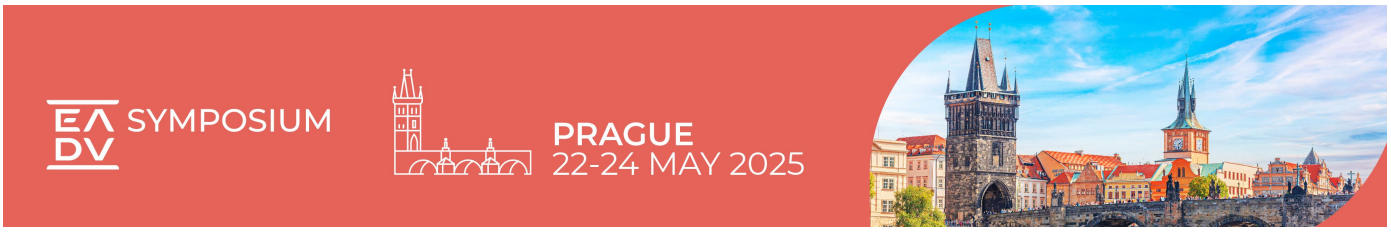

Abstract N°: 314

Curcumin targets YAP1 to promote mitochondrial function and autophagy and its protective effects against UVB induced photodamage in vitro and in vivo.

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Introduction & Objectives:

Ultraviolet B (UVB) radiation is a key environmental factor causing skin damage through DNA damage, oxidative stress, inflammation, and collagen alterations. It penetrates the epidermis, disrupts DNA structure, and generates ROS, activating pro-inflammatory pathways like NF-κB and AP-1, and inducing MMPs. This leads to skin structural changes, inflammation, and pigmentation disorders like In review melasma. UVB's cumulative DNA damage also promotes photocarcinogenesis, with nearly 90% of melanomas linked to UVR. Despite clinical countermeasures like phototherapy and antioxidants, effective treatments for UVB-induced damage remain a priority due to side effects and efficiency constraints.

Materials & Methods:

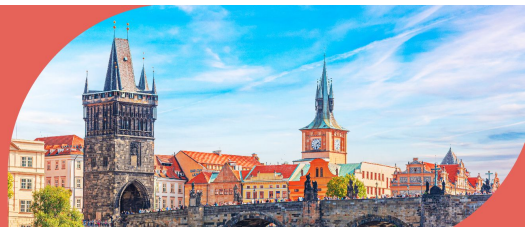
This study investigates curcumin's protective effects on UVB-induced skin and keratinocyte damage using mouse models and HaCaT cells. We assessed cellular changes via viability, mitochondrial function, ROS, and apoptosis assays, and applied transcriptomics to uncover curcumin's molecular mechanisms, providing insights into its protective role at the molecular level.

Results:

Curcumin treatment notably ameliorated UVB-induced skin lesions and inflammation in vivo. In vitro, it counteracted UVB's negative effects on HaCaT cells, enhancing viability and reducing apoptosis and ROS. Transcriptomic analysis showed curcumin upregulated YAP signaling and mitochondrial autophagy while inhibiting IL-18.

Conclusion:

Curcumin's direct interaction with YAP1 modulates mitochondrial autophagy, offering protection against UVB-induced damage. This research underscores curcumin's potential in skin photoprotection and therapy, paving the way for novel treatments and clinical use. These mechanisms also hint at broader therapeutic applications for curcumin.



Abstract N°: 442

Skin-derived precursor conditioned medium alleviated photoaging via early activation of TGF-β/Smad signaling pathway by thrombospondin1: In vitro and in vivo studies

Yiming Li*[1], Lidan Xiong[2], Jie Tang[2], Li Li[2], Zhiwei Zhao[3]

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[3]Sichuan University, anatomy, chengdu, China

Introduction & Objectives:

Photoaging is one major exogenous factor of skin aging. Our previous studies indicated that skin-derived precursors (SKPs) alleviated photodamage by early activation of TGF-β/Smad signaling pathway via thrombospondin1 (TSP1). However, the research concerning SKP conditioned medium (SKP-CM) has never been reported. In the current study, we aimed to explore the anti-photoaging effects of SKP-CM both *in vitro* and *in vivo*, and to elucidate the possible mechanisms.

Materials & Methods:

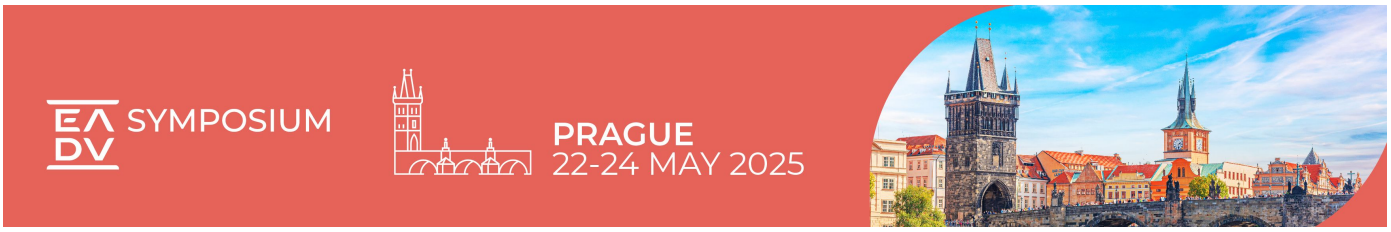
Mouse SKP-CM (mSKP-CM) collection was optimized by a comparative method. The concentration of protein and growth factors in mSKP-CM was detected using BCA protein assay kit and growth factor protein chip. The anti-photoaging effects of mSKP-CM and its regulation of key factors in the TGF-β/Smad signaling pathway were explored using UVA + UVB photoaged mouse fibroblasts (mFBs) and nude mice dorsal skin.

Results:

The research revealed that mSKP-CM contained significantly higher-concentration of protein and growth factors than mouse mesenchymal stem cell conditioned medium (mDMSC-CM). mSKP-CM alleviated mFBs photoaging by restoring cell viability and relieving senescence and death. ELISA, qRT-PCR, and western blot results implied the potential mechanisms were associated with the early activation of TGF-β/Smad signaling pathway by TSP1. In vivo experiments demonstrated that compared with the topical intradermal mDMSC-CM injection and retinoic acid cream application, the photodamaged mice dorsal skin intradermally injected with mSKP-CM showed significantly better improvement. Consistent with the in vitro results, both western blot and immunohistochemistry results confirmed that protein expression of TSP1, smad2/3, p-smad2/3, TGF-β1, and collagen I increased, and matrix metalloproteinases decreased.

