

## Abstract N°: 76

### An atypical presentation of generalised Dowling Degos Disease

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#### Introduction & Objectives:

Dowling-Degos disease (DDD) is a rare autosomal dominant genodermatosis that causes reticulate hyperpigmentation in the flexures. It affects any gender and race during adulthood, but may occur in isolation or with other associations. We present an atypical case of DDD in an adult, in association with B Cell lymphoma and Seborrheic Keratoses (SK).

#### Materials & Methods:

A 56-year-old male of a non-consanguineous parentage, presented with a 16-year history of reticulate hyperpigmentation on the trunk and upper limbs that remained static for 15 years. His pigmentation was incidentally detected while being investigated for a firm lump on the right anterior chest for a year. Within the 7 offsprings of his family, only one brother had similar skin lesions. Our patient had an unremarkable medical history. Examination revealed hyperpigmented macules with atrophic lesions on the trunk and upper limbs. Face, axillae, genital regions and lower limbs were spared. Multiple asymptomatic hyperpigmented just-raised-papules were noted on the trunk alongside a firm, skin-coloured nodule with a central punctum on the posterior torso. His metabolic and biochemical parameters were normal. CECT chest showed a 8.5 cm (coronal)x 4.5 cm (anteroposterior) x 6.3 cm (transverse) lump on the anterior chest without muscle involvement. Its histology showed a bland spindle-cell tumor. Its morphology and immunophenotype were compatible with cutaneous B-cell lymphoma(cBCLs) with Ki67-55%. Based on clinicopathological findings he was also diagnosed with multiple SK with a sebaceous cyst of the trunk. Histopathology from the reticulated hyperpigmented areas showed hyperkeratosis, normal thickness of the epidermis, antler-like epidermal down-growths, dermal fibrosis and elongated rete ridges, confirming DDD. After excising the tumour with adequate margins, he underwent 6 cycles of rituximab therapy every third week with oncology follow-up.

#### Results:

DDD is a rare asymptomatic progressive disorder of pigmentation, with mutations in genes affecting melanosome transfer, and melanocyte and keratinocyte differentiation. Atypical sites of presentation include, the face, chest and wrists. Pigmentation appears circularly with lentigo-like macules, sometimes with coalescence. Hyperkeratosis, comedones-like follicular papules in the back or neck, perioral pitted-like scars, and speckled macules in genitals maybe seen. Atypical presentations include fingernail dystrophy, dyschromatosis universalis hereditaria-like lesions, interspersed irregular dyspigmented macules, and vulval lesions. Diagnosis is by clinical and histological features.

The differential diagnosis of reticulate hyperpigmentation includes Acropigmentation of Dohi, Galli-Galli disease, Haber syndrome (HS), and Reticulate acropigmentation of Kitamura. Known associations of DDD include Hidradenitis suppurativa, while SK, dystrophic finger nails and Darier disease are rarely seen. The lump on the proband's chest was diagnosed as a cBCLs, which is an unusual finding.

#### Conclusion:

We underscore the importance of considering DDD as a differential diagnosis in generalised reticulated hyperpigmentation, even without flexural involvement.

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**Abstract N°: 122****Unlocking New Potential in Lip Vitiligo Therapy: Phenolization and Therapeutic Wounding A Case Series.**Anisha Biswal<sup>1</sup><sup>1</sup>ims and sum hospital, dermatology venerology and leprosy, bhubaneswar, India**Introduction & Objectives:**

Vitiligo is a chronic skin condition characterized by depigmented patches due to the loss of melanocytes. Lip vitiligo, a specific variant affecting the lips, can be particularly challenging to treat. Therapeutic wounding, combined with phenolization, has been explored as a potential treatment to stimulate repigmentation in affected areas.

The primary aim is to evaluate the efficacy and safety of therapeutic wounding with phenolization in patients with lip vitiligo.

The secondary objective is to document the extent of repigmentation and any adverse effects observed during treatment

**Materials & Methods:**

A case series involving 20 patients with stable lip vitiligo were included. Patients underwent therapeutic wounding followed by the application of phenol. Clinical parameters, including the extent of repigmentation and any side effects, were assessed over 4 visits each monthly. Photographic documentation was used to evaluate progress.

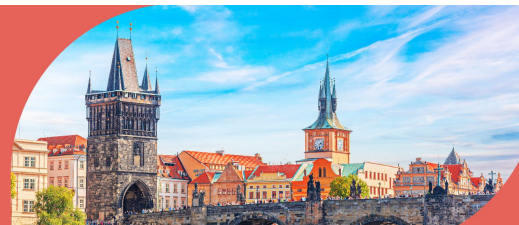
**Results:**

All patients showed varying degrees of repigmentation. 16 patients experienced near complete repigmentation in the treated areas within 3 months, with minimal side effects. Commonly observed side effects included mild erythema and transient swelling, which resolved without intervention. 3 patients did not show much improvement. 1 patient was lost to follow up

**Conclusion:**

Therapeutic wounding with phenolization appears to be an effective and safe treatment for lip vitiligo, offering significant repigmentation with minimal adverse effects. Further studies with larger sample sizes and longer follow-up periods are recommended to confirm these findings and optimize treatment protocols.



**Abstract N°: 244****To study the prevalence of Anti-Thyroid Peroxidase antibodies and C-Reactive protein serum levels in patients with late onset vitiligo.**Yashdeep Pathania\*<sup>1</sup><sup>1</sup>ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RAJKOT, DERMATOLOGY, VENEREOLOGY & LEPROLOGY, Rajkot, India**Introduction & Objectives:**

**Background:** There has been paucity of data and literature on the late onset vitiligo. There are only few studies in the literature demonstrating epidemiology, clinical pattern and other autoimmune disease association with late onset vitiligo.

**Objective:** To study the prevalence of Anti-Thyroid Peroxidase (TPO) antibodies and C-Reactive protein (c-RP) serum levels in patients with late onset vitiligo.

**Materials & Methods:** \*\* In this cross-sectional study of 50 patients, 30 years of age and above with new onset of depigmented macules or patches over body were interviewed and examined. Patient's sera were evaluated for Anti-Thyroid Peroxidase antibodies and C-Reactive protein levels. Patients were also evaluated clinically to find the clinical pattern of vitiligo and disease activity using VIDA (Vitiligo disease activity index) scoring scale). Late onset vitiligo patients were also evaluated for the psychosocial impact of the disease by using Dermatology Life Quality Index (DLQI) questionnaire in patient's language.

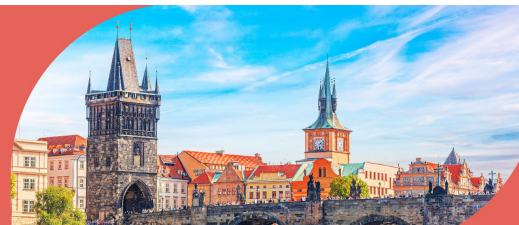
**Results:**

Out of 50 patients of late onset vitiligo 30 were females and 20 were males. The mean age of patients was  $49.16 \pm 11.762$ . The vitiligo lesions were generalised in 62% patients while distribution to hands & feet and acrofacial were 9% and 7% respectively. The prevalence of anti-TPO antibody and c-Reactive protein above the normal range were found in 22% and 8% patients respectively. The mean DLQI was  $12.88 \pm 4.822$ . The mean VIDA score was  $2.78 \pm 1.298$ . The c-RP levels had a positive correlation with VIDA score ( $p = 0.030$ ). The female patients had a higher mean and positive correlation with DLQI ( $p = 0.008$ ). There was a positive correlation found between the raised anti-TPO levels and VIDA score ( $p = 0.00$ ). It was also found that patients of age group between 30-40 years had a significant higher DLQI than older age group.

**Conclusion:**

Late onset vitiligo patients showed a significant relationship with raised anti-TPO antibody levels and few with raised c-RP levels. Anti-TPO levels had a positive correlation with the VIDA score. The majority of patients had a generalised type of vitiligo predominantly involving the hands and feet and also had a significant large psychosocial impact of the disease.



**Abstract N°: 444****Atypical Clinical Presentation of Hidradenitis Suppurativa**Khadijah Muzaffar<sup>1</sup>, Sahar Alshari<sup>2</sup><sup>1</sup>Batterjee Medical College, General Physician, Jeddah, Saudi Arabia<sup>2</sup>Al-Noor Specialist Hospital, Dermatology, Makkah, Saudi Arabia**Introduction & Objectives:**

Hidradenitis suppurativa (HS), also known as acne inversa, is a chronic, disfiguring inflammatory disorder affecting the hair follicles in apocrine gland-bearing areas such as the axilla, breasts, inner thigh, and genital and perineal regions. It is characterized by recurrent painful nodules, sinus tracts, and hypertrophic scarring. The global prevalence of HS ranges from 0.00033% to 4.1%, with a higher female predominance. Genetic and environmental factors contribute significantly to its pathogenesis. This report presents a case of HS with a focus on treatment challenges and outcomes.

**Case Presentation:**

A 41-year-old female with a history of hypertension presented with a 10-month history of severe itching initially affecting the axilla and groin, later progressing to the inframammary folds and perianal region with wounds, lesions, and discharge. The patient had a past history of ovarian cysts, acne, and an irregular menstrual cycle. There was no significant history of joint pain or systemic issues. The patient initially experienced complete remission without medication, but post-anal fistula surgery, symptoms reappeared with increasing severity. She was managed with various topical and oral medications, including itraconazole, clotrimazole, cetirizine, and zinc supplements, but experienced limited relief. Cryotherapy, salicylic acid, and corticosteroids were later introduced. A biopsy confirmed HS. Doxycycline and clindamycin were prescribed, but persistent symptoms led to the introduction of Adalimumab in January 2024. The patient showed marked improvement within five weeks, with complete resolution of axillary lesions, minor improvement in the groin, and persistent itching in the inframammary folds.

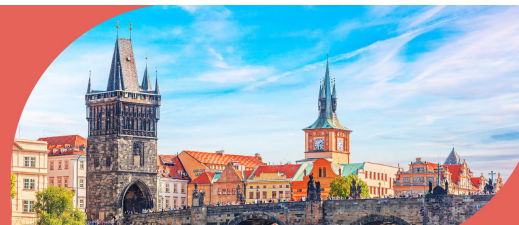
**Discussion:**

HS is a chronic and recurrent condition with significant morbidity. It is frequently misdiagnosed, leading to treatment delays averaging 7.2 years. The Hurley staging system is commonly used to assess severity, guiding treatment choices. Initial management involves lifestyle modifications and medical therapy, including antibiotics, corticosteroids, and immunosuppressants. Biologic therapy, specifically anti-TNF- $\alpha$  agents like Adalimumab, has demonstrated efficacy in moderate to severe cases. This case underscores the need for early recognition, histopathological confirmation, and timely intervention to prevent disease progression and improve quality of life.

**Conclusion:**

HS is a debilitating condition requiring a multidisciplinary approach for effective management. This case highlights the importance of prompt diagnosis, early therapeutic intervention, and the efficacy of biologic treatment in refractory cases. Future research should focus on optimizing biologic protocols and identifying predictive factors for treatment response.





**Abstract N°: 480**

### **Misconceptions About Depigmenting Agents: A Cross-Sectional Study on Knowledge and Practices**

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<sup>1</sup>Ibn Sina University Hospital in Rabat, dermatology, Rabat, Morocco

#### **Introduction & Objectives:**

Hyperpigmentation is among the most common skin conditions, significantly affecting patients' quality of life. A variety of treatments are available, including medications, cosmetic products, and traditional remedies. This study aims to gather misconceptions about common depigmenting agents.

