an aesthetic defect that needs correction.

While the treatment of rosacea, depending on the phenotype, is clearly defined today, the skin care for this dermatosis is always a puzzle for both the doctor and the patient.

Rosacea patients are more likely to have sensitive skin. Dryness, tightness, and itching are common phenomena in these cases; therefore, the preference for facial daily care products, which are a part of lifestyle, is a rather painstaking task.

Materials & Methods:

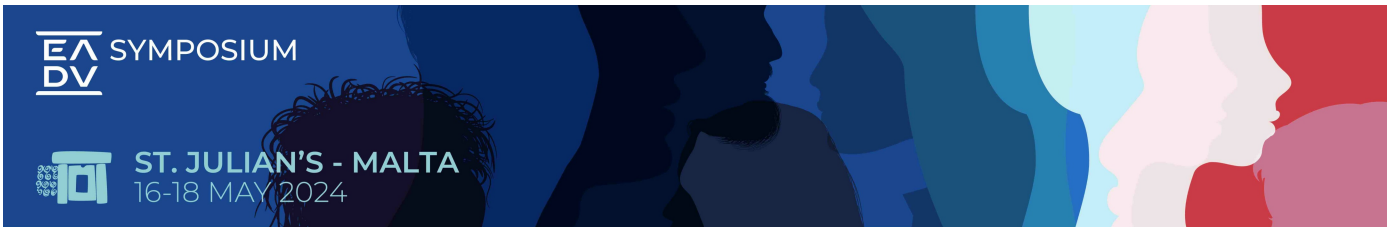
Knowing that the probiotics actively affect the inflammatory reaction and, as a result, reduce or eliminate the erythema, we recommended cleansing foam and cream with the probiotic Lactobacillus Ferment to our patients. A total of 43 patients with fixed centrofacial erythema phenotype of rosacea used these products within one month. ** The Clinician's Erythema Assessment and the Patient's Self-Assessment were used for erythema assess.

Results:

The proposed facial care products were well tolerated and did not cause additional irritation or dryness of the skin. From the 3rd to the 5th day of use, the patients noted the disappearance of uncomfortable symptoms, including the feeling of tightening of the skin; the intensity of the erythema decreased; and, on the 7th to 10th day, it completely disappeared. By the end of the month, the general appearance of the skin of the face significantly improved, and there were no relapses of the rosacea.

Conclusion:

Cosmeceuticals with probiotics have high therapeutic benefits in rosacea. In the treatment of dermatosis, it shows a distinguishable affection either for the intensity of erythema or for eliminating dryness and hypersensitivity of the skin. We achieve this outcome by restoring the functional features of the skin, including balancing out the skin's microbiome and repairing and strengthening the skin barrier. However, for perfect assessment of erythema, visual scales only are not reliable. It is necessary to develop digital criteria, possibly using digital photo processing or artificial intelligence even.



Abstract N°: 364

Matricectomy with phenol – the treatment of ingrown nail

Mihaela Georgescu[1]

[1]Central Military Universitary Emergency Hospital "Carol Davila", București, Romania

Introduction & Objectives:

The ingrown nail is the most common nail problem encountered in podiatry, general family medicine and dermatology.

Materials & Methods:

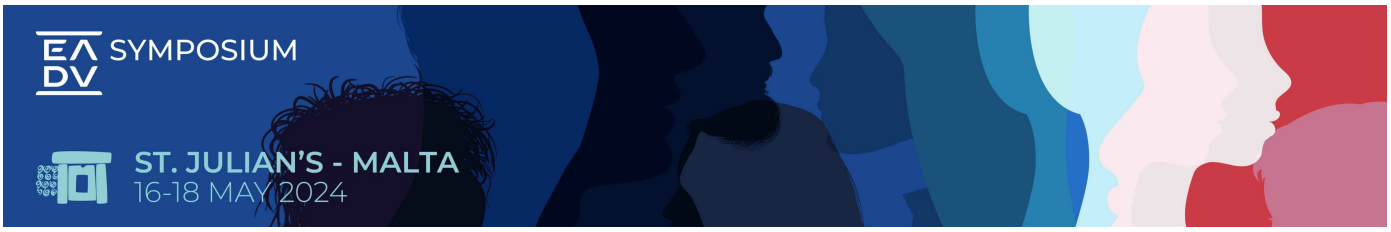
A series of ingrown nail's cases were treated using an 88% phenol solution. First the patients were asked a series of questions regarding diabetes mellitus, smoking, peripheral arterial disease, autoimmune disease, pregnancy. The procedure consisted of the following steps: local anesthesia, local antiseptic, tourniquet application, partial removal of nail plate, application an 88% phenol solution directly to the nail matrix, then 70% isopropyl alcohol to neutralize the phenol, antibiotic ointment, wound dressing. The patients were asked to come for follow-up at 1 month to assess the efficacy of the method and the wound healing.

Results:

The patients included in our study were satisfied with the obtained results. The mean period of wound healing varied from 3-6 weeks. Only 2 patients required oral antibiotic therapy. One patient suffered from diabetes mellitus and an echo Doppler was performed before the procedure. One patient suffered an infection three weeks after the procedure. The main problem of the patients was to protect the nail unit from water.

Conclusion:

The phenol solution is the gold standard in the treatment of ingrown nail.



Abstract N°: 436

Skin Lightening Practices by Transwomen in India and Treatments Used

Sriram Palepu*[1], Aylur Srikrishnan[2], Carrie Kovarik[3]

[1]University of Pennsylvania, Perelman School of Medicine, Philadelphia, United States,[2]Yrg Care Center For Aids Research & Education, Chennai, India, [3]University of Pennsylvania, Department of Dermatology, Philadelphia, United States

Introduction & Objectives:

Transwomen in India are often inducted into the hijra system, in which they live communally and adopt a distinct culture of language and lifestyle. Often, the socialization as a transwomen in Indian society is ostracizing, and individuals must resort to begging or sex work as their primary source of income. In one of the largest studies on the hijra community (n=300) to date, our team sought to understand the unique health needs of transwomen in Hyderabad, India. Indian beauty standards are known to place lighter complexion as paramount to feminine beauty, resulting in an increased demand for skin lightening products and procedures. Transwomen often feel immense pressure to not only distance themselves from the masculinity they were assigned at birth, but also fit into ideals of Indian femininity. We sought to understand the 1) prevalence of skin lightening, and 2) what regimens are used by transwomen to lighten their complexion.

Materials & Methods:

The study was conducted at a clinic for transwomen in Hyderabad. The team designed a survey which included questions about patient interest in skin lightening, prior use of skin lightening products, and products which were used. The survey was administered in Hindi, Telugu, or English depending on patient preference. No PHI was collected, and all relevant IRB approvals were given prior to data collection.