Conclusion:

In summary, both in vitro and in vivo experiments demonstrated that mSKP-CM alleviated photoaging through an early activation of TGF-β/Smad signaling pathway via TSP1. SKP-CM may serve as a novel and promising cell-free therapeutical approach for anti-photoaging treatment and regenerative medicine.



Abstract N°: 567

Olive Oil and Sunlight: An Unexpected Combination Leading to Photoallergic Eczema

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

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Introduction & Objectives:

Photoallergic eczema is a skin reaction triggered by sensitization to a chemical substance, which manifests only upon sun exposure following application of the product. While olive oil is widely used for its benefits in cosmetics and alternative medicine, it can provoke photoallergic reactions in certain individuals. Here, we report the case of a man who developed photoallergic eczema after applying olive oil.

Materials & Methods:

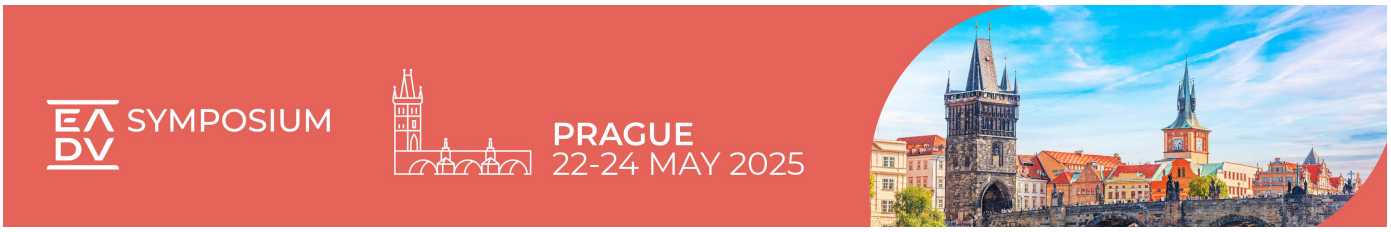
We report the case of a 29-year-old man who developed photoallergic eczema after applying olive oil followed by sun exposure.

Results:

The patient was a 29-year-old man with no significant medical history, including no atopy or previous allergic reactions. He applied olive oil to his back to relieve lower back pain two days before outdoor sun exposure. The next day, he developed skin lesions on his back, predominantly in sun-exposed areas, characterized by well-demarcated erythematous, edematous, and intensely pruritic plaques. Clinical examination confirmed the diagnosis of photoallergic eczema, restricted to areas where olive oil had been applied prior to sun exposure. No other skin abnormalities were observed elsewhere on the body. A photopatch test was performed to confirm the diagnosis. The 48-hour reading revealed a positive reaction to olive oil, confirming photoallergic eczema. The patient was treated with moderate-potency topical corticosteroids and local care, resulting in marked improvement of the lesions by day 4 of treatment. He was counseled on the importance of avoiding sun exposure after applying vegetable oils and refraining from their use on the skin prior to sun exposure.

Conclusion:

Although olive oil is widely used for its soothing properties, it can induce photoallergic eczema in some individuals. It is crucial to inform patients about the potential risks associated with using vegetable oil-based products before sun exposure and to recommend caution, especially in individuals with a history of skin allergies.



Abstract N°: 992

Efficacy and Safety of Narrowband Ultraviolet B Phototherapy for Prurigo Nodularis: A Tertiary Center Experience

Esra Ağaoğlu[1], Hilal Kaya Erdogan[1], Ersoy Acer[1], Zeynep Nurhan Saracoglu[1]

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Introduction & Objectives: Prurigo nodularis is a chronic pruritic dermatosis and narrowband-UVB (NB-UVB) phototherapy is considered as an effective and safe treatment option in patients with multiple comorbidities. In this study, we aimed to evaluate the efficacy and safety of NB-UVB phototherapy in the management of prurigo nodularis and to compare response rates according to the lesional localization.

Materials & Methods: Thirty prurigo nodularis patients who treated with NB-UVB phototherapy included in this study. The data for this study were retrieved retrospectively from patient follow-up forms in the phototherapy unit.

Results: NB-UVB phototherapy led to a complete response (CR) in 24 (80%) of the patients while partial response (PR) was achieved in 6 (20%) of the patients. Regarding prurigo nodularis localizations, the CR rate was statistically higher in those with diffuse and central involvement ($p<0.05$). Erythema and/or pruritus was observed in 4 (13.3%) of the patients with prurigo nodularis.

Conclusion: NB-UVB phototherapy is an effective and safe treatment option for prurigo nodularis patients especially with multiple comorbidities and medications. Patients with diffuse and central involvement may respond better to phototherapy than those with peripheral involvement.

Table 1: Clinical and treatment features of patients with prurigo nodularis according to phototherapy response