#### **Materials & Methods:**

Our study was based on a 40-question, 5-minute questionnaire administered to 200 individuals, including medical, paramedical, and non-medical professionals. The knowledge score was defined as follows: low (10–14), medium (15–24), and high ( $\geq 25$ ). Statistical analysis was performed using Jamovi software version 2.3.28.

#### **Results:**

The sample consisted of 70% women and 30% men, with a median age of 20. Among participants, 30% were healthcare professionals, and 70% were not. Hyperpigmentation affected 63% of participants, with common areas including the face (38%), inguinal region (17%), and periorbital region (15%). Dermatologists were the primary source of treatment recommendations (46%), followed by pharmacists (22%), influencers, and peers (18%), while general practitioners accounted for 14%.

63% expected partial improvement, 33% anticipated complete healing, and 4% did not expect recovery. Regarding timelines, 45% expected improvement within one month. Traditional remedies used included Nila (37%), lemon (28%), and milk powder (27%).

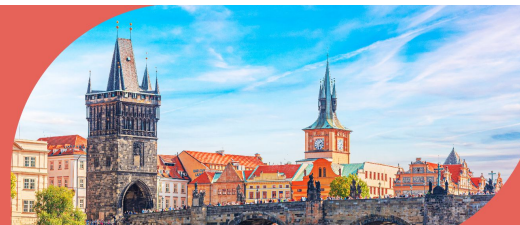
Only 23% believed sunscreen could prevent hyperpigmentation. SPF 50 was the most preferred choice (45%), followed by UVA protection (32%).

This study focused on hydroquinone, retinol, glycolic acid, azelaic acid, tranexamic acid, vitamin C, and chemical peels. Participants aged 25–40 exhibited better knowledge, while those under 25 had lower levels ( $p=0.013$ ). Women and healthcare professionals showed higher knowledge scores compared to men and non-professionals ( $p=0.01$ ). Individuals with hyperpigmentation had significantly higher knowledge ( $p=0.01$ ). Advice from dermatologists and general practitioners was associated with better understanding compared to other sources ( $p=0.04$ ).

#### **Conclusion:**

Despite widespread information through influencers and social media, gaps in knowledge about depigmentation treatments persist. This highlights the need for ongoing, accessible education for the general public.



**Abstract N°: 511****Efficacy and Safety of 577-nm Yellow Laser in the Treatment of Pigmented Epidermal Lesions**

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**Efficacy and Safety of 577-nm Yellow Laser  
in the Treatment of Pigmented Epidermal Lesions****Introduction & Objectives:**

Freckles and lentigines are common pigmented problems which not only cause substantial cosmetic morbidity but also create psychosocial concern. The available modalities for the treatment of pigmented lesions are often unsatisfactory for patients, require a long treatment period, and often cause skin irritation. With the advent of lasers, safe and effective treatment options for epidermal pigmentation have become more varied for different Fitzpatrick skin types. We aimed to evaluate the efficacy and safety of 577-nm yellow laser in the treatment of pigmented epidermal lesions.

**Materials & Methods:**

This study was carried out on 50 patients presented with pigmented epidermal lesions (25 presented with freckles and 25 presented with lentigines). Each patient received four treatment sessions with a 577-nm diode laser at 2-week intervals.

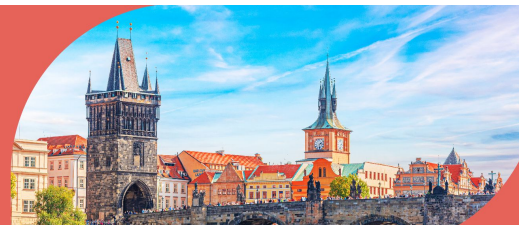
**Results:**

There was significant improvement in freckles and lentigines, as 23 out of 50 patients showed marked improvement, 11 patients showed moderate improvement, 10 patients showed mild improvement, and only six patients had no changes. Moreover, 23 patients were very satisfied, 18 patients were satisfied, and nine patients were not satisfied. As regards the safety of the 577-nm yellow laser, there was no significant adverse effect among patients except pain, erythema, and hyperpigmentation, which resolved within one month after treatment.

**Conclusion:**

This study showed that the 577-nm yellow laser is an effective, safe, and well-tolerated device in the treatment of freckles and lentigines.



**Abstract N°: 588****Two Atypical Localizations of Lichen Planus Pigmentosus: A Report of Two Cases**Nadia Lahmamsi<sup>1</sup>, Awatef Kelati<sup>1</sup>, Oumaima Sbai<sup>1</sup>, Soumia Chiheb<sup>1</sup><sup>1</sup>Cheikh Khalifa International University Hospital,, Dermatology, casablanca , Morocco**Introduction & Objectives:**

Lichen planus pigmentosus (LPP) is a rare variant of cutaneous lichen planus, characterized by chronic pigmentary changes of unknown etiology, first described in India. Clinically, it presents as pigmented macules, often on photo-exposed areas or in skin folds. We report two unusual cases of LPP: one affecting the ears and the other involving keloid scars.

**Materials & Methods:**

**Case 1** A 28-year-old female with no significant medical history presented with hyperpigmentation on the ears and face, persisting for several months. No history of trauma, rubbing, or medication use was noted. Clinical examination revealed confluent hyperpigmented macules on both lobes and helixes of the ears, as well as the face and abdomen. Scalp examination showed a 1 cm receding hairline, indicative of early-stage fibrosing frontal alopecia. Dermoscopy of the ear lesions showed pigmented reticulated lines with pigmented circles centered by a dot. Facial dermoscopy revealed pigmented dots arranged in parallel reticular lines over a pigmented and erythematous background. Scalp dermoscopy revealed erythema and peripilar scales. A biological work-up, including endocrine evaluation, was unremarkable.

**Case 2** A 42-year-old female with no previous medical history presented with multiple spontaneous keloid scars. Dermatological examination showed three keloid scars on the neckline, shoulder, and back, all surrounded by diffuse hyperpigmentation. Dermoscopy revealed a pigmented pseudo-network with thick grey dots and globules arranged in a circular pattern. A biological work-up, including HCV serology, was also unremarkable. The diagnosis in both cases was LPP, with the first case associated with fibrosing frontal alopecia and the second with keloid scarring.

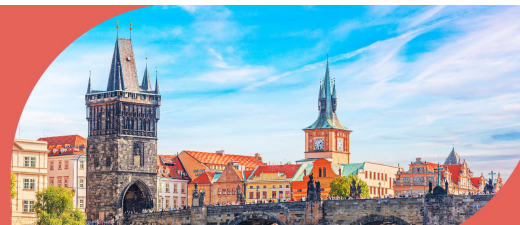
**Results:**

LPP is more common in individuals with darker skin types and typically affects areas like the face, neck, and upper limbs. It presents as ill-defined, homogeneous hyperpigmented macules or papules. Rare forms include inverse, blaschkoid, zosteriform, segmental, and mucosal types. The etiology of LPP remains unclear, but it is often associated with Koebner's phenomenon, especially due to sun exposure. However, LPP can also occur in non-sun-exposed areas, suggesting other mechanisms. In our first case, sun exposure likely contributed to the ear lesions, while the peri-cicatricial location in the second case may be linked to a Koebner phenomenon, a new association not previously described. Treatment of LPP remains non-standardized and mainly focuses on avoiding exacerbating factors, sun protection, and topical treatments. These include tacrolimus, corticosteroids, and depigmenting agents such as hydroquinone, often combined with retinoic acid or azelaic acid.

**Conclusion:**

LPP is a chronic pigmentary disorder that can present with rare clinical forms and unusual localizations, as demonstrated by these two cases. Further research is needed to better understand its pathophysiology and improve treatment approaches.



**Abstract N°: 596****A rare clinical presentation associated with Ixabepilone: Coexistence of Erythema Ab Igne and Neuropathy**

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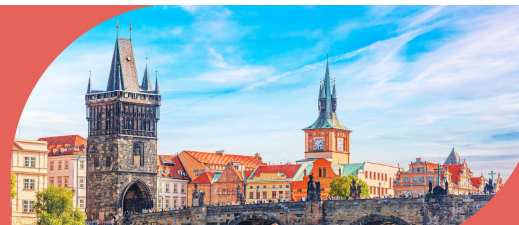
**Introduction & Objectives:** Erythema ab igne is a benign skin condition caused by prolonged exposure to infrared radiation and/or heat that is insufficient to induce burns. Initially presenting as mild erythema overexposed areas, it progresses over weeks to months into a reticulated hyperpigmentation with erythema, scaling, and telangiectasias. Diagnosis is primarily clinical, based on patient history and physical examination. A biopsy is not necessary for diagnosis but can be used to differentiate from malignancy.

**Materials & Methods:** A 58-year-old female patient presented to our clinic with lace-like erythema on her legs that had developed over the past month. The patient had a history of metastatic breast cancer and was undergoing treatment with ixabepilone. Upon examination, sensory loss in the legs was noted. Further questioning revealed that the patient had a persistent cold sensation on her legs therefore she had been placing her legs close to a stove daily to alleviate the cold sensation and the patient was diagnosed with erythema ab igne. Neurology consultation was sought to evaluate for neuropathy, and ixabepilone-induced neuropathy was diagnosed.

**Results:** At the 2-month follow-up, the patient's symptoms had begun to resolve following the discontinuation of heat exposure, the initiation of pregabalin for the management of neuropathy, and treatment with topical tretinoin.

**Conclusion:** Clinicians should maintain a high index of suspicion for various etiologies of erythema ab igne to ensure a thorough patient history is obtained.



**Abstract N°: 786****A very rare cause of acquired hyperpigmentation: Idiopathic eruptive macular pigmentation**

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**Introduction:**

Idiopathic eruptive macular pigmentation (IEMP) is a very rare benign dermatosis belonging to the group of acquired hypermelanosis of unknown etiology. It is characterized by the appearance of asymptomatic hyperpigmented macular lesions. We report a new case.

**Case presentation:**

An 8-year-old boy, with no notable medical history, presented with progressive hyperpigmented lesions for the past 6 months. No triggering factor was identified. Dermatological examination revealed multiple brownish macules, ranging from 5 to 20 mm, non-pruritic, scattered over the neck, trunk, and all 4 limbs. Darier's sign was negative. Palms and soles were spared. Examination of mucous membranes and nails was without abnormalities. Skin biopsy showed hyperpigmentation of the basal epidermal layer with numerous dermal melanophages. Based on these clinical and histopathological findings, we established a diagnosis of IEMP.

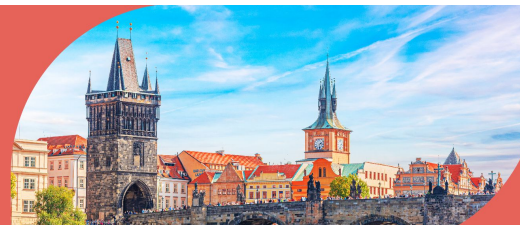
**Discussion:**

IEMP was first described in 1978 by Degos et al. Less than 50 cases have been reported in the literature. However, this frequency seems to be underestimated, considering the number of unpublished cases and cases mistaken for other diagnoses. The pathogenic mechanisms involved remain poorly understood. This pigmentation disorder mainly affects children and adolescents, without gender predilection. It must be differentiated from several diagnoses: cutaneous mastocytosis, lichen planus pigmentosus, ashy dermatosis, and postinflammatory hyperpigmentation. The resolution of IEMP lesions is spontaneous but slow, taking from few months to a few years.