Results:

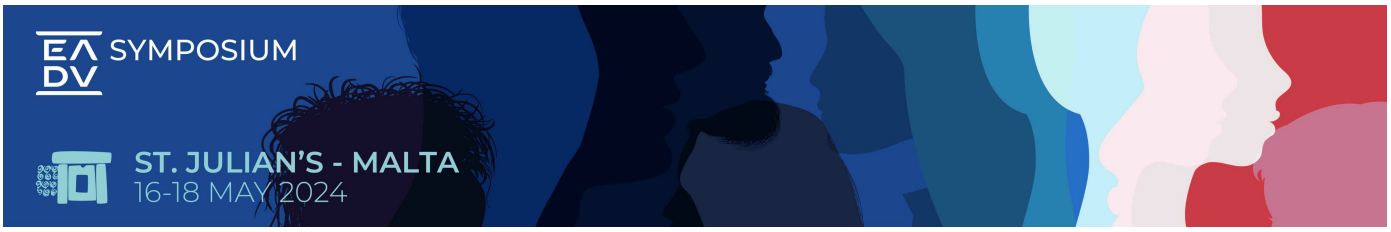
Of total surveyed (n=300), 223 responses were collected on skin lightening. About 67.3% (n=150) of transwomen expressed interest in skin lightening, while 33.7% (n=73) did not. Of those that were interested (n=150), about 43.3% (n=65) had used skin lightening products. There were two cases of patients who did not want to lighten their skin but used some products in the past. Patients sometimes used multiple products so counts listed are of number products reported, not number of patients. Some patients did not know what they were using and left the question blank. Active ingredients of products described are summarized in the table 1 below.

Conclusion:

The majority of transwomen surveyed had an interest in lightening their skin, though less than half of those who were interested actually pursued skin lightening treatments. Many resort to using topical medications often prescribed for conditions like melasma, acne, and psoriasis, without physician supervision. There is a marked interest in oral and IV glutathione, which has resulted in a counterfeit market of the latter with patients receiving saline injections instead, as self-reported by two patients. Alternative medicines and beauty creams containing several ingredients were also used. There is a pressing need to inform this population of best practices for maintaining skin health, and bring awareness to the fact that skin lightening products may be ineffective and can cause serious side effects.

Table 1: Products and Active Ingredients Used by Transwomen in Hyderabad

Type of Product Used	
Topical treatments (n=23)	Hydroquinone+Tretinoin+Mometasone Furoate (n=15) Clobetasol+Neomycin+Miconazole Nitrate (n=1) Glycolic Acid+Arbutin+Kojic Acid (n=1) Terbinafine+Ornidazole+Oflaxicin+Clobetasol (n=2) Betamethasone cream (n=3) Sunscreen (n=1)
Oral medications (n=2)	Levonorgestrel/ethinyloestradiol (n=1) Biotin+Multivitamin (n=1)
IV medications (n=16)	Glutathione (n=16)
Alternative (Herbal/Ayurvedic/Unani) (n=5)	**Combination of ingredients including:** Lycopene Botanical extracts (e.g. Mallow, Cowslip, Liquorice, Aloe vera) Soy isoflavones
Marketed Beauty Creams (n=15)	**Combination of ingredients including:** Herbal ingredients Kojic acid Niacinamide Vitamin C Vitamin E SPF (octocrylene, avobenzone, etc.)



Abstract N°: 672

Topical treatment of pyoderma gangrenosum: a narrative review

Harry Donnelly[1], Michael John Boffa[2]

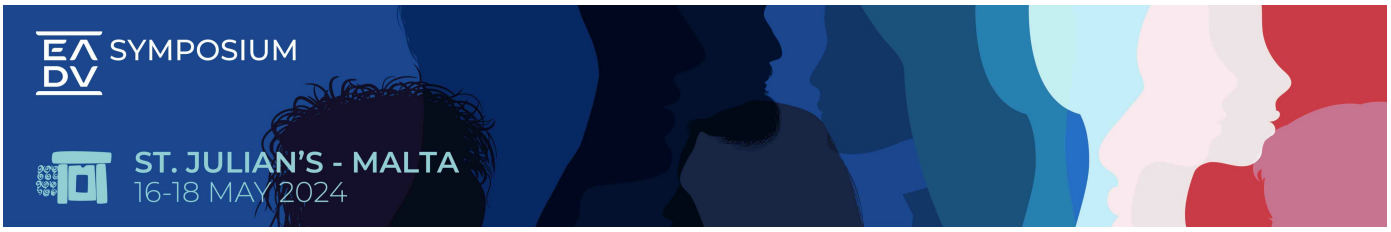
[1]Saint Bernard's Hospital, Medicine, Gibraltar, Gibraltar,[2]Mater Dei, Dermatology, L-Imsida, Malta

Introduction & Objectives: Systemic immunosuppressants are the mainstay of treatment for pyoderma gangrenosum (PG), but generally have significant side effects, which may be avoided by limiting treatment to topical therapy. This review aimed to assess the efficacy and safety of topical treatments for PG.

Materials & Methods: An extensive literature search identified 19 suitable publications for analysis, including two open cohort studies, five case series and 12 single case reports. The quality of evidence in the publications was graded and data relating to topical PG treatment were extracted. The lack of randomised clinical trials investigating topical monotherapy for PG means that robust statistical analysis was not possible.

Results: The percentage of patients achieving complete healing is comparable between the corticosteroid group (42.6%) and the calcineurin inhibitor group (67.5%). However a theme common to the included publications is that the parameters of complete healing are not well defined. The mean healing time in the calcineurin inhibitor group (79.1 days) was less than in the corticosteroid group (118.4 days), further supporting the impression that calcineurin inhibitors may be at least non-inferior to corticosteroids in treating PG in terms of time to action as well as overall efficacy. There were no major safety concerns with any of the reported topical treatments and in no case was treatment withdrawn due to adverse events. Topical corticosteroids and calcineurin inhibitors in particular can be considered to be a generally safe and well tolerated component in the clinician's arsenal for treatment of PG.

Conclusion: The greatest weight of current evidence for topical therapy favours either corticosteroids or calcineurin inhibitors. According to our review both these options appear well tolerated with few side effects and may have similar efficacy in speeding resolution of PG ulcers. Topical therapy could be considered for use in combination with systemic treatment. There may also be a role for topical monotherapy in selected patients with PG, especially those with early or mild disease and those with idiopathic PG. However further research is needed to confirm this and establish optimal treatment approaches for this condition.



Abstract N°: 731

Skin Lightening Practices by Transwomen in India and Treatments Used

Sriram Palepu[1], Aylur Srikrishnan[2], Carrie Kovarik[1]

[1]University of Pennsylvania, Philadelphia, United States,[2]YRG Care, Chennai, India

Skin Lightening Practices by Transwomen in India and Treatments Used

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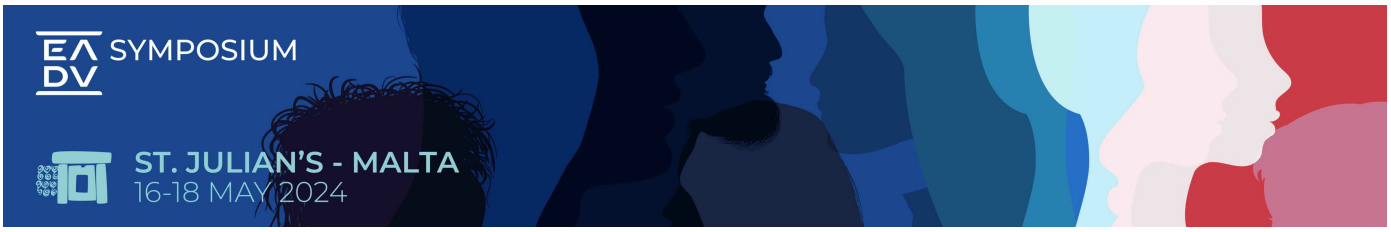
Table 1: Products and Active Ingredients Used by Transwomen in Hyderabad