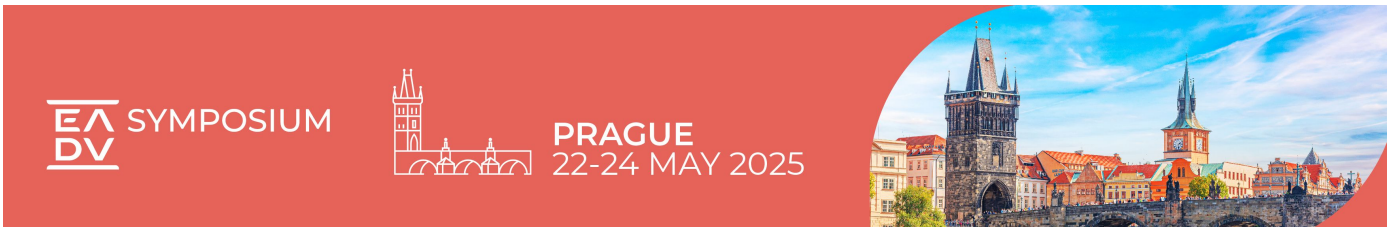
	Complete response (CR)	Partial response (PR)	p
Age	0.842		
<65 years	17 (81.0%)	4 (19.0%)	
≥65 years	7 (77.8%)	2 (22.2%)	
Sex	0.426		
Men	8 (88.9%)	1 (11.1%)	
Women	16 (76.2%)	5 (23.8%)	
Duration of disease	0.272		
** < 2 years	10 (71.4%)	4 (28.6%)	
** ≥ 2 years	14 (87.5%)	2 (12.5%)	
Previous treatments	0.551		
** Topical steroid	4 (80.0%)	1 (20.0%)	
Topical steroid + antihistamines	16 (76.2%)	5 (23.8%)	
Topical steroid + systemic steroid	4 (100.0%)	0 (0.0%)	
Comorbidities	0.709		
Psychological disorders	10 (83.3%)	2 (16.7%)	
Metabolic-endocrine disorders			
** Diabetes mellitus	10 (71.4%)	4 (28.6%)	0.522
** Thyroid- parathyroid disease	3 (75.0%)	1 (25.0%)	0.788
Cardiovascular disease	4 (80.0%)	1 (20.0%)	0.702
Malignancy	2 (66.7%)	1 (33.3%)	0.501
Mean number of sessions	48.21±23.58	35.83±17.65	0.299
Mean cumulative dose (J/cm2)	74.57±60.73	47.95±36.06	0.325
Side effects	4 (100.0%)	0 (0.0%)	0.283

SD: Standart Deviation

Table 2. Phototherapeutic data of the patients according to the localization of the lesions

	Peripheral	Diffuse	Central	p
Clinical response	CR: 9 (60.0%) PR: 6 (40.0%)	CR: 11 (100.0%) PR: -	CR: 4 (100.0%) PR: -	**0.024**
Mean number of sessions (±SD)	37.20±19.29	52.45±24.50	59.25±22.72	0.064
Mean cumulative dose (±SD) (J/cm2)	49.29±37.30	88.62±77.23	90.82±34.83	0.057

SD: Standart Deviation



Abstract N°: 1025

Efficacy of tofacitinib in chronic actinic dermatitis

Sukhdeep Singh*[1], Dipankar De[1], Sanjeev Handa[1]

[1]PGIMER, Dermatology, Chandigarh, India

Introduction & Objectives:

Chronic actinic dermatitis (CAD) is a photosensitive dermatosis characterized by abnormal cutaneous photosensitivity to ultraviolet and/or visible light. Management revolves around use of photoprotective measures, topical steroids, calcineurin inhibitors and systemic immunosuppressants. Tofacitinib is a janus kinase (JAK) 1/3 inhibitor used previously in few cases of refractory CAD unresponsive to conventional immunosuppressants with excellent response. We assessed the safety and efficacy of tofacitinib in patients of CAD as a primary therapeutic agent in this study.

Materials & Methods:

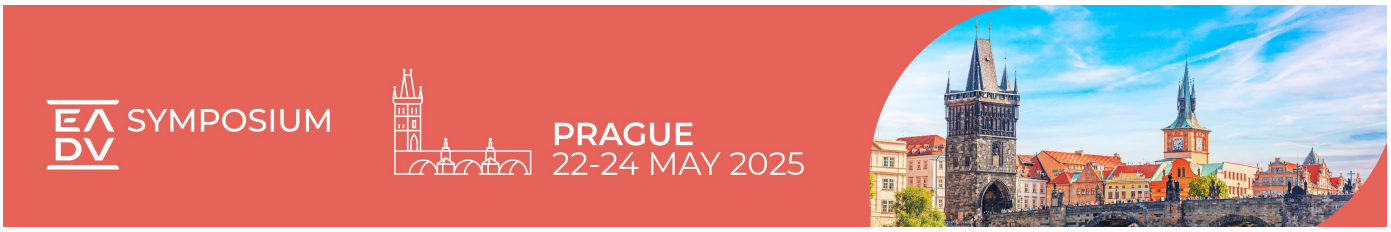
A prospective single arm interventional study involving 20 patients diagnosed with CAD attending the eczema clinic of dermatology department in a tertiary care center was conducted. The diagnosis of CAD was based on clinical examination after excluding contact dermatitis to hair dye and airborne contact dermatitis. Clinicodemographic parameters, eczema area severity index (EASI), Dermatology life quality index (DLQI) were noted in a fixed proforma. Patients were started on oral tofacitinib 5 mg twice daily upto 12 weeks and were followed up at monthly intervals. Response to treatment was assessed at monthly intervals by EASI upto 12 weeks. Concomitant topical therapy in the form of emollients, sunscreens and antihistamines were the only therapies allowed apart from tofacitinib.

Results:

The mean age of participants was 56.5± 11.3 years. Majority of participants were males with male to female ratio of 3:1. Forty five percent of affected patients were farmers involved in outdoor activities. Most common initial site of involvement in decreasing order was face (n=10, 50%), hands(n=7, 35%), scalp(2,10%) and neck(1,5%). Photosensitivity was seen in 18(90%) of patients. The median(range) total duration of illness was 42(10-240) months. All except 3 patients received previous treatment in form of oral steroids(n=9, 45%), azathioprine(n=4,20%) and topical drugs(n=4,20%). The mean(SD) baseline EASI score was 3.77(3.01) which reduced to 2.07(1.38) at 1 month, 1.40(1.30) at 2 months and 0.82(0.43) at 3 months. The response was measured in terms of EASI50(50% reduction) and EASI75(75% reduction) at 12 weeks. EASI50 was achieved in 19(95%) of participants while EASI75 was achieved in 12(60%) of participants. The mean DLQI score reduced from 9.4(4.3) at baseline to 3.95(2.30) at 12 weeks. Minor adverse effects were noted only in 3 patients(15%) in form of headache and lipid abnormalities which did not require cessation of treatment.

Conclusion:

Our study highlights the efficacy and safety of tofacitinib in CAD treatment contributing to the expanding repertoire of inflammatory dermatoses effectively managed with JAK inhibition. This can guide the development of future randomized controlled trials.