**Conclusion:**

IEMP is a rare entity, but one that needs to be known, both to avoid unnecessary investigations and considering the limited interest of treatment in the face of spontaneous resolution of the condition.



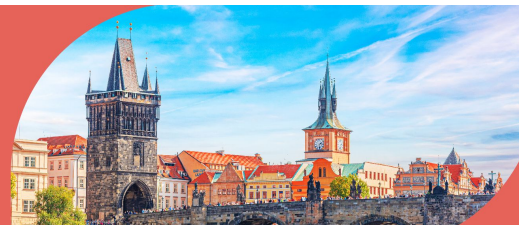
**Abstract N°: 868****Nevus Spilus Emerging During Pregnancy: A Case Report**Beliz Bayındır Aydemir<sup>1</sup>, Banu Ismail<sup>2</sup>, Bengü Nisa Akay<sup>3</sup><sup>1</sup>Ankara Atatürk Sanatoryum Eğitim ve Araştırma Hastanesi, Dermatology and Venereology, Ankara, Türkiye<sup>2</sup>Nigde Omer Halisdemir University, Dermatology and Venereology, Nigde, Türkiye<sup>3</sup>Ankara University, Dermatology and Venereology, Ankara, Türkiye

**Introduction & Objectives:** Nevus spilus (NS), also known as speckled lentiginous nevus (SLN), is characterized by cutaneous lesions consisting of numerous hyperpigmented macules or papules within a pigmented patch. The prevalence of NS is approximately 0.2%-2.3%. NS can be congenital or acquired. Its etiology and pathogenesis remain unclear. It is hypothesized that congenital lesions result from a postzygotic mutation affecting the melanocytic lineage, leading to a melanocytic clone that predisposes to neoplasms. The primary genetic causes of NS are thought to involve postzygotic mutations in HRAS, NRAS, and, rarely, other point mutations (such as in BRAF and MET genes). These lesions can also be influenced by environmental factors. An increase in lesions has been observed, particularly following ultraviolet (UV) light exposure. Currently, two cases of NS triggered by pregnancy have been reported. In this case report, we present a 23-year-old female patient with adult-onset NS that developed during pregnancy.

**Materials & Methods:** A 23-year-old female patient came to the dermatology clinic with asymptomatic, dark brown macular lesions on the right side of her neck that appeared during pregnancy. The lesion was examined and clinical and dermatoscopic images have been recorded. In order to confirm diagnosis, a punch biopsy was performed. \*\*

**Results:** A 23-year-old female patient, with no known comorbidities, presented with asymptomatic, dark brown macular lesions on the right side of her neck, which had been present for 7 months. The patient was 37 weeks pregnant. The cutaneous lesions had appeared during the second month of her pregnancy. On dermatological examination, numerous brown macular lesions were observed, arranged in a speckled pattern on a slightly pigmented patch on the right side of her neck. Although the hyperpigmented patch on the background was not very prominent during the dermatological examination, it became more evident upon dermatoscopic examination and Wood's lamp test. A skin biopsy taken from the hyperpigmented area revealed mild melanocytic hyperplasia and elongation of rete ridges. The patient had no epidermal nevus or port-wine stain. Other physical examination findings and laboratory tests were normal. The patient was not taking any regular medication. Based on the clinical and histopathological features, the diagnosis of nevus spilus was made. The patient was advised on sun protection and annual dermatological check-ups.

**Conclusion:** There is an ongoing debate about whether NS lesions are congenital or acquired pigmentary lesions. However, the etiology is multifactorial, with both genetic and environmental factors playing a role. As an example of environmental factors, UV light exposure in NS has been reported to darken the background lentiginous hyperpigmentation and increase the number of macules and papules. Two cases of NS triggered by pregnancy have been reported to date. In one of these cases, the NS lesions appeared at birth, while in the other, they appeared in adulthood. In both cases, NS lesions increased during pregnancy, and it was noted that the lesions darkened and grew during pregnancy. Our case is the first reported NS case that developed during pregnancy. Although the exact role of estrogen and progesterone levels and their receptors in nevus development remains unclear, our case suggests that hormonal factors may play a role in the pathogenesis of NS.

**Abstract N°: 892****Carnitine palmitoyltransferase 1B (CPT1B)-mediated fatty acid oxidation induces pigmentation in solar lentigo**Soon-Hyo Kwon<sup>1</sup>, Yoonsung Lee<sup>2</sup>, Man S Kim<sup>2</sup><sup>1</sup>Kyung Hee University Hospital at Gangdong, Kyung Hee University College of Medicine, Department of Dermatology, Seoul, Korea, Rep. of South<sup>2</sup>Translational-Transdisciplinary Research Center, Clinical Research Institute, Kyung Hee University Hospital at Gangdong, College of Medicine, Kyung Hee University, Seoul, Korea, Rep. of South

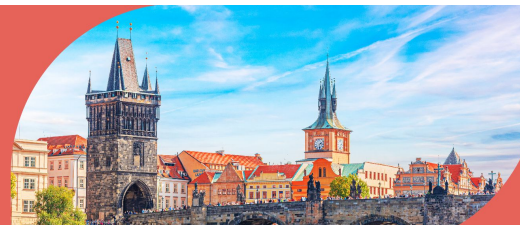
**Introduction & Objectives:** Ageing is characterised by a functional decline in organisms and is associated with various cellular changes, including senescence and metabolic alterations. Solar lentigo (SL) is a common age-related pigmented disorder characterised by accumulation of senescent cells and metabolic dysregulation. This study aimed to elucidate the transcriptional and metabolic alterations involved in SL development by identifying the regulatory mechanisms of differentially activated metabolic reactions and their potential enzymatic genes.

**Materials & Methods:** Transcriptomic profiles of SL skin samples were analysed by mRNA sequencing, differential gene expression analysis, and pathway enrichment analysis. Metabolic flux simulations were conducted to identify the significantly altered metabolic pathways. The key target genes were experimentally validated using a zebrafish model.

**Results:** Transcriptomic analysis and metabolic flux simulation revealed significant differential expression of genes involved in mitochondrial energy metabolism and fatty acid oxidation in SL. Upregulation of carnitine palmitoyltransferase 1B (CPT1B), a key enzyme in fatty acid oxidation, was confirmed. The zebrafish model demonstrated that CPT1B regulates pigmentation, corroborating its role in SL.

**Conclusion:** This study highlights the interplay between cellular senescence and metabolic alterations during SL development. Targeting CPT1B and the associated lipid metabolism pathways presents a novel therapeutic approach for managing SL and age-related pigmentation disorders.



**Abstract N°: 1072****Burrowing Bug Pigmentation: A Case Presentation**

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**Burrowing Bug Pigmentation: A Case Presentation****Introduction & Objectives:**

Insect related cutaneous manifestations has wide spectrum of presentation with severity being dependent on the type of arthropod species. Cutaneous pigmentation due to Burrowing bug (Cydnidae insect) can mimic many dermatological conditions.

**Materials & Methods:**

Five mothers, whom are the bystanders for their children, have noticed sudden onset asymptomatic pigmented spots over soles for 1 day duration. At the beginning of rainy season, all mothers have visited a nearby temple on barefoot, a day prior to the skin lesions. Examination revealed multiple, scattered, small well defined pigmented macules of varying sizes over bilateral soles. Diagnosis of Burrowing Bug Pigmentation was made and patients were reassured.

**Results:**

Burrowing bug, whose habitat in soil or sand commonly breed during rainy season, release odorous substance (mixture of hydrocarbonates), which cause macular hyperpigmentation of skin, if the insect was accidentally crushed. Lesions will spontaneously disappear within 10 to 14 days and can be remove with acetone. Junctional nevi, lentigines, malignant melanoma, and petechiae constitute differentials. Based on abrupt onset, asymptomatic lesions over exposed areas, during rainy season, clustering of cases, along with history of outdoor activity aid diagnosis.

**Conclusion:**

Knowledge of this self-limiting condition can help avoid unnecessary investigations and treatment



**Abstract N°: 1124****Factors Influencing Quality of Life in Vitiligo Patients: A Cross-Sectional Study Using VIS-22 Scores**Disha Chakraborty<sup>\*1</sup>, Abhishek De<sup>2</sup>, Namratha Grisilda<sup>3</sup><sup>1</sup>UC Davis, Dermatology, Rheumatology, Sacramento, United States<sup>2</sup>Calcutta National Medical College and Hospital, Dermatology, Kolkata, India<sup>3</sup>Indian Institute of Public Health, Epidemiology, Hyderabad, India**Introduction & Objectives:**

Vitiligo, a chronic pigmentary disorder characterized by melanocyte loss, is largely asymptomatic but carries significant cosmetic and psychosocial implications. The Vitiligo Impact Scale (VIS-22) is a validated disease-specific tool to assess the psychosocial burden of vitiligo. This study evaluates the quality of life (QoL) in vitiligo patients using VIS-22 scores and analyzes its correlation with demographic, clinical, and disease severity parameters.

We conducted this cross sectional study to assess the quality of life in vitiligo patients using VIS-22 scores, to examine associations between VIS-22 scores and clinico-demographic factors, including age, gender, socioeconomic status, disease duration, clinical subtypes, and severity indices (VASI, BSA, PGIS) and to identify predictors of QoL impairment in vitiligo patients.

**Materials & Methods:**

A cross-sectional study was conducted over six months (July–December 2023) at a tertiary care dermatology center. A total of 58 vitiligo patients aged  $\geq 18$  years were enrolled. Clinical and demographic data were collected, including age, gender, socioeconomic status, family history, disease duration, and vitiligo subtype. Disease severity was assessed using Vitiligo Area Scoring Index (VASI), Body Surface Area (BSA), and Patient Global Impression of Severity for both face (PGIS-F) and vitiligo (PGIS-V). The impact of vitiligo on quality of life was assessed using VIS-22, categorized into no impact (0–5), mild (6–15), moderate (16–25), large (26–40), and very large (41–66) impact.

**Results:**

The mean VIS-22 score was 13.09, indicating a mild impact on QoL. Distribution of VIS-22 scores: 3 patients (7.0%) had no impact, 39 patients (90.7%) had a mild impact, and 15 patients (2.3%) had a moderate impact. No patients experienced a large or very large impact.

Age-related differences: Patients  $\geq 18$  years had significantly higher VIS-22 scores (mean =  $17.8 \pm 9.85$ ) than those  $< 18$  years (mean =  $8.6 \pm 3.68$ ) ( $p < 0.002$ ), indicating greater QoL impairment in adults.

Gender differences: No significant difference was observed in VIS-22 scores between males ( $12.6 \pm 4.15$ ) and females ( $13.4 \pm 4.9$ ) ( $p = 0.2$ ).

Socioeconomic status: Patients from the lower-middle class had significantly higher VIS-22 scores ( $13.8 \pm 1.4$ ) compared to the upper-middle class ( $7.5 \pm 1.9$ ),  $p = 0.003$ .