Type of Product Used	Ingredients
Topical medications (n=11)	Hydroquinone+Tretinoin+Mometasone Furoate (n=6) Clobetasol+Neomycin+Miconazole Nitrate (n=1) Glycolic Acid+Arbutin+Kojic Acid (n=1) Terbinafine+Ornidazole+Oflaxicin+Clobetasol (n=2) Betamethasone cream (n=3)
Oral medications (n=3)	Glutathione (n=1) Estrogen/Progestin (n=1) Biotin+Multivitamin (n=1)
IV medications (n=16)	Glutathione (n=16)
Alternative (Herbal/Ayurvedic/Unani) (n=8)	**Combination of ingredients including:** Lycopene Botanical extracts (e.g. Mallow, Cowslip, Liquorice, Aloe vera) Soy isoflavones
Marketed Beauty Creams (n=15) (mix of ingredients including	**Combination of ingredients including:** Herbal ingredients Kojic acid Niacinamide Vitamin C Vitamin E SPF (octocrylene, avobenzone, etc.)



Abstract N°: 845

Environmental impact of emollient ingredients—what is the update?

Amy Long*[1], Jessica Gale[1]

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

Introduction & Objectives:

We live in an environmentally conscious society where, mostly, people try to live in a more environmentally friendly way. In the most recent (2022) survey by the Organization for Economic Co-operation and Development (OECD) two thirds of 17,000 households from 9 countries indicated a willingness to make personal compromises for the benefit of the environment. Dermatology is rather unique as a medical specialty in that large quantities of topical treatments are prescribed for its patient cohort. Many studies have been completed looking at the environmental consequence of packaging associated with topical products, but fewer have looked at their constituents. In the clinical setting, questions from patients regarding product sustainability continue to rise.

Materials & Methods:

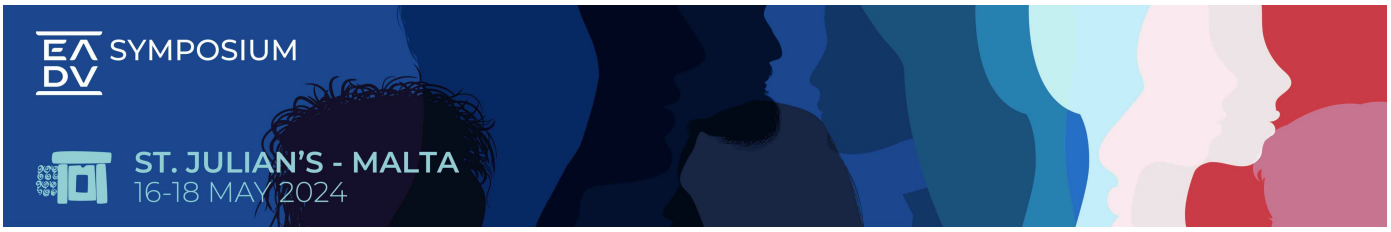
A review of common emollient ingredients was undertaken to assess their environmental impact, and to report developments that are leading to more sustainable alternatives becoming available.

Results:

Petrolatum based emollients such as paraffin gel and emulsifying ointment are frequently prescribed for their highly efficacious occlusive and hydration properties, but come from environmentally-harmful fossil fuel extraction. A proportion of squalene, another efficacious emollient and antioxidant, comes from shark liver oil which over the last decade lead to overfishing of sharks for the coveted substance. Palm oil also raises environmental concerns for its contribution to deforestation and biodiversity loss. Bioengineering is identifying new ways to substitute unsustainable ingredients. Squalene can now be successfully derived from microbial fermentation, or simply by extraction from certain plants including olives. Fossil-fuel derived hydrocarbons are proving more difficult to replicate sustainably but some vegetable oils are showing comparability. Organisations safeguarding natural resources are growing in strength, such as the Roundtable on Sustainable Palm Oil. Advancements in green chemistry, upcycling of agri-food by-products and use of fair-trade materials are additionally empowering the sustainability movement.

Conclusion:

Dermatologist clinicians must reconcile environmental responsibility with patient care. While substitutions for unsustainable conventional ingredients are greatly anticipated, opportunity to dutifully address environmental concerns exist in the present moment. Skincare companies with commitments to sustainability practices should be promoted. Patients can be educated on how to make informed purchases and reminded to recycle used packaging where possible. Climate impact as a result of topical treatments is multifactorial and calls for innovative measures across all aspects from supply chain to post-consumer phase. Dermatologists have a specific role to play in this process to care for both patient and planet.



Abstract N°: 883

JAK-STAT pathway and pemphigus: emphasis on therapeutic opportunities

Parvaneh Hatami[1], Zeinab Aryanian[1], Kamran Balighi[1], Hamed Nicknam Asl[1], Azadeh Khayyat[2]

[1]TUMS, Dermatology, Tehran, Iran, [2]Medical College of Wisconsin, Pathology, United States

Introduction & Objectives:

Tyrosine kinases of the Janus family (Janus kinases or JAKs) have been recently shown to have central role in the immune responses due to their association with many cytokine receptors. A recent study confirmed the increased expression of JAK3, STAT4 and STAT6 (but not STAT2) in oral mucosa lesions of patients with PV in study groups in comparison to the control group.

Materials & Methods:

Here, we reviewed the existing data regarding potential therapeutic effects of JAK inhibitors in PV through searching on PubMed, Google Scholar and Scopus. All of the relevant papers published in English, until October, 2023, which we could access to their full-texts, were included

Results:

Since JAK3 plays a role in the signaling of IL-2, it might be involved in the recurrence of lesions in the course of disease and also could be assumed as a marker for monitoring the activity of the PV.

Tofacitinib, an inhibitor of JAK1, JAK3 and to a lesser extent JAK2, has been proposed as a potentially effective drug to treat pemphigus due to the essential role of IL-4 and IL-21 in the development of PV.

In 2022, Vander et al. reported a case of PV with nail involvement with a prominent clinical response to combination of rituximab and oral tofacitinib. Since the onset of action of rituximab has been shown to be slow in pemphigus, the striking improvement in nail lesions of this case considered to be due to tofacitinib. One can infer that combining tofacitinib with rituximab which has been shown to be a potent treatment of PV might add the advantage of rapid disease improvement to long-term remission potential of rituximab

Oclacitinib is a selective JAKi which has been successfully used in some cases of blistering disorders such as pemphigus foliaceus and subepidermal blistering dermatosis in animals.