Abstract N°: 1069

Beyond light: a clinico-pathological approach to photodermatoses

José González Fernández[1], Paula Soto Revuelta[1], Mary Carolina Antonetti Roso[1], Sergio García-González[1], Karol Sabas Ortega[1], Lydia Corbalan Escortell[1], Mar García-García[2], Mariano Ara Martín[1]

[1]Hospital Clínico Lozano Blesa, Service of Dermatology of the Clinical Hospital Lozano Blesa, Zaragoza
[2]Hospital Clínico Lozano Blesa, Pathological Anatomy Service, Zaragoza

Introduction & Objectives: Actinic prurigo is an idiopathic photodermatosis characterized by pruritic lesions in photo-exposed areas, predominantly affecting mestizo populations in Latin America. Its etiology involves genetic factors and an immune response mediated by Th1 and Th2 lymphocytes. We present the case of a woman with cutaneous lesions compatible with this entity, aiming to highlight the importance of clinico-pathological correlation in its diagnosis and management.

Materials & Methods: Case report.

Results: A 38-year-old woman from Guatemala was evaluated for pruritic skin lesions with a three-month evolution. Physical examination revealed lichenified lesions on the dorsum of the hands and forearms, as well as edematous lesions with vesicles and blisters on the neckline and face, also affecting the upper lip mucosa. Biopsies from the facial region were performed for histological study using hematoxylin-eosin staining and direct immunofluorescence (DIF). Additionally, laboratory tests were conducted, including a complete blood count, biochemistry, and autoimmunity study.

Histological analysis showed telangiectatic vessels and a perivascular lymphohistiocytic inflammatory infiltrate with accompanying eosinophils. DIF revealed no antibody deposits. The complete blood count, biochemistry, and autoimmunity study results were normal. Based on clinical and histopathological findings, a diagnosis of actinic prurigo was established. Treatment was initiated with sun exposure avoidance, oral prednisone in a tapering regimen, and topical pimecrolimus.

Conclusion: Actinic prurigo is a challenging diagnosis requiring an integrated approach based on clinical evaluation, histopathology, and exclusion of other photodermatoses. The differential diagnosis should include dermatoses with similar lesion distribution, such as systemic lupus erythematosus, rosacea, polymorphic light eruption, porphyria, or erythematous pemphigus. In this case, the clinico-pathological correlation enabled an accurate diagnosis and appropriate treatment. Emphasis is placed on the importance of photoprotection and individualized management to improve patients' quality of life.

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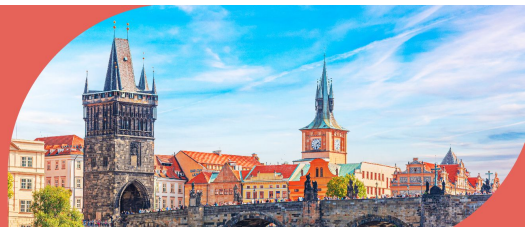


Abstract N°: 1074

Efficacy and safety of narrowband-UVB phototherapy in the elderly

Ersoy Acer[1], Esra Ağaoğlu[1], Hilal Kaya Erdogan[1], Hilal Çavuş[1], Belgin Öztürk[1], Muzaffer Bilgin[2], Zeynep Nurhan Saracoglu[1]

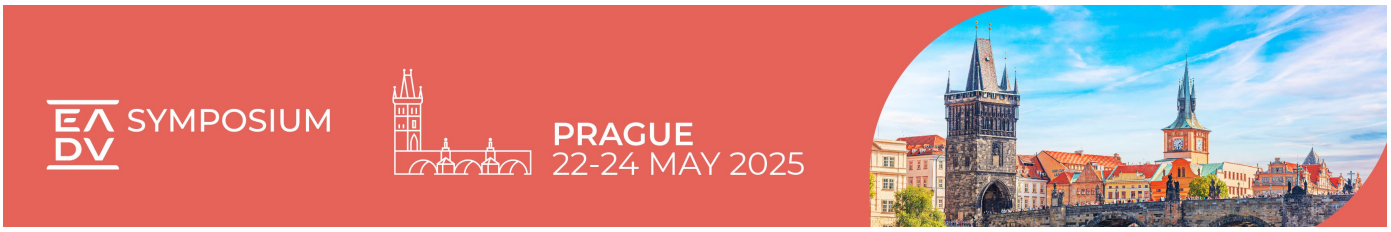
[1]Eskişehir Osmangazi University Faculty of Medicine Department of Dermatology, Eskişehir, Türkiye
[2]Eskişehir Osmangazi University Faculty of Medicine Department of Biostatistics, Eskişehir, Türkiye

Introduction & Objectives: Narrowband ultraviolet B (NB-UVB) phototherapy still has an important place in dermatology despite the therapeutic advances such as biologics and small molecule inhibitors. In recent years, the elderly population has been increasing in all over the world, so it is tought that NB-UVB will be more crucial in the geriatric dermatology. In this study, we aimed to evaluate the efficacy and safety of NB-UVB in various dermatoses seen in elderly patients.

Materials & Methods: This observational, retrospective study included patients over the age of 65 who received NB-UVB for any dermatological disease between 2014 and 2024. Phototherapy and clinical follow-up forms of the patients were retrospectively reviewed.

Results: A total of 126 patients were included in this study. Fifty-two (41.3%) of the patients were male and 74 (58.7%) were female. The mean age of the patients was 71.9±6.90 years. NB-UVB was administered most frequently to 30 (23.8%) of the patients with the diagnosis of generalized pruritus, 23 (18.3%) with mycosis fungoides, 20 (15.9%) with psoriasis, 15 (11.9%) with lichen planus, and 14 (11.1%) with prurigo nodularis. The mean number of sessions was 47.7±21.4, and the cumulative UVB dose was 73.17±49.87 J/cm2 in all patients. Complete response was achieved in 68 (%54) patients, partial response was achieved in 46 (%36.5) of the patients. Mild side effects were observed in 23 (18.3%) of the patients. None of them led to discontinuation of treatment. Antinuclear antibody (ANA) was positive in 29.4% of the patients. There was no statistically significant difference between ANA positivity and development of side effect (p=0.644).