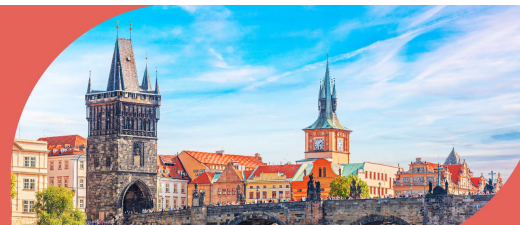
Disease severity correlations: Generalized vitiligo had significantly higher VIS-22 scores ( $15.6 \pm 5.38$ ) than focal vitiligo ( $11.3 \pm 4.05$ ),  $p = 0.001$ , indicating a higher psychosocial burden with extensive disease. VASI and BSA scores did not show a significant correlation with VIS-22, suggesting that the extent of depigmentation may not directly translate to QoL impairment. PGIS-V categories (mild, moderate, severe) showed no statistically significant difference in VIS-22 scores.

**Conclusion:**

Vitiligo exerts a mild to moderate impact on quality of life, with age, socioeconomic status, and clinical subtype (generalized vs. focal vitiligo) emerging as significant predictors. Adults and individuals from lower socioeconomic backgrounds experience greater psychosocial distress. However, disease extent (BSA, VASI) does not strongly correlate with QoL impairment, highlighting the subjective nature of vitiligo burden. A holistic approach addressing psychosocial concerns is crucial for comprehensive vitiligo management.

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**Abstract N°: 1181****A systematic review of case series and clinical trials investigating systemic oral or injectable therapies for the treatment of vitiligo**

Alireza Jafarzadeh\*<sup>1</sup>, Azadeh Goodarzi<sup>1</sup>

<sup>1</sup>Department of Dermatology, Rasool Akram Medical Complex Clinical Research Development Center (RCRDC), School of Medicine, Iran University of Medical Sciences, Tehran, Iran , Tehran, Iran

**Introduction & Objectives:**

The purpose of this study is to investigate the effectiveness and safety of oral and injectable systemic treatments, such as methotrexate, azathioprine, cyclosporine, tofacitinib, baricitinib, corticosteroids, statins, zinc, apremilast, etc., for treating vitiligo lesions.

**Materials & Methods:**

Databases including PubMed, Scopus, and Web of Science were meticulously searched for studies spanning from 2010 to August 2023, focusing on systemic oral and injectable therapies for vitiligo, using comprehensive keywords and search syntaxes tailored to each database. Key data extracted included study design, treatment efficacy, patient outcomes, patient satisfaction, and safety profiles.

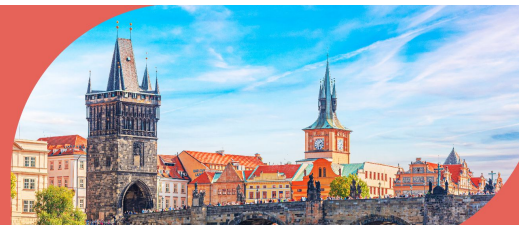
**Results:**

In a total of 42 included studies, oral mini-pulse corticosteroid therapy (OMP) was the subject of six studies (14.2%). Minocycline was the focus of five studies (11.9%), while methotrexate, apremilast, and tofacitinib each were examined in four studies (9.5%). Antioxidants and Afamelanotide were the subjects of three studies each (7.1%). Cyclosporine, simvastatin, oral zinc, oral corticosteroids (excluding OMP) and injections, and baricitinib were each explored in two studies (4.8%). Azathioprine, mycophenolate mofetil, and Alefacept were the subjects of one study each (2.4%).

**Conclusion:**

Systemic treatments for vitiligo have been successful in controlling lesions without notable side effects. OMP, Methotrexate, Azathioprine, Cyclosporine, Mycophenolate mofetil, Simvastatin, Apremilast, Minocycline, Afamelanotide, Tofacitinib, Baricitinib, Antioxidants, and oral/injectable corticosteroids are effective treatment methods. However, oral zinc and alefacept did not show effectiveness.





Abstract N°: 1186

### Melasma on Screen: The Role of YouTube in Educating Arabic-Speaking Patients in Morocco

Lina Mouline<sup>1</sup>, Fatima Zahra Hammoud<sup>1</sup>, Bouchra Idrissi Rhenimi<sup>1</sup>, Meriam Meziane<sup>1</sup>, Nadia Ismaili<sup>1</sup>, Syrine Hamada<sup>1</sup>, Laila Benzekri<sup>1</sup>

<sup>1</sup>مستشفى ابن سينا, Department of Dermatology and Venerology, Rabat, Morocco

#### Introduction & Objectives:

Melasma is a prevalent pigmentary disorder, particularly in regions like Morocco, where sun exposure and cultural practices play significant roles. Social media platforms such as YouTube are increasingly used to seek information about melasma treatments, but the accuracy, safety, and cultural influences of this content remain concerning. This study aimed to analyze the first 50 YouTube videos retrieved by the Arabic search term “علاج الكلف” (melasma treatment) to evaluate their educational value, treatment claims, persuasion methods, and audience engagement, with a focus on identifying potential misinformation and cultural misconceptions

#### Materials & Methods:

Videos were identified using private browsing to avoid algorithmic bias. A structured exploitation sheet was used to classify videos by type (tutorial, testimonial, educational), speaker characteristics (gender, profession, Arabic dialect), and treatment recommendations (natural, medical, preventive). Content was analyzed for differentiation between melasma types (epidermal, dermal, mixed), physiopathology explanation, prevention advice, and commercial partnerships. Viewer comments were also evaluated to assess sentiment, engagement trends, and cultural influences, based on the first 10 comments of each video.

#### Results:

- **Video Characteristics:** Tutorials (44%) and testimonials (42%) were predominant. Male presenters achieved higher average views despite women being the primary speakers (62%).
- **Treatment Trends:** Natural remedies were the most promoted (40%) and garnered the highest engagement, with substances like **apple cider vinegar** and **lemon juice** often applied in unsafe proportions. Medical remedies, such as **topical steroids** and **hydroquinone**, were presented without adequate warnings about their risks, with some glorifying adverse effects like **induced rosacea** and **cushingoid appearance**.
- **Religious and Cultural Misconceptions:** Many videos perpetuated **religious beliefs**, with melasma attributed to **acts of witchcraft** or supernatural causes, further stigmatizing the condition.
- **Comments Analysis:** Of the analyzed comments, **76% shared success stories**, 24% sought advice, 10% expressed concerns, and only 4% mentioned adverse effects. Additionally, **84% of comments reflected cultural or religious influences**, and the majority (87%) were from women.
- **Neglect of Professional Advice:** Only 14% of videos emphasized the importance of **dermatological consultation**, highlighting a gap in promoting professional care.

#### Conclusion:

YouTube videos on melasma treatments reflect a concerning mix of educational, misleading, and culturally influenced content. The widespread use of unregulated natural remedies and the glorification of harmful medical treatments, combined with religious misconceptions, underline the urgent need for regulation of digital health content. Furthermore, there is a critical need for **Arabic-speaking dermatologists** to engage with social media platforms and provide evidence-based, culturally sensitive education to counter misinformation and guide patients safely. Strengthening digital health

regulations and promoting professional expertise in online spaces could mitigate the risks associated with misinformation and improve public health outcomes.

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**Abstract N°: 1226****A Systematic Review of Case Series and Clinical Trials Investigating Regenerative Medicine for the Treatment of Vitiligo**Alireza Jafarzadeh<sup>\*1</sup>, Azadeh Goodarzi<sup>1</sup><sup>1</sup>Department of Dermatology, Rasool Akram Medical Complex Clinical Research Development Center (RCRDC), School of Medicine, Iran University of Medical Sciences, Tehran, Iran , Tehran, Iran**Introduction & Objectives:**

The aim of this study is to examine the efficacy and safety of various regenerative medicine treatments, such as cell therapy, platelet-rich plasma (PRP), plasma-poor platelet (PPP), plasma-rich fibrin (PRF), mesenchymal stem cells, stromal vascular fraction (SVF), exosomes, adipose-derived stem cells (ADSC), and stem cell-conditioned media (SC-CM), for treating vitiligo.

**Materials & Methods:**

We conducted a thorough search of major databases such as PubMed, Scopus, and Web of Science, and selected 48 articles based on specific criteria. We used EndNote X8 and Google Sheets to review and extract data from the articles. After analyzing the studies, we categorized them accordingly.

**Results:**

This systematic review analyzed 48 articles involving 2,186 patients with vitiligo to assess the effectiveness of regenerative medicine treatments. Key findings revealed that methods such as autologous noncultured melanocyte-keratinocyte transplantation and platelet-rich plasma (PRP) injection exhibited significant repigmentation, particularly when combined with modalities like NB-UVB phototherapy and laser treatments. Notably, the autologous melanocyte-keratinocyte transplantation achieved over 50% repigmentation within 9 months, while PRP demonstrated an average repigmentation of 58.7%, especially effective with CO2 laser treatment. Hair follicle-derived cell transplantation also showed impressive response rates, achieving good to excellent results in up to 93.8% of patients. Side effects were noted in 21 of 28 studies, primarily involving pain, with no serious adverse events reported. The risk of bias assessment indicated that 37.21% of studies were low risk, while 48.84% had high risks overall. These findings suggest that while regenerative medicine holds promise for vitiligo treatment, further clinical trials are necessary to explore additional methods like stromal vascular fraction and exosomes.

**Conclusion:**

We have concluded that regenerative medicine plays an effective role in the treatment of vitiligo lesions. Furthermore, this treatment method is safe and does not cause serious complications. It can be used alone or in combination with other methods for treating vitiligo. To advance the treatment of vitiligo, we recommend conducting clinical trials on the unexplored branches of regenerative medicine.



**Abstract N°: 1230****Effectiveness and safety of the intense pulsed light (IPL) therapy in patients with solar lentigo: a prospective cohort comparative trial**

Elena Sukhanova<sup>1</sup>, Elena Snarskaia<sup>1</sup>, Elena Morozova<sup>1</sup>

<sup>1</sup>I.M. Sechenov First Moscow State Medical University, Moscow, Russian Federation

Effectiveness and safety of the intense pulsed light (IPL) therapy in patients with solar lentigo: a prospective cohort comparative trial

**Introduction & Objectives:** Solar lentigo is a macular hyperpigmented skin lesion that results from chronic ultraviolet radiation exposure. The spots are light brown to black in color and are located on exposed areas of the body, especially on the face, forearms and dorsum of the hands. The larger lesions can reach several centimeters in diameter.

Solar lentigines are common in the aging patient. For the age group over 60 years the incidence is as high as 90%. Solar lentigo has no oncogenic potential and does not require medical intervention but is only represent a cosmetic defect that can significantly reduce the quality of patients' life.

**Materials & Methods:** There are 35 patients diagnosed with solar lentigo, aged 31 to 79 years, who are undergoing IPL treatment. All patients were clinically examined using non-invasive diagnostic methods prior to the start of therapy (epiluminescence microscopy and 3D camera for skin analysis). 3D camera for skin analysis allows for accurate and rapid determination of concentration and distribution of main skin chromophores – melanin and hemoglobin in the damaged skin. Clinical improvement was assessed by control studies after every 3 sessions of phototherapy at 3–4-week intervals, and two cut-off filters (560 nm and 510 nm) were used sequentially in each session. The efficacy of IPL treatment was measured by the Global Aesthetic Improvement Scale.