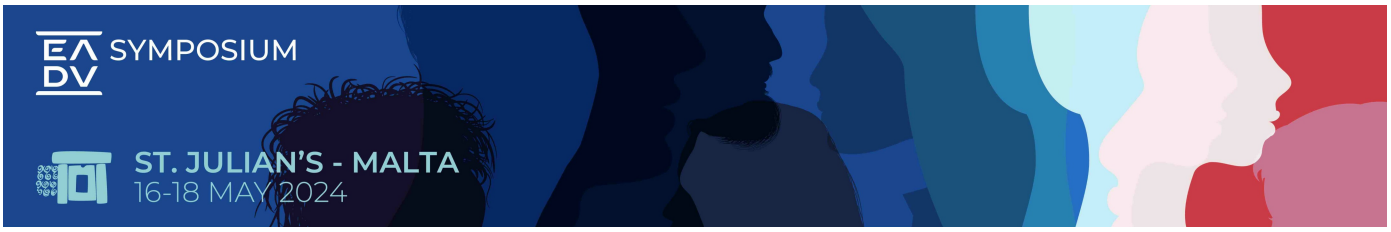
Ruxolitinib, another inhibitor of JAK1 and JAK2 pathways, might be the potential treatment of BP and DH on the basis of its ability to suppression of Th17 cell differentiation, which is critical in both dermatoses

Conclusion:

Small structure of JAK inhibitors and their acceptable bioavailability let us using them in both oral and topical forms which could be considered as a superiority over rituximab regarding the avoidance of venipuncture and hospitalization and superior patient convenience.

On the other hand, targeting both T and B cells by JAKis could be another strength of this class of medications over rituximab.

The results of future studies in this regard are eagerly awaited due to their important effects on altering treatment paradigms through better clinical efficacy along with fewer side effects in pemphigus patients with the view of personalized medicine.



Abstract N°: 923

Combined phototherapy for the treatment of dry skin

Shakhnoza Mavlyanova[1], Хондамир Жаъфаров[1]

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Introduction & Objectives: Dryness/xerosis of the skin is one of the current problems in practical dermatology, caused by a frequent symptom of many skin diseases, such as atopic dermatitis, psoriasis and lymphoproliferative skin diseases. The search for optimal methods of external therapy for dry skin is a priority in dermatological practice around the world.

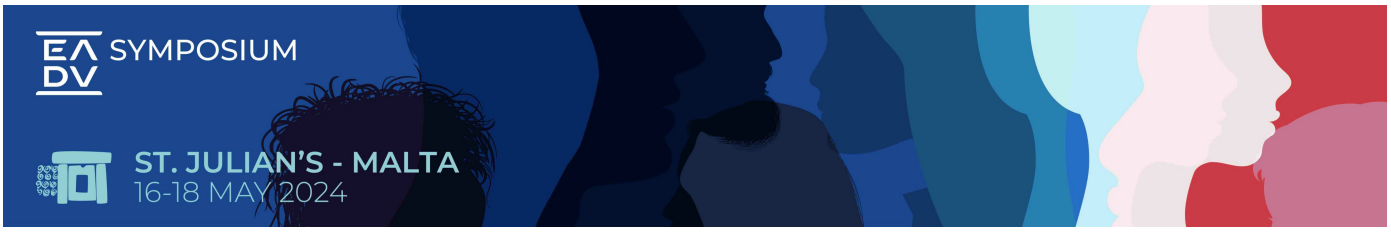
Purpose of the study: to evaluate the combination therapy of phototherapy with lanolin-siliceous cream from the Fatiderm line in patients with dry skin.

Materials & Methods: 128 patients with atopic dermatitis aged from 12 to 54 years were observed. There were 77 (60.2%) females and 51 (39.8%) males. All patients underwent clinical (severity studies according to the Dermatological Index Symptom Scale (DIS)), microbiological, corneometric and statistical studies. LED phototherapy with a wavelength of 633 nm in combination with lanolin-silica cream was prescribed once a day for 20 minutes in course No. 10.

Results: to assess the clinical effectiveness, patients were divided into 2 groups: Group I (73 patients with AD who received phototherapy in combination with Fatiderm cream) and Group II (55 patients who received topical corticosteroids). The results of clinical studies showed that the DIHS index in both groups averaged 25.6 + 0.04 and 26.1 + 0.05 points, respectively, the corneometry pH averaged 14.3 + 0.4, which characterized severe dehydration skin.

After complex therapy in patients of group I, the index of the degree of DISH decreased by 2.7 times and averaged 9.4 + 0.05 and the degree of dehydration averaged 52.8 + 0.6, while in group II the index of DISH was - 16.3 + 0.06 and the degree of dehydration on average was - 26.7 + 0.3. In patients of group I, the skin pathological process significantly resolved over time, the skin in the affected areas became significantly moisturized, and the itching stopped. Microbiological studies have shown a decrease in the degree of colonization of opportunistic microorganisms staphylococcus spp. 4.3 and 3.2 times after treatment in both groups, respectively. ($P<0.05$)

Conclusion: analysis of the results obtained indicates that the combined method of phototherapy using lanolin-silicon cream “Fatiderm” contributed to an increase in therapeutic effectiveness by 1.9 times, which can be recommended for practical dermatology.



Abstract N°: 1039

Determination of some immunological indicators in patients with acne during complex treatment that included combined laser therapy

Marianna Dashko , Mariia Melnykovych , Orysya Syzon , Hennadiy Astsaturov , Iryna Chaplyk-Chyzho

Introduction & Objectives: A high incidence of acne, tendency to a chronic course with the formation of resistance to treatment and frequent development of deep forms determine the important medical and social significance of the problem. Acne is one of the most important problems in modern dermatology, being a common cause for cicatricial skin changes, loss of performance capability and social activity and negatively affects in the psycho-emotional state of patients. The topicality of the disease is due to the high degree of its proliferation, chronic and recurrent course, and resistance to existing therapies. The development of acne is due to the combined effect of endogenous and exogenous factors, including the important role played by the changes of immunological reactivity, justifying the administration of immunotropic techniques and drugs in their comprehensive treatment.

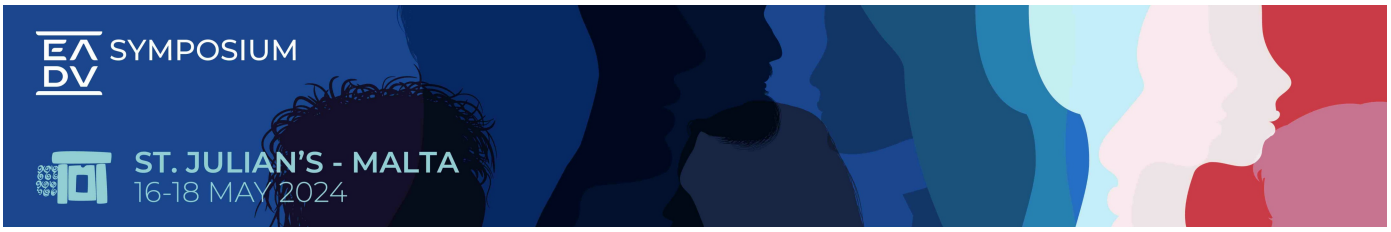
Reducing the effectiveness of skin diseases treatment, including that of acne, at present, is associated with developing resistance to drugs, which causes the use of non-drug methods in dermatology nowadays., including low-intensity (with capacity of 1-20 mV) laser therapy, which possesses an anti-inflammatory, antibacterial or bacteriostatic action, stimulates the immune system factors , without causing any side effects or complications.