Conclusion: NB-UVB is an effective and safe treatment option for dermatoses such as generalized pruritus, mycosis fungoides, psoriasis, lichen planus, prurigo nodularis in the elderly population,



Abstract N°: 1123

A light weapon in dermatology: Photodynamic therapy as an effective treatment for viral warts - Case report - abstract

Anna Tekielak*[1, 2], Aleksandra Frątczak[2], Mikołaj Łanocha[1, 2], Szymon Leonik[1, 2], Karolina Dębowska[2], Karina Polak[1, 2], Beata Bergler-Czop[2]

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Introduction & Objectives: Photodynamic therapy (PDT) is a well-established treatment method that has been used in dermatology since the 1990s, and has gained popularity in recent years, especially in the treatment of skin diseases such as viral warts. PDT is based on the use of photosensitizers and light, which activates them to generate reactive oxygen species that damage cells infected with the human papilloma virus (HPV), responsible for the formation of viral warts. The purpose of this article is to present a case on the spectacular effect of photodynamic therapy in the treatment of viral warts.

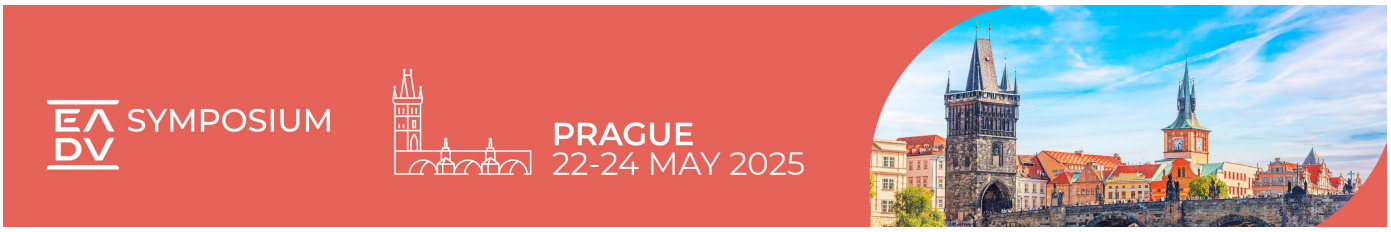
Materials & Methods: The case analysis was conducted on the basis of the medical records of a patient with multiple viral warts on the feet, caused by human papillomavirus (HPV). The treatment procedure with photodynamic therapy involved the application of 5-aminolevulinate (ALA) as a photosensitizer to the affected skin areas. After 3 hours of incubation, the patient was irradiated with 635 nm light for 13 minutes to activate the photosensitizing substance. The therapy was carried out twice, one month apart, to evaluate the effectiveness of the treatment.

Results:

The case presented concerns a 20-year-old patient with multiple viral warts on his feet, caused by HPV, who was treated with PDT. The patient had previously been treated with traditional methods such as topical application of fluorouracil with salicylic acid for a period of 5 months, which did not yield the expected results. Therefore, it was decided to implement photodynamic therapy. 5-aminolevulinate (5-ALA) was applied as a photosensitizer to the affected skin areas. After 3 hours of incubation, irradiation with light at 635 nm for 13 minutes was performed. After two PDT sessions, performed one month apart, a complete reduction of viral warts was obtained. The treatment was well tolerated, and no side effects of the therapy were evident.

Conclusion:

Photodynamic therapy is an effective treatment for viral warts, offering a lower risk of scarring and recurrence compared to traditional techniques.



Abstract N°: 1228

When Treatment Leaves a Mark: Hyperpigmentation and Leflunomide: A Case Report

Carina-Andreea Bazon[1], Hutanu Antonia Elena[1], Branisteanu Daciana Elena[1], Andrese Porumb Elena[1]

[1]CF Clinical Hospital, Dermatology, Iasi, Romania

Introduction & Objectives:

Leflunomide is a disease-modifying antirheumatic drug (DMARD) widely used in rheumatoid arthritis (RA). While its known adverse effects include hepatotoxicity, hypertension, and immunosuppression, cutaneous adverse effects are relatively uncommon but have been reported. We present a case of hyperpigmented skin lesions in a patient with RA receiving leflunomide, emphasizing the importance of recognizing this potential adverse effect.

Materials & Methods:

A 52-year-old female diagnosed with RA, receiving leflunomide 20 mg daily since November 2020, developed asymptomatic hyperpigmented lesions on the anterior neck and extensor surfaces of the upper limbs.

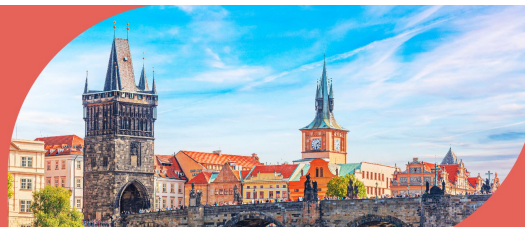
Results:

Physical examination revealed a hyperpigmented lesion on the anterior neck with a clear center and irregular, well-defined borders, while lesions on the extensor surfaces of the upper limbs were uniformly hyperpigmented, irregularly shaped, and well-demarcated. The patient denied any pruritus, pain, or other associated symptoms.

The pathophysiology of leflunomide-induced hyperpigmentation is not fully understood but may involve alterations in melanin metabolism or direct effects on keratinocytes. Differentiating these lesions from other causes, such as autoimmune pigmentary changes, post-inflammatory hyperpigmentation, or lichenoid drug eruptions, is essential. The distinct morphology and absence of inflammatory signs suggest a drug-induced reaction rather than an autoimmune or inflammatory dermatosis.

Conclusion:

This case highlights a potential cutaneous adverse effect of leflunomide in patients with RA. Recognizing such manifestations is essential for early diagnosis and appropriate management, whether through continued monitoring or consideration of alternative treatment options if needed. Further studies are needed to elucidate the mechanisms behind leflunomide-induced pigmentary changes.



Abstract N°: 1331

To PDT or not to PDT, that is the question - a retrospective analysis of carbon emissions associated with travel for photodynamic therapy.