**Results:** Significant decrease was reported in melanin and hemoglobin concentrations of treatment areas and reduction in surface area after the IPL treatment. A baseline of the melanin and hemoglobin of the skin concentrations found to influence the outcome – fewer phototherapy sessions are needed for patients with lower concentrations of the two parameters in the spots. On the basis of the GAIS, 27 of 35 patients (77.1%) showed complete or partial clearance of hyperpigmentation. None reported adverse effects such as post-inflammatory hyperpigmentation and persistent erythema.

**Conclusion:** This study showed that intense pulsed light therapy is a safe and effective treatment option for patients with solar lentigo. Further studies are needed to evaluate the long-term effects of treatment and detect the ideal key of IPL parameters, the number of times the procedures need to be repeated to achieve a good medical result and the optimal time interval between the procedures.





**Abstract N°: 1388**

### **Knowledge and attitudes towards vitiligo among dermatology patients**

Meryem Khallouki<sup>1</sup>, Bendaoud Layla<sup>1</sup>, Mohamed Houbayeli<sup>1</sup>, Mariem Aboudourib<sup>1</sup>, Said Amal<sup>1</sup>, Ouafa Hocar<sup>1</sup>

<sup>1</sup>Mohammed VI University Hospital of Marrakech , Department of Dermatology and Venereology, Marrakech

#### **Introduction & Objectives:**

Vitiligo is an acquired immune-mediated skin condition. Although vitiligo had no physical danger , it has a significant psychological impact affecting patients quality of life and reinforcing social stigmatization. The aim of our study is to evaluate the knowledge and attitudes of the individuals consulting the dermatology department regarding vitiligo , as these factors play a key role in shaping societal perceptions of the condition.

#### **Materials & Methods:**

We conducted a cross-sectional study (May–September 2024) among 150 dermatology outpatients over 18 years old, without vitiligo, and not cohabiting with affected individuals. Data were collected via a structured questionnaire, assessing knowledge and attitudes through dedicated scores, and analyzed using SPSS.

#### **Results:**

We carried out the study on 150 people consulting the dermatology department. The mean age was 43.03 years. Women represented 66% of the sample. The source of information about vitiligo was family and friends in 90.7% of participants. Knowledge of vitiligo was sufficient for 94% of participants: most respondents (84%) recognized that vitiligo has an impact on patients social life; 86% stated that vitiligo is not a contagious disease, and 82.7% considered vitiligo to be harmless. But there were just 45% of participants who agreed that there is a treatment for vitiligo, 48% who considered vitiligo a non-hereditary disease and 52% who said that vitiligo is associated with eating habits. An analysis of factors associated with greater knowledge of vitiligo showed that female gender was associated with sufficient knowledge of these condition (p-value of 0.02) .Healthcare professionals showed sufficient knowledge of vitiligo although they represented only 3.3% of the sample. Most participants (86.6%) showed a positive attitude, with 76.6% agreeing to employ a vitiligo patient, 82% agreeing to be served by a vitiligo patient, and 60% agreeing to shake hands with a vitiligo patient without fear of contamination. 49% of the sample did not agree to marry a vitiligo patient, and 17% were unsure of their choice. 86% said there was a lack of information and awareness about vitiligo, and analysis of the results showed a strong association between sufficient knowledge of vitiligo and the participants' positive attitude, with a statistically significant difference of  $p < 0.001$ .

#### **Discussion:**

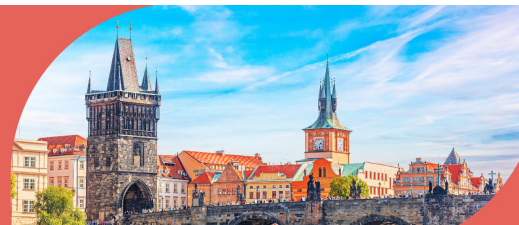
Although 94% of participants had sufficient knowledge of vitiligo, beliefs about the existence of a treatment, heredity and dietary associations testify to the persistence of misconceptions that may be related to a lack of information. A study by Fatani et al showed that 36% of participants believed that vitiligo is non-hereditary, 52% associated it with dietary habits and 57% believed that there is a treatment for vitiligo. A study by al Ghamdi et al showed that public misconceptions and negative attitudes towards vitiligo are widespread and affect the quality of life of vitiligo patients. Our results show that sufficient knowledge of vitiligo is associated with a positive attitude towards vitiligo, although vitiligo still constitutes a social barrier given that 49% of participants did not agree to marry a vitiligo patient, and 86% stated that vitiligo has an impact on patients' social lives.

#### **Conclusion:**

Emphasizing the importance of educational initiatives is crucial, particularly since most participants highlighted a lack of awareness, which could help to reduce the social stigma surrounding vitiligo.

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**Abstract N°: 1475****Оценка эффективности фторурацила Схемы терапии при стабильном несегментарном витилиго**Jahongir Narziyev<sup>1</sup><sup>1</sup>Farobiy 3A, Dermatomyology, Dermatomyology, Toshkent, Uzbekistan**Introduction & Objectives:**

Vitiligo is a chronic skin disease characterized by depigmentation due to melanocyte destruction. One of the promising therapeutic approaches is the use of fluorouracil—an antimetabolite with immunomodulatory and cytotoxic properties. This study aims to evaluate the effectiveness of various fluorouracil therapy regimens for stable non-segmental vitiligo.

Vitiligo affects approximately 1% of the population and is a disease with an unclear etiology, including autoimmune, genetic, and external factors. Fluorouracil is traditionally used in oncology, but its ability to induce repigmentation makes it a potential candidate for vitiligo treatment. The objective of this study is to compare the effectiveness of different fluorouracil therapy regimens in patients with stable non-segmental vitiligo.

**Materials & Methods:**

This study included 60 patients diagnosed with stable non-segmental vitiligo, who were divided into three groups of 20 individuals each:

Group 1: Intradermal administration of 5% fluorouracil.

Group 2: Fluorouracil application combined with microdermabrasion.

Group 3: Combined therapy with fluorouracil and narrowband UVB therapy (NB-UVB 311 nm).

Evaluation criteria included the affected area, degree of repigmentation (scored), patient satisfaction, and frequency of side effects. Assessments were conducted at weeks 4, 8, and 12 of therapy.

**Results:**

In Group 1, repigmentation was observed in 40% of patients, with an average reduction in the affected area of 15%.

In Group 2, the effect was more pronounced: repigmentation was observed in 55% of patients, with a reduction in the affected area of 25%.

In Group 3, the best results were achieved: repigmentation was observed in 75% of patients, with a reduction in the affected area of 40%.

The frequency of side effects (erythema, itching, burning) was moderate and did not exceed 20% in any group.

**Conclusion:**

Fluorouracil has potential effectiveness in the treatment of stable non-segmental vitiligo, especially in combination with microdermabrasion and NB-UVB. Further research is needed to optimize treatment regimens and minimize side effects.



**Abstract N°: 1497****Investigating melanogenesis-related microRNAs as disease biomarkers in vitiligo**Noha Tawfik\*<sup>1</sup><sup>1</sup>suez canal university, Dermatology, venereology and andrology, ismailia, Egypt**Introduction & Objectives:**

Vitiligo is considered a disabling disease that affects physical, social, psychological, and occupational aspects of an individual's quality of life. The search for non-invasive and reliable biomarkers for vitiligo's early diagnosis, prognosis, and treatment prediction is under intensive investigation. There is currently an emerging interest in employing miRNAs as biomarkers to predict vitiligo diagnosis and prognosis, inspired by the well-preserved nature of miRNAs in serum or plasma.

**Materials & Methods:**

In the current study, we assessed a panel of 20 melanogenesis pathway-related microRNAs (miRNAs) using quantitative real-time PCR technique in 85 non-segmental vitiligo (NSV) patients compared to 85 normal controls followed by function and pathway enrichment analysis for the miRNAs with significant results.

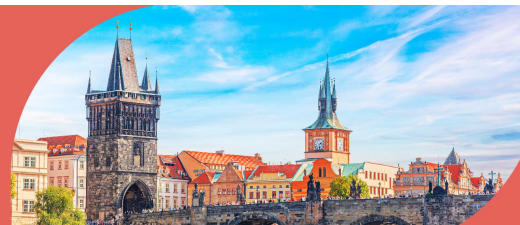
**Results:**

Twelve out of the 20 circulating miRNAs showed significantly higher expression levels in vitiligo patients relative to controls where miR-423 show the highest expression level followed by miR-182, miR-106a, miR-23b, miR-9, miR-124, miR-130a, miR-203a, miR-181, miR-152, and miR-320a. While six miRNAs (miR-224, miR-148a, miR-137, and miR-7, miR-148b, miR-145, miR-374b, and miR-196b) didn't show significant expression level. The analysis of the receiver operating curve indicated that miR-423, miR-106a, and miR-182 were outstanding biomarkers with the highest areas under the curve in vitiligo. This study is the first Egyptian study to investigate a panel of miRNAs expression profile in the plasma of patients with NSV.

**Conclusion:**

Our results suggest that specific circulating miRNAs signature might be implicated in vitiligo pathogenesis and could potentially be used as biomarkers in vitiligo.



**Abstract N°: 1660****Localized argyria: report of an unusual case with genital discolorations**Samuel Utz\*<sup>1</sup>, Severin Lächli<sup>1</sup><sup>1</sup>Institut für Dermatologie, Stadtspital Zürich Europaallee, Zürich, Switzerland**Introduction & Objectives:**

Localized argyria is a rare dermatological condition caused by a circumscribed deposition of silver particles in the skin or mucosa resulting from prolonged exposure to silver-containing substances, such as silver nitrate, colloidal silver, or silver sulfide. The initially achromatic silver particles accumulate in the dermis, where they oxidize and interact with proteins or other substances, forming a characteristic and permanent gray discoloration.

In this case report, we present a patient with localized argyria on the genital mucosa.

**Materials & Methods:**

A 77-year-old man presented himself to the dermatology clinic with two erythematous patches with central gray discoloration on the penis. He reported a sudden onset and a mild local feeling of irritation. He further noted having been diagnosed with a balanitis around 4 years ago by a general practitioner and since then ongoing daily usage of a disinfectant wound cream containing silver sulfadiazine which was prescribed at the time.

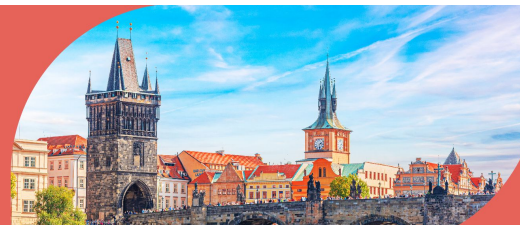
**Results:**

The clinical picture consisted of two sharply demarcated shiny erythematous patches in the coronal sulcus of the penile mucosa, both with a bluish-gray discoloration in their center. The foreskin and the remainder of the genital skin were otherwise inconspicuous with no sign of phimosis or irritation, respectively. A swab for bacteria and candida was negative. After a sequence of 4 weeks application of a topical corticosteroid, the erythematous border dissolved only leaving the gray discoloration. A biopsy was performed to rule out a melanocytic lesion and instead, with histological evidence of typical filamentous brownish deposits along the elastic fibers and black-brown pigment granules, the diagnosis of localized argyria was confirmed.