Objective. To increase the effectiveness of treatment of acne during complex treatment that included combined laser therapy with consideration for indicators of systemic immunity.

Materials & Methods: 72 patients (aged 18-25) with acne were observed; among which in 29 (40.28 %) patients mild acne were diagnosed, in 30 (41.76%) – moderate, in 13 (18,06 %) persons – severe. The control group consisted of 26 healthy individuals (donors) of the similar age. In all patients systemic immunity indicators were assessed. In the course of treatment patients were divided into two groups: the first (comparative) – received standard therapy, according to the protocols, using immunotropic medication, the second (main) - secondary to the standard therapy the immunotropic medication and combined laser therapy (percutaneous laser irradiation of blood and differentiated external laser therapy) was administrated.

Results: In patients from the first treatment group there was detected probable positive dynamics of individual systemic immunity indicators: increase of CD3+ on 15,3%, ($p<0,001$), CD4+ on 20,7%, ($p<0,001$), CD8+ on 9,1%, ($p<0,05$), and diminishing of CD19+ on 16,4%, ($p<0,01$). But the significant positive dynamics of immune parameters was in patients from the second (main) group: increase of CD3+ on 25,0% ($p<0,001$), CD4+ on 35,5% ($p<0,001$), CD8+ on 19,8%, ($p<0,001$) and diminishing of CD19+ on 19,4% ($p<0,001$). Thus proving the efficacy of complex therapy by immunotropic medication and combined laser therapy in patients with acne.

Conclusion: The administration of immunotropic medication and combined laser therapy helps to normalize or establish the tendency to the normalization of systemic immunity and may be recommended in complex treatment for the patients with acne.



Abstract N°: 1100

Topical 5-fluorouracil-induced distant skin reaction in a patient with widespread actinic keratoses: a case of 'recall reaction' or systemic toxicity?

Mihaela Adriana Ilie[1], Eva Brandin[1], Lise-Lotte Rydqvist[1]

[1]Kalmar County Hospital, Dermatology Department, Kalmar, Sweden

Introduction & Objectives:

Topical 5-fluorouracil (5-FU) is extensively used to treat actinic keratoses, especially with multiple lesions and an irritant contact dermatitis is expected to occur at the application site. Selective inflammation of actinic keratoses has also been reported in case of systemic administration of 5-FU, resembling the well-recognized chemotherapy-induced 'recall dermatitis' on previously irradiated skin. Herein, we describe the occurrence of a distant inflammatory reaction of previously treated and healed actinic keratoses 2 weeks after topical 5-FU treatment of another anatomic area. To the best of our knowledge, there is only one report of a similar distant reaction of untreated actinic keratoses after topical 5-FU and it was attributed to the high systemic absorption from occlusive therapy.

Materials & Methods:

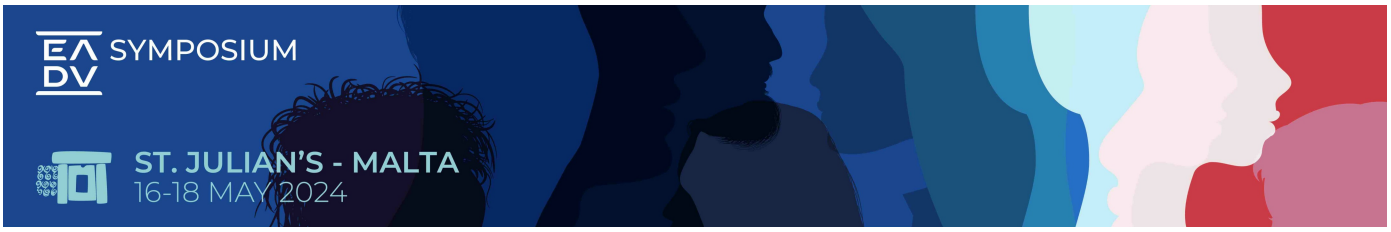
A 68-year-old man with type 1 skin presented with widespread actinic keratoses located on his forearms. The lesions were treated during the last 7 years with liquid nitrogen cryotherapy, topical imiquimod and 4% 5-fluorouracil cream alone and in combination with topical retinoids. His last treatment was 7 months prior to actual presentation with satisfactory result. He was now prescribed topical 4% 5-FU cream once daily for 30 days, after pretreatment of affected skin with a topical retinoid once daily for 2 weeks. He started with his left forearm and completed the treatment without other side effects than the expected local reactions. After approximately 1 month, when the skin lesions resolved completely, he started to treat his other forearm.

Results:

After 2 weeks of topical 5-FU on the right forearm, he reported feeling generally unwell and a widespread burning skin eruption involving his treated forearm but also on the previously treated forearm. He also observed inflammation of actinic keratoses on the chest and sides of the neck, where he had not applied 5-FU. Physical examination revealed erythematous, scaly, and erosive plaques. The treatment was discontinued. Laboratory investigations including complete blood count, basic metabolic panel and urinalysis were normal. Dihydropyridine dehydrogenase genotyping was not performed. The symptoms disappeared after a few days and the skin reactions healed after 3 weeks without any specific treatment.

Conclusion:

Cutaneous reactions distal to the area of topical therapy with 5-FU are extremely rare and could occur in case of increased systemic absorption secondary to widespread erosions. In our case, pretreatment of the forearms with a topical retinoid, as well as the repetitive exposure to topical 5-FU may have led to greater absorption of the drug. Awareness and early recognition of these underreported drug reactions from topical 5-FU are essential for prompt intervention and to advance our understanding of the underlying pathophysiologic mechanisms.



Abstract N°: 1476

Successful Use of Topical Timolol as a Novel Treatment for Hailey-Hailey Disease in Two Sisters

Alphonsus Yip[1], Nandini Roy[1], Narin Shareef[1], Geoffrey Brent[1], Janakan Natkunarajah[1]

[1]Kingston Hospital, Dermatology, London

Introduction & Objectives:

Hailey-Hailey disease is an autosomal dominant blistering disorder, characterised by flaccid blisters and erosions commonly affecting skin folds. The condition is caused by a change in the ATP2C1 gene found on chromosome 3, which results in defective keratinocyte adhesion and acantholysis. Treatment may involve a combination of topical steroids, calcineurin inhibitors and photodynamic therapy, however the condition remains difficult to treat. We present a case series of two sisters with Hailey-Hailey disease who underwent a trial of topical timolol 0.5% eye drops with favourable outcomes.

Materials & Methods:

Case 1

A 59-year-old female presented with a 9-year history of superficial ulcerations which on examination revealed large erythematous patches on right and left flank, superficial ulceration of the right lateral breast and smaller papulovesicular lesions on the right thigh and upper arm. She experienced multiple flares which were treated with a combination of topical antibiotics and anti-virals. She found some success after undergoing photodynamic therapy, however after further flares she was started on topical timolol 0.5% eye drops twice daily to the affected areas in combination with taking aciclovir 200mg.