Nicola Kearney[1], Ibrahim Afridi[1], Mary Laing[1]

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

Introduction & Objectives:

The World Health Organisation has called for urgent action to avert the catastrophic health implications of climate change. While the impact of dermatological care on our environment may pale in comparison to the effect of global events, “no one is too small to make a difference”, to quote Greta Thunberg. We sought to evaluate the impact of travel for photodynamic therapy (PDT) on carbon emissions.

Materials & Methods:

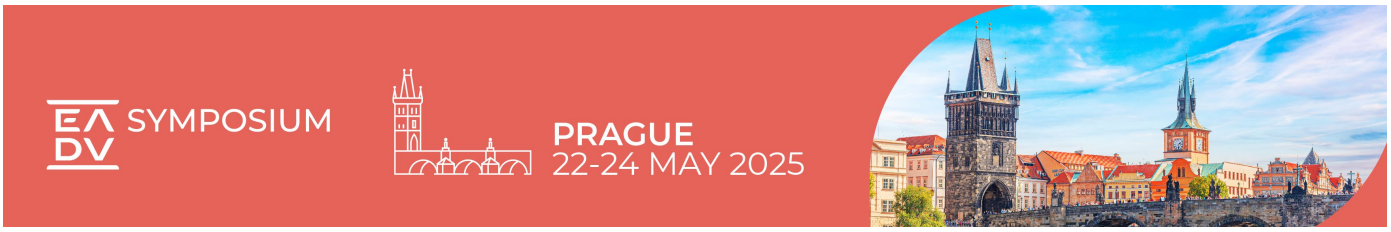
We performed a retrospective review of patients attending a tertiary dermatology unit in the West of Ireland for PDT from the 1st of July 2023 to the 1st of January 2024 to determine the impact of travel for PDT on carbon emissions.

Results:

A total of 50 patients received 86 sessions of PDT during this timeframe; 50% of whom were female. The average age of PDT recipients was 74 years. Diagnoses included actinic keratosis (AK) (29%), squamous cell carcinoma in-situ (SCCis) (36%) and superficial basal cell carcinoma (sBCC) (36%). 80% of patients received two sessions of PDT. Those who received one session of PDT were typically those with AK, or those in whom the first session was poorly tolerated. The average distance travelled by patients to our department for PDT during the specified time period was 107km (range 3km - 288km). The total cumulative distance travelled was 9,216km which equates to 3.02 metric tonnes of carbon dioxide emissions per 6 months, assuming unknown fuel-type for an average car. Carbon emissions were calculated using an online tool recommended by the Environmental Protection Agency of Ireland. Ireland’s total carbon emissions from the transport sector for 2023 was 11.791 million tonnes of CO2 equivalent. Assuming a similar amount of carbon emissions from travel for PDT in our department for the first half of 2023 as the second (3.02 metric tonnes), our departmental PDT travel emissions accounted for 5.1 x 10 -5 % of Ireland’s entire carbon emissions from travel in 2023, emissions which are not negligible.

Conclusion:

This study demonstrates that a single dermatology unit delivering PDT leaves a substantial carbon footprint. Home daylight PDT (DL-PDT) is a promising treatment option for AK, but the literature is lacking on the treatment of keratinocyte malignancies such as SCCis and sBCC with home DL-PDT. Furthermore, patients with more hyperkeratotic AK disease may have poorer outcomes when treated with home DL-PDT. While strides are being made to shift dermatology as a specialty into carbon neutrality, further work is required to optimise this therapeutic approach of home DL-PDT. It is imperative we continue to identify sustainable practices with a focus on actions that could be implemented in dermatology centres. As Albert Einstein once said, “those who have the privilege to know, have the duty to act”.



Abstract N°: 1657

Clinical Characteristics and Allergen Profiles of Photosensitive Dermatoses in Guangzhou: A Retrospective Study

Jiaoquan Chen*[1], Rihua Lin[1], Huaping Li[1], Yeqing Gong[1], Bihua Liang[1], Huilan Zhu[1]

[1]Guangzhou Dermatology Hospital, guangzhou, China

Clinical Characteristics and Allergen Profiles of Photosensitive Dermatoses in Guangzhou: A Retrospective Study

Introduction & Objectives:

To investigate the clinical characteristics of common photodermatoses in the Guangzhou region, identify the role of contact allergens and photoallergens in these conditions, and provide reference data for diagnosis and management.

Materials & Methods:

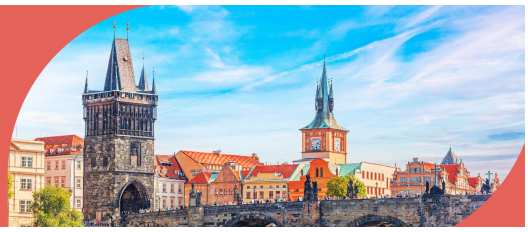
A retrospective analysis was conducted on 313 outpatients with suspected photodermatoses who underwent photopatch testing between March 2011 and August 2023. The study included patients without prior use of systemic corticosteroids, immunosuppressants, or oral antihistamines and no recent sunlight exposure on testing sites. Standard photopatch tests were performed using a kit containing 20 allergens. Reactions were classified based on international guidelines into photoreactive, contact allergic, coexisting, photoinhibited, irritant, phototoxic, or negative responses.

Results:

Males are mainly affected by chronic actinic dermatitis (91.89% of male cases), and middle-aged males (41–80 years) were the primary affected group. Females tended to be younger (21–60 years) and were more frequently diagnosed with polymorphous light eruption and other photosensitive dermatoses. Lichenic acid, Peru balsam, and fragrance mix were the most common allergens, eliciting a range of reactions. Irritant and phototoxic reactions were predominant, while the coexistence of photoreactive and contact sensitivity reactions was less common. Facial dermatitis cases were exclusively female.

Conclusion:

In Guangzhou, photosensitive dermatoses predominantly affect middle-aged males, with chronic actinic dermatitis being the most common diagnosis. Females are more affected by other photosensitive conditions and facial dermatitis. Lichenic acid, Peru balsam, and fragrance mix were potent allergens, emphasizing the need for men to minimize sun exposure and women to carefully select low-allergenicity skincare products.