**Conclusion:**

This is an unusual case of localized argyria with discoloration of the genital mucosa presenting a challenging differential diagnosis. Localized argyria is an asymptomatic condition and diagnosed based on clinical history and picture, sometimes confirmed by histopathology. Management focuses on stopping silver exposure, since treatment options, such as laser therapy (e.g. Q-switched Nd:YAG) used to reduce discoloration, are limited with inconsistent results.



**Abstract N°: 1749****A novel humanized mouse model closely mimics human vitiligo**Aviad Keren<sup>1</sup>, Assaf Zeltzer<sup>1</sup>, Ralf Paus<sup>2</sup>, Amos Gilhar<sup>1</sup><sup>1</sup>Technion – Israel Institute of Technology, Haifa, Israel<sup>2</sup>University of Miami, Miami, United States**Introduction & Objectives:**

Vitiligo is a complex depigmentation disorder resulting from epidermal melanocyte apoptosis and premature senescence of the epidermal pigmentary unit, mainly driven by oxidative damage and CD8+ T cell-produced IFN- $\gamma$ . Current vitiligo mouse replicate this complexity insufficiently. To develop the first “humanized” mouse model that optimally replicates human vitiligo.

**Materials & Methods:**

Healthy human dark skin xenotransplants on SCID/beige mice were oxidatively stressed (topical catalase inhibitor plus H<sub>2</sub>O<sub>2</sub>-NaN<sub>3</sub>). Autologous PBMCs were pre-stimulated to induce a vitiligo-typical Th1 phenotype, while autologous melanocytes were cultured with menadione, MART1, gp100, and tyrosinase to enhance antigen presentation and mimic immune activation observed in vitiligo. Th1-skewed PBMCs and pre-treated melanocytes were co-cultured and injected intradermally into xenotransplants. Moreover, mice were intravenously treated with IgG4 from vitiligo patients and HSP70. Key vitiligo characteristics and the model's response to established vitiligo therapeutics were assessed.

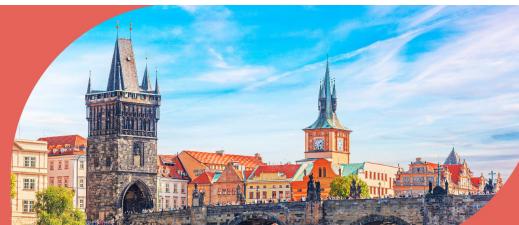
**Results:**

Vitiligo-like depigmented lesions developed in 80% of xenotransplants. Quantitative immunohistomorphometry (qIHC) demonstrated depletion of epidermal melanocyte numbers and markers (Melan-A, gp100, c-KIT) and decreased melanin content using Masson Fontana, elevation of keratinocyte-derived key cytokines (IFN- $\gamma$ /Krt10, IFN- $\alpha$ /Krt10, IL-15/Krt10, IL-18/Krt10), enhanced GP100/NKG2D/MICA and CD8/NKG2D/gp100 interactions, along with elevated CD11c+ and pDC cell numbers. FACS analysis further demonstrated increased co-expression of c-KIT, MELAN-A, MICA, and CD83 compared to the control group. The qIHC analysis revealed a significantly increased number of epidermal TRM cells (CD8, CD103, and CD49a) in vitiligo xenotransplants compared to control xenotransplants treated with activated CD8/NKG2D. Additionally, there was no significant decrease in repigmented vitiligo xenotransplants following treatment with Opzelura. FACS analysis confirmed the presence of epidermal TRM cells (CD8/CD69+CD103+ and CD49a) in vitiligo xenotransplants with increased expression of TNF $\alpha$  and IFN- $\gamma$  in contrast to the control groups. qIHC analysis revealed that lesional keratinocytes and melanocytes exhibited elevated senescence markers (P16INK4A, SIRT1, and p-S6), alongside reduced antioxidant and mitochondrial markers (e.g., NRF2, MTCO1, Porin/VDAC, PGC1 $\alpha$ ,) preceding depigmentation. Tacrolimus and Opzelura (70%) effectively promoted repigmentation of 30 respectively 70% of experimentally induced vitiligo lesions.\*\*

**Conclusion:**

This new “humanized” vitiligo model optimally replicates all key characteristics of human vitiligo. In this preclinical model, vitiligo pathogenesis can be interrogated and candidate vitiligo therapeutics tested under clinically relevant conditions *in vivo*.



**Abstract N°: 1819****Lichen Planus Pigmentosus: Hypopigmented Macules as a Genuine Feature and Concurrent Frontal Fibrosing Alopecia – a Case Series**Abdulmajeed Alajlan<sup>1</sup>, Najlaa Alsubeeh\*<sup>2</sup>, Bushra Alraddadi<sup>3</sup><sup>1</sup>King Saud University Medical City, King Saud University, Riyadh , Saudi Arabia<sup>2</sup>Ministry of Health , Riyadh , Saudi Arabia<sup>3</sup>Ohud Hospital, Ministry of Health, Dermatology , Madina, Saudi Arabia**Introduction & Objectives:**

Lichen planus pigmentosus (LPP) is a chronic inflammatory variant of lichen planus (LP), primarily presenting as brown to gray macules on sun-exposed areas. While post-inflammatory hypopigmentation is a recognized consequence of LP, primary hypopigmented macules as a clinical feature of LPP remain underreported. Additionally, the association between LPP and frontal fibrosing alopecia (FFA) is increasingly observed but not well characterized. This study seeks to (1) confirm hypopigmented macules as a genuine feature of LPP through histopathologic analysis, distinguishing them from conditions like Post Inflammatory Hypopigmentation (2) explore the concurrent occurrence of LPP and FFA, and (3) highlight the limited efficacy of current treatment modalities.

**Materials & Methods:**

A case series of four Saudi female patients with LPP was analyzed. Three of these cases also exhibited FFA. Biopsies were obtained from hypopigmented lesions in three cases to confirm their pathological correlation with LPP.

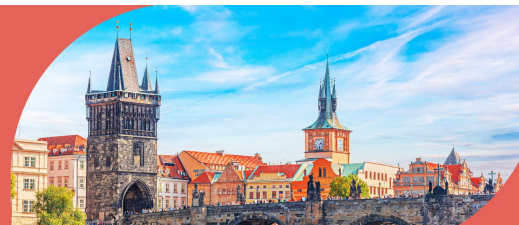
**Results:**

Three of the fourth patients presented with slate-gray hyperpigmented patches and scattered hypopigmented macules on the face, neck, and trunk. Three of these four patients had concurrent FFA, further adding to the rarity of the cases. The histopathology of the hypopigmented lesions from 3 patients confirmed LPP with features including epidermal atrophy, focal interface lymphocytic infiltration, necrotic keratinocytes, and melanophages, distinguishing them from post-inflammatory hypopigmentation. The fourth patient, who did not exhibit hypopigmentation, had LPP with concurrent FFA. Treatments included systemic agents such as hydroxychloroquine, isotretinoin, corticosteroids, cyclosporine, tranexamic acid, and laser therapy (Thulium, Erbium, and CO<sub>2</sub>). However, the responses to these treatments were a cause for concern, as they were generally poor, with only stabilization of disease progression in some cases.

**Conclusion:**

This case series supports the hypothesis that hypopigmented macules are a genuine clinical feature of LPP rather than post-inflammatory sequelae. Additionally, the frequent coexistence of LPP and FFA in this study suggests a potential shared pathophysiological mechanism. Current therapies exhibit limited efficacy, underscoring the need for further research into optimized treatment approaches. Recognition of hypopigmented macules as a presentation of LPP is crucial for accurate diagnosis and management.



**Abstract N°: 1837****A puzzling diagnosis of Progressive Macular Hypomelanosis**

Marian-Aurelian Closca<sup>1</sup>, Nedelcu Roxana<sup>2</sup>, Andrei Razvan<sup>3</sup>, Brinzea Alice<sup>2</sup>, Dobre Alexandra<sup>2, 4</sup>, Ion Daniela<sup>2</sup>, Turcu Gabriela<sup>1, 5</sup>

<sup>1</sup>Colentina Clinical Hospital, Dermatovenereology, Bucharest, Romania

<sup>2</sup>Carol Davila University of Medicine and Pharmacy, Pathophysiology, Bucharest, Romania

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<sup>4</sup>Elias Emergency Teaching Hospital, Dermato-venereology, bucharest, Romania

<sup>5</sup>Carol Davila University of Medicine and Pharmacy, Dermatovenereology, Bucharest, Romania

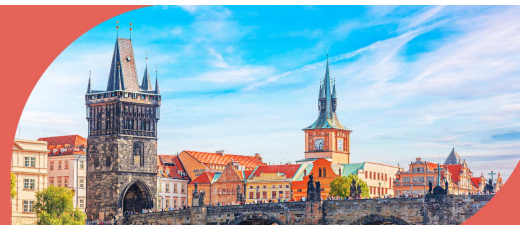
**Introduction & Objectives:** Progressive macular hypomelanosis (PMH) is an acquired pigmentation disorder that is often misdiagnosed due to its similarities to more common causes of eruptive macular hypopigmentation. Even though the condition has a benign course, its natural progression over years or decades and the still incompletely elucidated pathogenesis are often associated with significant concern and dissatisfaction from patients.

**Materials & Methods:** A 33-year-old man was examined for an asymptomatic, well-defined hypopigmented macular eruption on the trunk and upper arms, which had been progressing for over 4 years. Upon clinical examination, facial acne, abdominal folliculitis, and chronic hand eczema were also observed. Topical and systemic antifungals, topical steroids, and emollients were not effective. The Wood's light test revealed fluorescence in the hair follicles. Histopathological and immunohistochemical examinations highlighted a normal number of melanocytes but a reduction in melanin in the affected skin. We performed blood tests that ruled out infections, nutritional deficiencies, or systemic inflammation.

**Results:** The differential diagnoses considered during the 4 years of progression included: tinea (versicolor), post-inflammatory hypopigmentation, cutaneous lymphoma, morphea, cutaneous lupus erythematosus, pityriasis alba, progressive macular hypomelanosis, syphilis, sarcoidosis, and guttate hypomelanosis. The diagnosis of PMH was established by correlating medical history, previous therapeutic results, and the findings of the above-mentioned investigations. Although the pathogenesis is not well understood, molecular biology techniques indicate that *Cutibacterium acnes*, phylogenetic type III, plays a role in producing the factor that induces depigmentation. As in our case, PMH is frequently associated with acne. There is limited knowledge on the optimal treatment for PMH. We currently recommend topical benzoyl peroxide 5% and clindamycin 1% to reduce *C. acnes* colonization, and narrowband UVB phototherapy as a promoter of repigmentation.

**Conclusion:** Through our case of PMH in a young patient, we highlighted some of the challenges that dermatologists and patients can face when managing atypical acquired eruptive macular hypopigmentation, including: a varying number of medical visits until a confirmatory diagnosis is obtained; significant resources that may be needed for skin examination (Wood's light, skin biopsy, histopathology, immunohistochemistry, special stains, dermoscopy); incomplete mechanistic elucidation and inconsistent large studies regarding therapy and follow-up of PMH; and the management of the psychological and social impact of a chronic and progressive condition, sometimes associated with delayed recognition.



**Abstract N°: 1920****Is there any elevated cardiovascular risk in patients with vitiligo?**

Parvaneh Hatami<sup>1</sup>, Zeinab Aryanian<sup>1</sup>, Mohamadreza Eftekhari<sup>1</sup>

<sup>1</sup>TUMS, Tehran, Iran

**Introduction & Objectives:**

Owing to its inflammatory nature, vitiligo might be considered to enhance the risk of cardiocerebrovascular accidents.