Case 2

A 56-year-old presented with a 15-year history of a rash confined to the right axilla and which revealed multiple foci of intraepidermal clefting within the epidermis consistent with Hailey-Hailey disease. Notably, she is the sister to the patient presented in Case 1 demonstrating a family history of the condition. On examination, there were two small erosions in the right axilla and the patient was initiated on topical timolol 0.5% monotherapy.

Results:

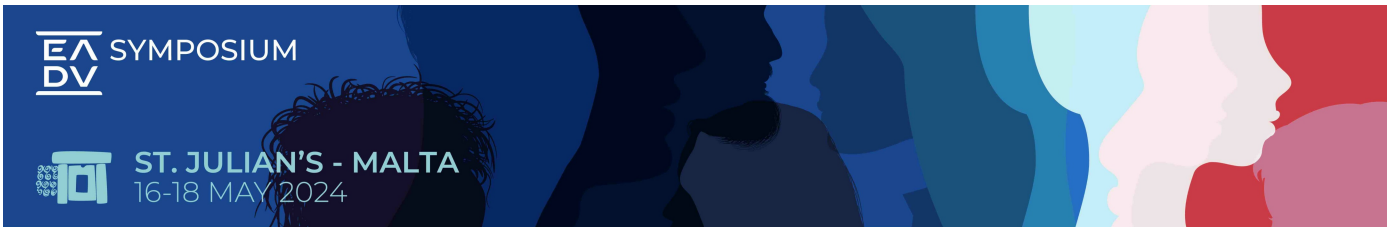
For our first patient, she was reviewed 4 weeks after being started on topical timolol 0.5% eye drops and we observed significant improvement in the affected areas, and she remains stable. For our second patient, she also responded well to the topical therapy and has noted a significant improvement.

Conclusion:

Timolol is a non-selective beta-blocker which is primarily used for the treatment of open-angle glaucoma and has since been repurposed topically to treat a variety of dermatological conditions1. The exact mechanism of action behind healing in Hailey-Hailey disease is uncertain, however several theories suggest that timolol may improve calcium homeostasis resulting in better cell-cell adhesion, desmosome formation and keratinocyte differentiation2. The first reported case of successful treatment of Hailey-Hailey disease with topical timolol was by Brent et al. in 20233, and this cases series provides further evidence to support the use of topical timolol for Hailey-Hailey disease.

References:

1. Sarsik SM, El-Amawy HS. Uses of eye drops in dermatology, literature review. Journal of Dermatological Treatment. 2022 Jun 2;33(6):2758–70. doi:10.1080/09546634.2022.2079598
2. Hu Z, Bonifas JM, Beech J, Bench G, Shigihara T, Ogawa H, et al. Mutations in ATP2C1, encoding a calcium pump, cause Hailey-Hailey disease. Nature Genetics. 2000 Jan;24(1):61–5. doi:10.1038/71701
3. Brent G, Al-Wahab Y, Natkunarajah J. Topical timolol 0.5% as a novel therapeutic approach for Hailey–Hailey Disease. Clinical and Experimental Dermatology. 2023 Aug 31;49(1):76–8. doi:10.1093/ced/llad296



Abstract N°: 1492

Tranexamic acid as a therapeutic option for melasma management: meta-analysis and systematic review

Yaser Algaidi*[1], Retaj Calacattawi[2], Khalid Basamih[3], Ghada Alsugair[4], Raghad Alqahtani[5], Noor Alkhabbaz[6], Fatimah Aleid[7], Maryam Aleid[7], Latifa Alrakayan[7], Abdulaziz Almohanna[8], Afnan Madkhali[9], Shaima Aljohani[10], Naif Alotibi[11]

[1]Royal College Of Surgeons in Ireland, School of medicine, Ireland,[2]King Saud bin Abdulaziz University for Health Sciences, Department of Medicine, [3]Umm Al-Qura, College of Medicine,[4]Princess Nourah Bint Abdul Rahman University, College of Medicine, Riyadh, Saudi Arabia, [5]King Khalid University, College of Medicine, Abha, Saudi Arabia,[6]Imam Abdulrahman bin Faisal University, College of Medicine, Dammam, Saudi Arabia, [7]Imam Abdulrahman Bin Faisal University, College of Medicine, Dammam, Saudi Arabia, [8]Imam Muhammad Ibn Saud Islamic University, College of Medicine, Riyadh, Saudi Arabia, [9]University Hospital at the University of Jazan, جازان, Saudi Arabia, [10]Taibah University, College of Medicine, Madinah, Saudi Arabia, [11]Taif University, Taif, Saudi Arabia

Introduction & Objectives:

Melasma is a prevalent pigmentary disorder with a complex pathophysiology and significant impact on patients' quality of life. The research aims to conduct a meta-analysis and systematic review of randomized controlled trials to evaluate Tranexamic acid's efficacy, identify associated adverse effects, and compare its effectiveness with other melasma treatments.

Materials & Methods:

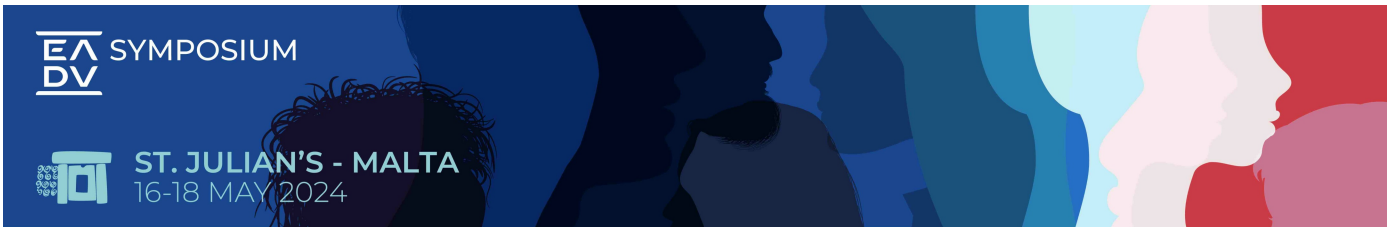
This study adheres to PROSPERO and PRISMA guidelines, conducting a thorough electronic search in four databases for randomized controlled trials on tranexamic acid (TXA) in melasma. Inclusion criteria encompass English-language, full-text articles without time limitations. Exclusions include studies not using TXA for melasma, lacking specific outcome measures, non-English publications, and those with high bias risk. Four blinded reviewers independently screen titles and abstracts, with disagreements resolved by the first author. Two teams extract data, resolving inconsistencies with a third author. Extracted information includes study details, patient and intervention characteristics, outcome measures, statistical methods, and conclusions.

Results:

Our search identified 22 relevant studies. The findings indicate that tranexamic acid (TA) treatment shows promise in reducing the severity of melasma. Whether used alone or in combination with other treatments, TA appears to be effective. However, the studies exhibit significant heterogeneity, suggesting differences in treatment approaches and outcomes. More research is required to determine the best way practices for utilizing TA in melasma treatment and to address the variations observed in the studies.

Conclusion:

Tranexamic acid (TA) is effective for treating melasma, whether used alone or in combination with other treatments. However, further research is needed to address limitations such as variability in administration methods, and the need for long-term studies to determine optimal dosage, frequency, duration, and potential side effects of TA in diverse populations.