Abstract N°: 1938

Efficacy of UVB in the treatment of generalized granuloma annulare

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Introduction & Objectives:

Granuloma annulare is a rare dermatosis, according to some data, it affects less than 0.05% of the population. In recent years, there has been an increase in the incidence of this dermatosis. However, the disease remains poorly understood, its etiology and pathogenesis have not been deciphered, and diagnosis and treatment are challenging.

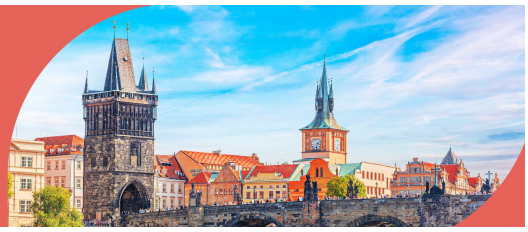
Background: A 22-year-old patient has presented with complaints of a rash affecting various areas of her body. She has considered herself ill for approximately 10 years, when rashes initially appeared on the dorsum of her feet, without accompanying subjective sensations. The patient associates the onset of the rashes with a previous episode of sore throat. After consulting a dermatologist, she was diagnosed with Granuloma annulare and was prescribed topical glucocorticoids and antibiotics, however, these treatments did not yield any improvement. Subsequently, she was referred to a rheumatologist, who recommended external therapy, but this also produced no visible positive effects. Over the course of external therapy 2 to 3 years, the rashes became paler. Currently, since mid-summer 2024, there has been an exacerbation characterized by an increase in the number of rashes and a change in their color, which the patient links to increased sun exposure.

Materials & Methods:

Observation: The skin process is widespread and subacute inflammatory, affecting the skin on the dorsal surfaces of the hands, elbow joints, flexor surfaces of the forearms, buttocks, flexor surfaces of the thighs, and dorsal surfaces of the feet. The lesions are characterized by small (0.1-0.5 cm in diameter), firm, smooth, hemispherical, slightly flattened, shiny dermal papules of a roseate and bluish color, arranged in a ring-like pattern and grouped in a semicircular formation. The nail plates are unchanged. Dermographism is mixed. Turgor is preserved, and sweat and sebaceous gland functions are intact, with normal hair growth. Lymph nodes are not palpable, muscle tone is preserved, and joint movements are not restricted. Based on the patient's complaints, medical history, and dermatological status, a diagnosis of disseminated granuloma annulare has been made. To confirm the diagnosis, a skin biopsy was conducted, which verified the diagnosis. The treatment provided includes antihistamines, detoxification therapy, external therapy, and phototherapy. Method: UVB general for phototype 2 in 2 fields. Quantity: 7+2, 3 times a week. Area of action: general. Phonophoresis with topical glucocorticoids. Method: 0.4 W/cm2 for 15 minutes. Quantity: 5+2, 2 times a week. Area of action: dorsum of the feet.

Results: UVB treatment, has shown significant efficacy by enhancing skin clearance and improving patient outcomes

Conclusion: Granuloma annulare is a rare dermatosis and phototherapy, particularly UVB treatment, has shown significant efficacy in managing generalized granuloma annulare, enhancing skin clearance and improving patient outcomes, thereby providing a valuable therapeutic option for this challenging dermatological condition.



Abstract N°: 1948

Thiazide-Induced Photosensitivity: A Case Report

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Introduction & Objectives

Drug-induced photosensitivity is a common cutaneous adverse reaction, classified as either photoallergy or phototoxicity. Its incidence is increasing due to greater sun exposure and the widespread presence of photosensitizing agents in food, supplements, pharmaceuticals, and cosmetics. Various drug classes are implicated, including NSAIDs, cardiovascular agents, psychotropics, antimicrobials, antihyperlipidemics, and antineoplastics. These reactions often lead to hospitalization, additional treatments, and drug discontinuation. We report a case of thiazide-induced photosensitivity.

Materials & Methods

A 72-year-old hypertensive patient had been on indapamide for one year, discontinued it for six months, switched to losartan for one month, then resumed indapamide. One month later, he developed erythematous infiltration of the upper limbs, anterior neck, and face, with yellowish crusts and excoriation marks. Maculopapular lesions appeared across the body.

Skin biopsies revealed chronic eczema and eczematous dermatosis with a unilocular subcorneal pustule. The reaction was reported to pharmacovigilance, leading to the contraindication of thiazides and sulfonamide-related drugs. Indapamide was replaced with an ACE inhibitor. The patient improved after a 10-day systemic corticosteroid course and gradual topical corticosteroid tapering.

Results

Indapamide, a sulfonamide-derived indole compound, is pharmacologically related to thiazide diuretics, both known for inducing photosensitivity.

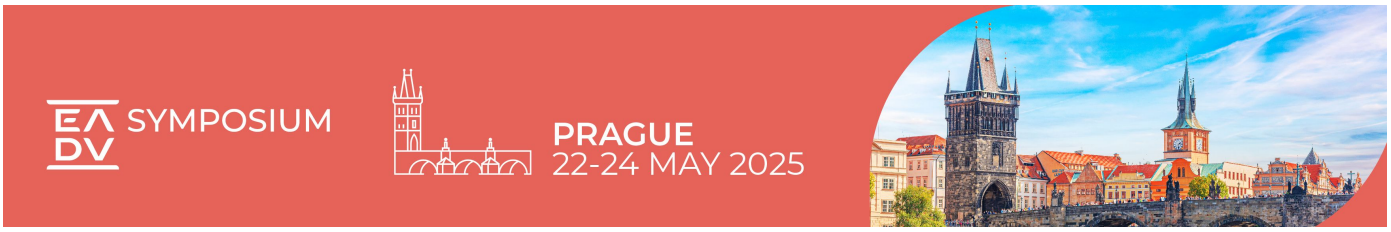
Photoallergy is an immune-mediated hypersensitivity reaction, characterized by (i) absence of reaction upon first exposure, (ii) a required incubation period, (iii) cross-reactivity with similar drugs, (iv) occurrence at low drug doses, and (v) chemical modification and covalent binding of the photosensitizer.

Phototoxicity, by contrast, results from direct cellular damage via a non-immunologic mechanism. It is characterized by (i) immediate onset, (ii) rapid development post-sun exposure, (iii) need for high drug concentrations, (iv) a dose-dependent effect, and (v) no cross-reactivity.