In this study, we aimed to evaluate echocardiographic and electrocardiographic features among patients with vitiligo

**Materials & Methods:**

In a cross-sectional study, 28 patients who were clinically diagnosed with vitiligo and 66 age- and sex- matched healthy controls were assessed. Their clinical and laboratory data as well as cardiac evaluation were collected and compared.

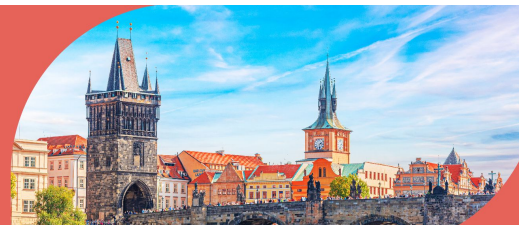
**Results:**

PAP (pulmonary artery pressure)\*\* and PVP (Pressure gradient across the pulmonary valve) were significantly lower in patients with vitiligo compared to normal controls (P values: 0.000 and 0.006, respectively). Moreover, left atrial volume, PWT (Pulmonary artery acceleration time), LVEDV (left ventricular end-diastolic volume), LVESD (left ventricular end-systolic diameter), LVEDVi, AOMG (aortic root mean pressure gradient), Annulus of aorta, STJ (sinotubular junction) and sinus of Valsalva amounts were significantly higher in patients versus normal controls (P values: 0.008, 0.023, 0.000, 0.005, 0.001, 0.015, 0.004, 0.000 and 0.009, respectively).

**Conclusion:**

This study suggests that individuals with vitiligo might have a heightened risk of developing cardiovascular diseases. This finding may provide valuable insights for clinicians regarding patient monitoring and preventive care strategies.



**Abstract N°: 1953****The association between specific single nucleotide polymorphisms (SNPs) of BsmI and FokI Vitamin D receptor (VDR) gene in vitiligo female patients**Hristina Kocic<sup>1</sup>, Tatjana Jevtovic-Stoimenov<sup>1</sup>, Uwe Wollina<sup>1</sup>, Torello M. Lotti<sup>1</sup><sup>1</sup>Medical Faculty University Clinical Center Nis, Clinic for Dermatology, Nis, Serbia

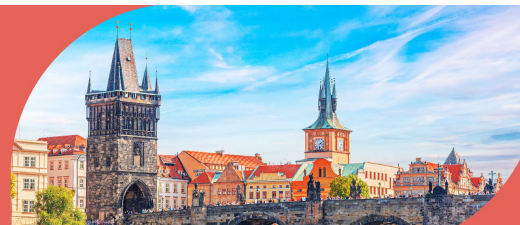
**Introduction & Objectives:** Vitiligo is a complex autoimmune disorder characterized by the progressive loss of melanocytes, resulting in depigmented skin patches. Vitamin D plays an important role in melanocyte function and skin pigmentation. Its effects are largely mediated through the Vitamin D receptor (VDR), which is expressed in various skin cells, including melanocytes. VDR is a nuclear, ligand-dependent transcription factor which is essential for the biological effects of Vitamin D, including regulation of immune responses and skin pigmentation, via inducing expression of tyrosinase in melanocytes, thereby enhancing melanin production. Recent studies have highlighted the potential role of Vitamin D and VDR in the pathogenesis of vitiligo.

**Materials & Methods:** The present study investigated the association between specific single nucleotide polymorphisms (SNPs) of the VDR gene, using polymerase chain reaction restriction fragment length polymorphism (PCR-RFLP) method for BsmI (rs1544410) and FokI (rs2228570), compared to i TNF- $\alpha$ -308, in 9 vitiligo female patients.

**Results:** The results revealed a high prevalence of the Bb heterozygotes (55,5%) and 22,2% of bb homozygotes for the BsmI. The Ff genotype (55,5%) for the FokI SNP, suggesting a significant involvement of these variants in the development of vitiligo. Interestingly, these SNPs were found to be more prevalent than the SNP for TNF- $\alpha$  -308, (11,1%), associated with increased TNF- $\alpha$  production, often linked to other autoimmune disorders. The altered VDR expression and function due to the identified SNPs could contribute to the autoimmune mechanisms driving vitiligo. The BsmI polymorphism is located within the 3' untranslated region of the VDR gene and can result in individuals carrying the Bb or bb genotypes reduced VDR expression and function. The FokI gene with two alleles, F (normal) and f (variant), can be linked to lower VDR expression and lower VDR synthesis and weakened response to Vitamin D. This polymorphism affects the binding affinity of Vitamin D to its receptor and, in some cases, may reduce the efficiency of the immune-modulating functions of Vitamin D.

**Conclusion:** Based on these findings, therapeutic interventions targeting Vitamin D supplementation or VDR modulation could be considered as potential strategies to manage vitiligo, particularly in patients with these specific SNPs. A deficiency in Vitamin D action may impair the melanogenesis process and an increased risk of hypopigmentation or even skin damage from UV exposure, what may be particularly relevant for protecting the skin from UV damage by increasing melanin synthesis as a natural sunscreen. Personalized treatment approaches involving Vitamin D analogs or VDR activators may help in restoring immune balance and preventing disease progression in genetically predisposed individuals.



**Abstract N°: 1967****Under the Light of Ribociclib: The Secrets of Vitiligo-Like Lesions**

Eda Nur Demir<sup>1</sup>, Ibrahim Akcay<sup>\*1</sup>, Nilay Duman<sup>1, 2</sup>

<sup>1</sup>Ege University Faculty of Medicine , Department of Dermatology. and Venereology, İzmir, Türkiye

<sup>2</sup>Ege University Institute of Health Sciences, Department of Basic Oncology, İzmir, Türkiye

**Introduction & Objectives:**

Vitiligo-like hypopigmentation associated with CDK4/6 inhibitors is a rare but significant side effect that may require permanent discontinuation of the drug, although it can also be reversible. Ribociclib is considered the most likely culprit among these agents. This presentation will discuss a case of widespread vitiligo-like hypopigmentation that developed during treatment with ribociclib and letrozole for breast cancer.

**Materials & Methods:**

The patient referred to us by the medical oncology department will be thoroughly presented in accordance with the clinical findings, treatment process, and factors that should be considered in their management.

**Results:**

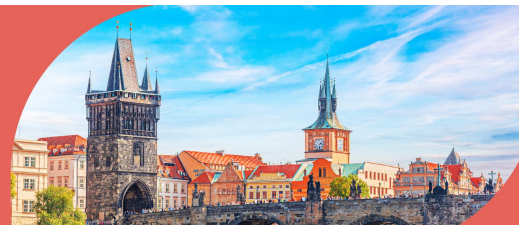
The patient is a 61-year-old woman diagnosed with oligometastatic HR (+) invasive ductal carcinoma in February 2023, with a single bone lesion at T11. Her tumor profile includes ER (+), PR (+), HER2 (-), and a Ki67 index of 15%. The patient has no known history of allergies or autoimmune diseases, nor does she have a history of smoking or alcohol use. After breast surgery, ribociclib and letrozole were initiated by the medical oncology department. Starting from the 12th month of ribociclib and letrozole treatment, the patient developed vitiligo-like hypopigmented macular lesions in areas exposed to light, including the forehead, perioral region, bilateral malar areas, neck, and bilateral upper extremities. The skin under the chin, which had not been exposed to light, remained unaffected. No hypopigmented lesions were noted on the trunk or lower extremities. Due to the different color tones on her face, the patient had been diagnosed with melasma at an external center before coming to us.

Based on the history, clinical examination, dermoscopic findings, and Wood's lamp examination, a diagnosis of vitiligo-like hypopigmentation due to ribociclib was made. Topical treatment with corticosteroids, emollients, and sunscreens containing antioxidants was initiated. However, due to the patient's significant complaints regarding these lesions, the ribociclib treatment was discontinued by the medical oncology department.

**Conclusion:**

This case emphasizes the importance of correctly identifying widespread vitiligo-like hypopigmentation in a breast cancer patient undergoing ribociclib treatment due to hormone receptor positivity, and differentiating it from classic vitiligo and conditions that progress with hyperpigmented macules, such as melasma. During the treatment process,. The literature suggests that with appropriate treatment, lesion progression can be halted, and mild improvement may occur. Therefore, it is important to avoid the use of permanent depigmenting agents in such cases.



**Abstract N°: 2002****A melasma treatment method that utilizes a new mechanism to break down existing melasma using patches and solutions.**

Eun Ju Hwang<sup>1</sup>, Ki-Young Park<sup>2</sup>, Jieun Kim<sup>2</sup>, Chulhak Yang<sup>2</sup>

<sup>1</sup>the3.0coltd, Department of dermatology, Goyang-si/Gyeonggi-do

<sup>2</sup>the3.0coltd, Goyang-si/Gyeonggi-do

**Introduction & Objectives:**

**Background:** Melasma is an acquired, chronic pigmentary disorder predominantly affecting women. It may significantly affect quality of life and self-esteem due to its disfiguring appearance. Multiple treatments for melasma are available, with mixed results.

**Objective:** Hydroquinone, topical vitamin A, and steroids offer antimelanogenesis, mild peeling, and anti-inflammatory benefits, respectively, leading to some improvement in melasma. However, this study aims to investigate an alternative mechanism that focuses on breaking down existing melanin rather than inhibiting its production. We aim to evaluate the efficacy and side effects of this new treatment.

**Materials & Methods:**

To determine which substance most effectively and rapidly breaks down existing melanin, we reacted melanin with various substances and measured the remaining melanin levels. To assess the cellular safety of these substances, we also conducted an MTT assay. Based on the selected substances, Gobright™ solution was formulated, and to enhance its skin penetration, Gobright™ patch was applied for 8 hours. A clinical trial was then conducted on 22 patients with melasma using this combined treatment approach.

**Results:**

The effect of melanin reduction\*\* is 20% better in the WH-4-22 100ug/ml alone treatment group than the arbutin 150ug/ml treatment group. In a clinical study involving 22 patients with melasma under the eyes, even long-standing, dark melasma showed improvement, with a reduction of 17.67% after 3 days, 18.21% after 1 week, 31.03% after 4 weeks, and 75% after 8 weeks of use.

**Conclusion:**

Melasma forms through a process in which melanin pigment aggregates with various proteins and inorganic metals such as iron, leading to the formation of complex, insoluble compounds. Traditional treatments have primarily focused on inhibiting melanin production. However, for long-standing melasma, removal through peeling methods often results in frequent recurrence. In contrast, a new mechanism that breaks down existing melanin offers faster improvement and reduces recurrence, making it a low-risk and effective treatment. This approach presents a promising alternative, particularly for individuals who have difficulty visiting clinics or obtaining prescription medications.