Abstract N°: 1587

Oral oxybutynin is a safe option with high survival in patients with multifocal hyperhidrosis followed in a single center real world setting

Vassiliki Markantoni* , Vassiliki Markantoni[1], Erasmia Adamou[1], Efthimia Agiasofitou[1], Aikaterini Tsiogka[1], George Kontochristopoulos[1], Alexandros Stratigos[1], Stamatis Gregoriou[1]

[1]Andreas Syngros Hospital of Venereal & Dermatological Diseases, Athina, Greece

Oral oxybutynin is a safe option with high survival in patients with multifocal hyperhidrosis followed in a single center real world setting

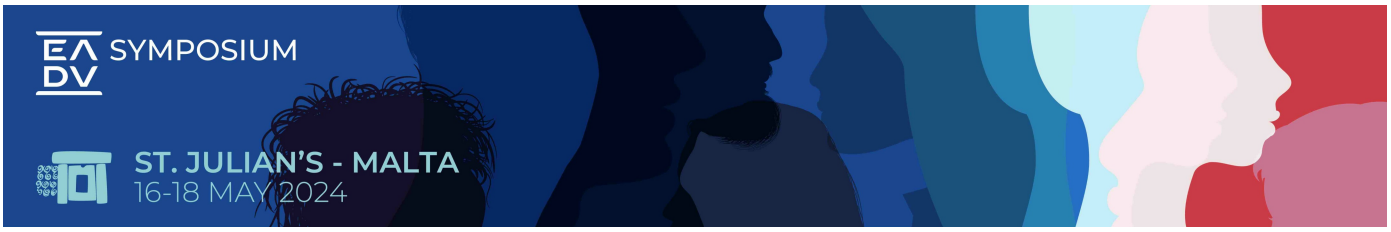
Markantoni Vassiliki, Adamou Erasmia, Agiasofitou Efthimia, Tsiogka Aikaterini, Kontochristopoulos George, Stratigos Alexandros, Gregoriou Stamatios

Introduction & Objectives: Primary multifocal hyperhidrosis (MFH) constitutes a phenotype of primary focal hyperhidrosis (PFH) affecting two or more body sites, characterized by excessive perspiration. Our study aims to delineate the clinical characteristics, and therapeutic modalities employed in the management of MFH within real-world framework.

Materials & Methods: The study encompassed 102 patients diagnosed with primary multifocal hyperhidrosis (MFH) between December 2016 and December 2020. Inclusion criteria followed diagnostic guidelines for primary focal hyperhidrosis (PFH). Data collected encompassed demographic details, affected areas, symptom severity assessed via the Hyperhidrosis Disease Severity Scale (HDSS), comorbidities, exacerbating factors, cutaneous complications, and treatment approaches. Ethical approval was obtained, and all participants provided informed consent. Statistical analyses were conducted using SPSS Statistics v27.0 software, employing appropriate tests for association. Categorical variables were presented as frequencies/percentages, while quantitative variables were expressed as mean ± standard deviation. Associations were evaluated using Mann–Whitney U, Kruskal–Wallis, and chi-square tests, with p-values <0.05 indicating statistical significance.

Results: More than half of the patients experienced moderate to severe (MFH), with 82.4% noting seasonal variations in symptoms, and 77.5% reporting exacerbating factors. A significant correlation existed between younger age at MFH onset and axillary/palmar/plantar involvement compared to other regions ($p < 0.001$). The occurrence of involvement in three localizations was as prevalent as involvement in two. Palmar/plantar involvement was more frequent than axillary involvement. Oral oxybutynin was the predominant treatment, showing a 2-year survival rate of 76.2%, either as continuous therapy or intermittently paused during winter months. Doses achieving control of MFH ranged between 2,5-10mg daily.

Conclusion: While treatment guidelines lack specific recommendations for MFH, systemic therapies like oral oxybutynin could be considered as first-line in MFH due to the extended surface involved.**



Abstract N°: 1795

Protective effects of several tyndallized probiotics against UVs-induced photodamage in epidermal keratinocytes cells

Daniela Pinto*[1], Giorgia Mondadori[1], Annalisa Visciglia[2], Angela Amoruso[2], Marco Pane[2], Fabio Rinaldi[1]

[1]Giuliani Spa, [2]Probiotical Spa

Introduction & Objectives:

The skin, serves as the frontline defence against external threats, including the harmful effects of ultraviolet (UV) radiation. Prolonged exposure to UVs poses a significant risk, leading to various skin disorders, premature aging, and an increased susceptibility to skin cancers. Amidst the ever-growing interest in skincare and preventive health measures, probiotics have emerged as promising candidates for fortifying the skin's natural defences. Beyond the gut-brain-skin axis, the intricate interplay between the skin's microbiome and its overall health has become a focal point of research. In this context, probiotics offer a unique avenue for intervention, demonstrating the ability to influence skin health through their diverse mechanisms of action.

Materials & Methods:

The present work explores the potential of five tyndalized probiotics (Lactiplantibacillus plantarum SKINBAC™ SB01, Limosilactobacillus reuteri SKINBAC™ SB02, Bifidobacterium breve SKINBAC™ SB03, Ligilactobacillus salivarius SKINBAC™ SB04, and Bifidobacterium animalis spp. lactis SKINBAC™ SB05) (Skinbac®, Probiotical, Italy), as protective agents against UVA ((10 J/cm2) and UVB (25 mJ/cm2) damages on human keratinocyte line (HaCaT) and human skin 3D model (Phenion® Full-Thickness Skin Model, Henkel AG & Co. KGaA). The protective role toward artificially induced oxidative stress was evaluated through the determination of the residual viability after UV stress. Also resulting alterations in the gene expression of markers involved in apoptosis (Tumor protein 53), inflammation/immunosuppression (IL-6), oxidative stress (oxidative stress response enzyme heme oxygenase 1), and cell-cell adhesion (E-cadherin) were investigated using quantitative real-time PCR.

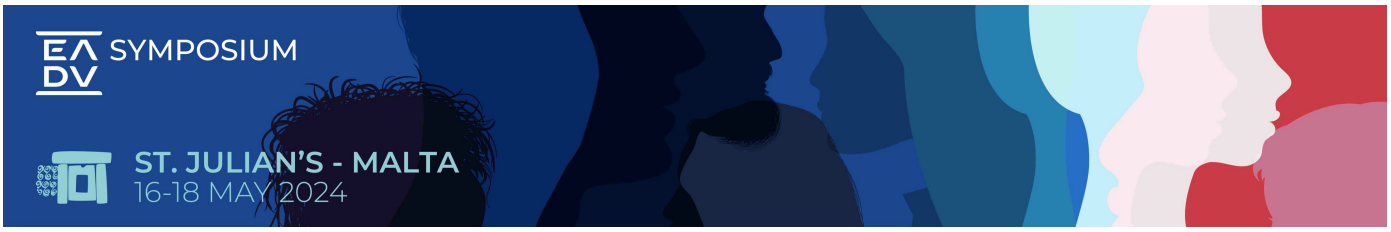
Moreover, we examined the protective effects of these strains testing them on Normal Human Epidermal Keratinocytes (NHEK) irradiated with UVC (30000 mJ/cm2). Specifically, the expression of tight junction proteins, including claudin1, claudin4, and occludin, was evaluated by ELISA (by Assay Genie).