The patient’s delayed onset, prior sensitization to indapamide, polymorphic presentation, and primarly involvement of photo-exposed areas were consistent with a photoallergic reaction.

Conclusion

Thiazide diuretics are widely used antihypertensives with a generally good safety profile. However, photosensitivity is their most frequent cutaneous adverse effect, often presenting as eczematous reactions. Dermatologists should be familiar with the diagnosis and management of thiazide-induced photosensitivity.



Abstract N°: 2062

Lime dermatitis

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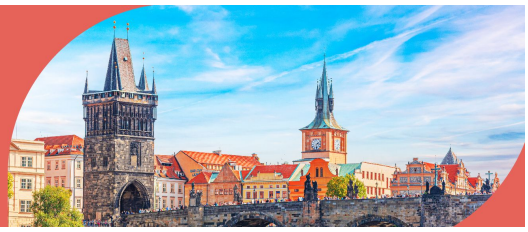
Introduction & Objectives: Case report describes the case of a 26-year-old man with an exanthema characterized by irregular linear brown-red dermatitis and small brown-red macules, localized on the skin of the abdomen and thighs and lower legs. The patient had had these symptoms for about 2 weeks and they had occurred for the first time in his life. He stated that at the beginning of the manifestations there were also blisters in soft places. The day before visiting our clinic, he returned from a vacation in Mexico.

Materials & Methods: In the anamnesis, the patient does not report any diseases or allergies, does not take any medications.

Based on the clinical picture, we suspected phototoxic dermatosis. To targeted questions, the patient was not aware of contact with any plants or perfumes. The patient was explained the phototoxic effect of plants on the skin. At the mention of citrus fruits, he remembered that he had a cold and that he had consumed a lot of lime juice. He stated that he would often take a bowl of cut limes and squeeze the juice into water or eat the limes. He did this on the beach in the sun, just in his bathing suit. Splashing lime juice caused hyperpigmented macules and linear brown marks after wiping hands on skin. He then washed his hands, but the rest of his body remained stained with lime juice.

Results: That explained his skin changes. It was **lime dermatitis.** The poster presentation includes photo documentation of the case.

Conclusion: The citrus family Rutaceae is the second most widely distributed family of plants associated with phytophotodermatitis. In the family Rutaceae, the most severe reactions are caused by the essential oil of the bergamot orange - Citrus bergamia. Other plant species in the family Rutaceae that are associated with phytophotodermatitis include burning bush - Dictamnus albus, common rue -Ruta graveolens, and other plants in the Ruta genus.



Abstract N°: 2107

A Rare Presentation of Phytophotodermatitis: A Case Study

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Introduction & Objectives:

Phytophotodermatitis occurs when photosensitizing agents from plants, such as furocoumarin, interact with ultraviolet A (UVA) light. Citrus fruits, parsley, and celery are common causes. As physical contact and sun exposure are required, phytophotodermatitis usually occurs on exposed skin of hands, arms, and face. Involvement of less exposed regions, such as axillae, is unusual. We report an unusual presentation of this condition.

Materials & Methods:

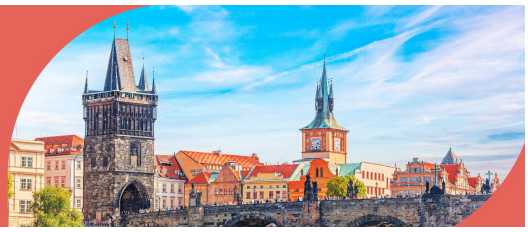
We report a 76-year old man with phytophotodermatitis seen at our dermatology department. Demographics and case presentation details as well as any risk factors and associated symptoms were collected.

Results:

The patient presented with a dark spot beneath the left arm that he first noticed a few months previously. He reported that it seemed to be getting darker but not growing, bleeding, burning, or itching. The patient enjoys yardwork, does not travel, and has used lime juice. Closer inspection of the spot in the left axilla showed an irregularly hourglass shaped hyperpigmented patch on the posterior aspect of the left axilla. The patient drank cola with lime in the preceding months.

Conclusion:

Based on the patient's story and outdoor exposure habits, it was concluded that preparing a lime juice with cola resulted in phytophotodermatitis with post-inflammatory hyperpigmentation. Phytophotodermatitis is a rare occurrence, and literature suggests that it often limits itself to photo-exposed regions. Phytophotodermatitis may be in the differential, regardless of the location, if the clinical history and pattern of involvement is suggestive.



Abstract N°: 2409

The Role of Topical Antioxidants in Sun and Environment Protection: A Canadian Dermatology Consensus

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[2]Victoria General Hospital, Victoria, Canada

Introduction & Objectives:

Advancements in skin health research have identified topical antioxidants (AOX), in complement with conventional sunscreens, as a compelling approach for broader protection against various environmental stressors, such as ultraviolet radiation, pollution, and high-energy visible light. However, there is a lack of published consensus on its application. This project aims to provide first-of-its kind national consensus for clinicians on the present understanding and integration of topical AOX for optimal skin health.

Materials & Methods:

Using a multistage-modified Delphi process, twenty-five Canadian dermatologists, from multiple provinces across Canada, developed a consensus-based framework of statements for employing topical AOX in preventing skin damage.

Results:

Consensus, where the threshold for agreement of 75% was met or surpassed, was achieved for all six statements:

\1. While broad-spectrum sunscreens partially protect against UVA/UVB, they do not fully protect the skin against the damaging effects of ultraviolet radiation.

\2. Most broad-spectrum sunscreens do not protect the skin against visible light and provide minimal to no protection against infrared radiation.

\3. Topical AOX can protect the skin from the damaging effects of ultraviolet radiation, visible light and infrared radiation.

\4. Topical AOX can protect the skin from the damaging effects of air pollution.

\5. Topical AOX should be considered as an adjunct to broad-spectrum sunscreens to reduce damage caused by UVA/UVB, visible light and infrared radiation.

\6. Topical AOX should be considered to mitigate damage to the skin caused by air pollution.

Conclusion:

This Canadian consensus provides the first guide towards incorporating topical AOX alongside clinically accepted sun protection measures, in a multi-faceted approach to promoting skin health and reducing skin damage.