Results:

The tested probiotics are effective in protect from UVA, UVB and UVC damages on all end points analyzed and this effect was found to be statistically significant compared to control, revealing probiotic capacity to enhance barrier protection in cases of damage.

Conclusion:

With this work we aim to contribute valuable insights that may pave the way for innovative skincare strategies centered around probiotic-based formulations for enhanced skin protection against UV-induced damage.



Abstract N°: 1853

Topical Simvastatin Plus Cholesterol Cream: A Case Report on the Safety and Efficacy in Treating Disseminated Superficial Actinic Porokeratosis

Daciana Elena Branisteanu[1, 2], Andreea-Lorena Tucaliuc[3], Antonia Clivet[1], Roxana-Paraschiva Ciobanu[1], Diana Sinigur[1], Branisteanu Catalina Ioana[4], Mihaela Paula Toader[1, 2], Alexandra Starica*[1]

[1]Railway Clinical Hospital, Iasi, Romania, [2]Universitatea de Medicină și Farmacie „Grigore T. Popa" din Iași, Iași, Romania, [3]Hyluxmed, Timisoara, Romania, [4]Saint Spiridon County Hospital, Iași, Romania

Introduction & Objectives:

Disseminated superficial actinic porokeratosis (DSAP) is a hereditary or sporadic disorder of keratinization associated with mutations in the mevalonate pathway genes. Porokeratosis is considered a premalignant condition, with squamous cell carcinoma being the most commonly reported malignancy, highlighting the significance of treating this condition.

Traditionally, the primary focus of porokeratosis treatment, like other clonal keratinocyte disorders, has been on lesion destruction through methods such as cryotherapy, photodynamic therapy (PDT), CO2 lasers, and 5-fluorouracil. Additional strategies to reduce scale and inflammation associated with these lesions involve acitretin, topical corticosteroids, and vitamin D analogs. However, these approaches are often deemed ineffective and expensive. Recently, promising results have been observed with the use of topical lovastatin combined with cholesterol cream. Given the challenges in accessing lovastatin in certain countries, simvastatin cream has also been utilized, maintaining positive outcomes.

Materials & Methods:

We present the case of a 73-year-old woman with pruritic pink to brown plaques exhibiting a raised railroad track border and an atrophic, sometimes hypopigmented center on sun-exposed areas, persisting for over 30 years.

The diagnosis of DSAP was firmly established by correlating the patient's history, clinical presentation, dermoscopy findings, and histopathological results. Despite prior treatment with topical corticosteroids and calcineurin inhibitors, the patient reported minimal improvement in symptoms.

We initiated treatment with a 2% cholesterol/2% simvastatin ointment, which was applied twice daily on the lesional skin and the patient was allowed to use emollients on untreated skin.

Baseline clinical photography and a biopsy from the affected skin were obtained.

Clinical response follow-up examinations were conducted at four-week intervals up to three months. The evaluation included changes in lesion size, the presence or absence of coronoid lamella under dermoscopy, the Actinic Keratosis Field Assessment Scale and Patient Quality of Life survey. Photography was performed at each visit to document the clinical response.

Results:

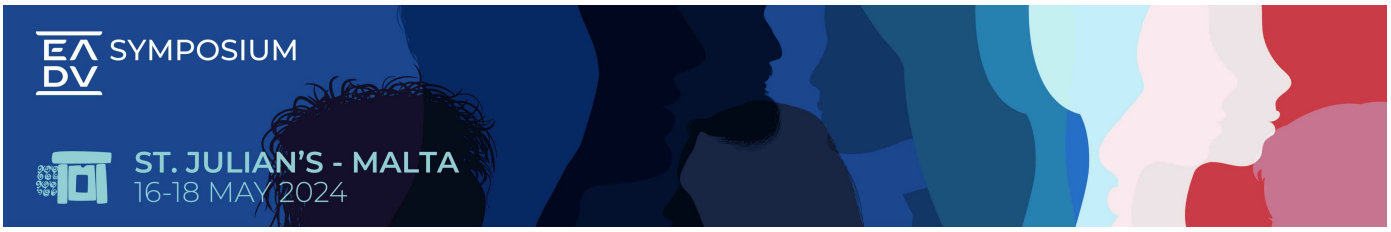
Topical simvastatin-cholesterol cream improved lesion number, erythema and scale on treated areas. Patient-reported disease activity also improved. The only adverse event reported was folliculitis, attributed to occlusion caused by the cream's greasy texture.

Conclusion:

The application of topical lovastatin/cholesterol improves DSAP by replenishing cholesterol and preventing the

accumulation of toxic metabolites in the mevalonate pathway.

Simvastatin, a chemically modified version of lovastatin, shares similar molecular structures and mechanisms of action. However, simvastatin is known for its improved intrinsic inhibitory potency. Multiple studies have indicated that using simvastatin instead of lovastatin has a similar overall effect on DSAP lesions, leading to a significant decrease in lesion number, redness, and scale. Clinicians may consider using topical simvastatin/cholesterol gel for treating DSAP due to its accessibility, cost-effectiveness, and efficacy when compared to other treatments.



Abstract N°: 1974

Evaluating the Clinical Utility of Sulfasalazine in the Treatment of Pyoderma Gangrenosum: A Systematic Review

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Introduction & Objectives:

Pyoderma gangrenosum (PG) is a rare neutrophilic dermatosis characterized by painful and rapidly developing ulcers predominantly affecting the lower limbs. Sulfasalazine, a disease-modifying antirheumatic drug (DMARD) indicated for rheumatoid arthritis and ulcerative colitis, is increasingly being employed off-label in dermatology due to its ability to modulate cytokines and reduce inflammation. Given its favorable safety profile and anecdotal efficacy in treating PG, we performed a systematic review of all study types to describe and compare clinical outcomes in PG patients treated with sulfasalazine.

Materials & Methods:

We searched MEDLINE and EMBASE databases until July 6, 2023, according to a pre-registered PROSPERO protocol (CRD42023443087), which yielded 399 articles after deduplication; 232 were excluded by abstract and a full-text review was conducted on 129 studies, with 30 being included in this review.

Results:

Within the cohort of 35 cases included in our analysis, the mean patient age was 39 years with a female-to-male ratio of 1.25:1. Among PG patients, 57% achieved a complete response and 9% had partial improvement, while 34% experienced no response. Adverse events were infrequent, with only two cases reporting skin rash and bone marrow toxicity. Lesion size varied, with 53% of ulcers measuring less than 5cm. The most frequent associated systemic conditions were inflammatory bowel disease (40%; Crohn's 23%, ulcerative colitis 17%). Sulfasalazine dosage ranged from 1-6g per day, with an average treatment duration of 11.3 weeks. Notably, sulfasalazine was used concomitant with another therapy in 86% of cases.

Conclusion:

Several cases reported positive outcomes in patients with PG treated with adjunct sulfasalazine, with minimal adverse events. This underscores the need for prospective studies to assess sulfasalazine's clinical utility in PG treatment.