**Abstract N°: 2018****A Case of Confluent and Reticulated Papillomatosis Emerging During the Healing Phase of DRESS Syndrome Successfully Treated with Azithromycin**

Erkin Berkay Yilmaz<sup>1</sup>, Şeyma Nur Erol<sup>1</sup>, Selda Pelin Karta<sup>1</sup>, Unsal Han<sup>2</sup>

<sup>1</sup>Etlik City Hospital, Dermatology and Venereology, Ankara, Türkiye

<sup>2</sup>Etlik City Hospital, Pathology, Ankara, Türkiye

**Introduction & Objectives:**

Confluent and reticulated papillomatosis (CRP) is a rare dermatosis typically affecting young adults, presenting with confluent hyperkeratotic papules surrounded by reticulated hyperpigmented plaques, most commonly localized to the neck, axilla, groin, and trunk. The exact pathophysiology of CRP remains unknown, though several factors are suspected to contribute, including fungal and bacterial infections, abnormal keratinocyte differentiation, immune dysregulation, UV exposure, and systemic diseases such as amyloidosis. Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) is a severe, T cell-mediated adverse drug reaction characterized by an extensive skin rash with visceral organ involvement, lymphadenopathy, eosinophilia, and atypical lymphocytosis. The pathogenesis of DRESS is not fully understood, but two main accepted mechanisms are drug-specific immune responses and human herpesvirus (HHV) reactivation. Immune dysregulation is considered a key driver of the signs and symptoms observed in DRESS syndrome. Here, we report a case of a 42-year-old Turkish male patient who developed CRP while hospitalized for DRESS syndrome, during the stabilized phase of the disease with a significant response to azithromycin treatment.

**Materials & Methods:**

Medical history and records of patient were acquired a literature investigation were performed using the keywords "Confluent and reticulated papillomatosis", "DRESS syndrome", "hyperpigmentation".

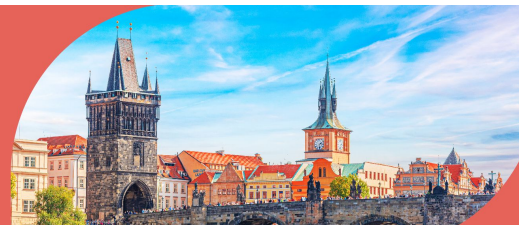
**Results:**

A 42-year-old Turkish male patient who developed CRP while hospitalized for DRESS syndrome, during the stabilized phase of the disease. Diagnosis of CRP was confirmed, and other dermatoses were excluded through skin biopsy, blood work, and microbiological tests. Biopsy specimens of the patient showed a hyperkeratotic stratum corneum, irregular acanthotic epidermis, and interface vacuolar degeneration, implying an interface dermatitis morphology; melanophages and lymphocytic perivascular inflammation were observed in the papillary and superficial dermis. No growth was observed in bacterial and fungal cultures, and KOH examination was negative. The patient was discharged with an oral corticosteroid regimen for the long-lasting DRESS syndrome treatment, and oral azithromycin, 500 mg three times a week for 3 weeks, was started. The patient was followed up in the outpatient clinic weekly. Lesions of CRP were significantly cleared at the second and third weeks, and no recurrences of DRESS syndrome or adverse drug reaction were observed.

**Conclusion:**

To our knowledge, no other case of CRP associated with DRESS syndrome has been reported. This suggests that immune dysregulation in DRESS may be a significant factor in the development of CRP in this case, highlighting the role of immune mechanisms in CRP pathogenesis. Response to azithromycin treatment, despite the lack of response to corticosteroids for DRESS, supports the hypothesis of an infectious etiology.



**Abstract N°: 2092****Eruptive lentiginosis in resolving psoriatic plaques**

Jelena Peric<sup>\*1, 2</sup>, Neda Delic<sup>1</sup>, Jelena Stojkovic-Filipovic<sup>1, 2</sup>, Martina Bosic<sup>3</sup>, Djurdjina Petrovic<sup>3</sup>, Dusan Skiljevic<sup>1, 2</sup>

<sup>1</sup>University Clinical Center of Serbia, Clinic of Dermatology and Venereology, Belgrade, Serbia

<sup>2</sup>University of Belgrade Faculty of Medicine, Department of Dermatology and Venereology, Belgrade, Serbia

<sup>3</sup>University of Belgrade Faculty of Medicine, Institute of Pathology "Dr Djordje Joannovic", Belgrade, Serbia

**Introduction & Objectives:**

The appearance of lentigines following psoriasis treatment was first described in the form of PUVA lentigo. However, eruptive lentigines confined to resolving psoriatic plaques (ELRP) can appear upon treatment of psoriasis with topical corticosteroids or calcipotriol, as well as systemic agents, such as methotrexate or apremilast. Recently, there has been an increasing number of reported ELRP cases associated with biological therapy of psoriasis.

**Materials & Methods:**

Here we describe a 38-year-old male patient of Fitzpatrick skin type III who developed multiple hyperpigmented lentiginous macules confined to resolved psoriatic plaques following treatment with ustekinumab. The patient had a 15-year history of psoriasis, initially treated with short courses of methotrexate and photochemotherapy, as well as adalimumab, during which he denied the appearance of hyperpigmented speckles. He was otherwise healthy and denied using other medications or excessive sun exposure.

**Results:**

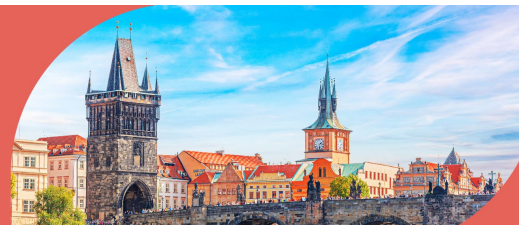
Clinical examination revealed disseminated oval hyperpigmented patches located predominantly on the trunk, corresponding to postinflammatory hyperpigmentations from resolved psoriatic plaques. Superposed on the hyperpigmented patches were numerous scattered well demarcated more intensely pigmented lentiginous macules. Dermatoscopy revealed multiple foci of structureless or reticular pigmentation consistent with lentigines, on a generally hyperpigmented background. Histopathological analysis of a lesional biopsy was compatible with lentigo. Other than sun protection, no specific treatment was initiated for the lentigines, and the treatment with ustekinumab was continued. The lesions remained stable over 12 months of follow-up.

**Conclusion:**

It is known that certain proinflammatory cytokines have an inhibitory effect on melanocyte growth and tyrosinase activity. Therefore, the suppression of psoriasis-related cytokines with melanocyte inhibitory effects could lead to a pronounced boost in pigment production, resulting in ELRP. Accordingly, this phenomenon is typically associated with the rapid resolution of initially severe psoriatic lesions, reflecting strong therapy-induced cytokine inhibition. Given that ELRPs have been linked to most local and systemic psoriasis treatments, they likely represent a phenomenon innate to psoriasis, rather than a side effect of specific therapy.

Our report aims to inform clinicians about this rare and benign phenomenon, whose pathophysiology remains insufficiently studied. Further investigation into ELRP pathogenesis could provide deeper insights into the role of pro-inflammatory cytokines and their modulations on melanogenesis.



**Abstract N°: 2118****optimizing outcomes in skin of color: using low fluence q-switched nd:yag laser to prevent post inflammatory hyperpigmentation before ablative procedures in acne scar revision**Samkit Shah<sup>1</sup><sup>1</sup>Vedantaa Institute Of Medical Sciences,Dahanu, Sasvand, India**Introduction & Objectives:**

Post-inflammatory hyperpigmentation (PIH) that develops after cosmetic procedures, is of a significant concern & using Q-Switched Nd:Yag laser with low fluence before any treatment known to induce PIH may help in its prevention.

To evaluate the safety and effectiveness of low-fluence Q-Switched Nd:Yag laser in preventing and treating PIH, and to assess its impact on the incidence of PIH before ablative laser treatments.

**Materials & Methods:**

This prospective interventional study included twenty patients over 18 years old with skin types 4-6, each presenting with varying histories of PIH and scheduled for ablative CO<sub>2</sub> laser treatment for acne scars. Each patient underwent a single pass of fractional Q-Switched Nd:Yag laser at 1064 nm with a fluence of 1 J/cm<sup>2</sup> and a spot size of 8×8 mm on the treatment areas, followed by ablative CO<sub>2</sub> laser therapy. Outcomes were assessed based on clinical improvement in pigmentation using the PIH Severity Scale and the Patient Global Assessment Scale.

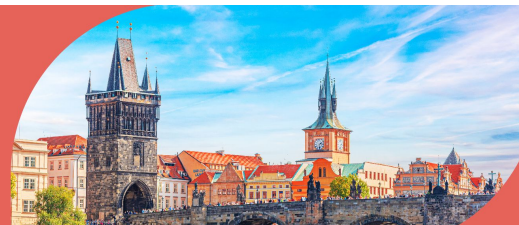
**Results:**

The study enrolled 20 subjects, including 13 females and 7 males, aged 18 to 50 years, with skin types 4-6. The treatment showed varying degrees of success, with the mean baseline PIH score decreasing from 11.25 to 3, representing a 73.02% improvement. The Patient Global Assessment Scale indicated improvements ranging from 50% to 100%.

**Conclusion:**

In conclusion, the application of low-fluence Q-Switched Nd:Yag laser prior to ablative lasers shows promising results in controlling PIH and in turn helps in reducing the appearance of scars by reducing the pigmentary alterations.



**Abstract N°: 2169****Understanding Pregnancy's Pigmentary Puzzle: The Role of Demarcation Lines**Mythili Ramamurthy Srinivasan<sup>\*1</sup>, Farishta Khan<sup>2</sup>, Zhenghao Wang<sup>2</sup>, Anila Kapadia<sup>2</sup><sup>1</sup>George Eliot Hospital, General Internal Medicine, Nuneaton, United Kingdom<sup>2</sup>Norfolk and Norwich University Hospital, Dermatology, Norwich, United Kingdom**Introduction & Objectives:**

Pigmentary Demarcation Lines (PDL) are natural, distinct borders between areas of differing skin pigmentation that may become more visible during pregnancy due to hormonal changes affecting melanin distribution. Recent classification of PDL includes eight types (A-H) and is commonly linked to inheritance and cutaneous mosaicism. Accurately distinguishing PDLs from other pregnancy-associated pigmentation, such as melasma or linea nigra, is crucial for a precise diagnosis and avoiding unnecessary invasive investigations. This is especially important in patients with skin of colour where cosmetic concerns are more pronounced and more prevalent.

This case report seeks to increase awareness of self-limiting condition for its accurate diagnosis, prevent unnecessary investigations and treatments, and thereby contribute to safe ongoing care of patients.

**Materials & Methods:**

We present a case involving a dermatologist with skin of colour who experienced similar pigmentary changes, likely attributable to PDL.

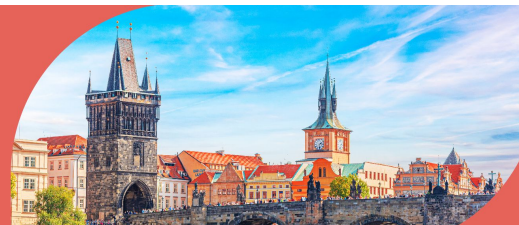
**Results:**

A 41-year-old primigravida of South Asian heritage developed asymptomatic well-demarcated pigmentation on the posterior aspect of lower limbs bilaterally during her second trimester. Her medical history included hay fever and her regular medication only consisted of over the counter multivitamins and folic acid. These symmetrical linear changes had lighter skin medially, transitioning to darker pigmentation laterally, with no pigmentary changes on the anterior aspect. The obstetric team initially suspected this was an underlying deep vein thrombosis (DVT). However, the patient, a dermatologist by profession, was certain of a clinical diagnosis of PDL and therefore further investigations were not pursued. Where the pigmentation gradually faded over two years, it is likely that these demarcated lines are consistent with type B PDL, which often develops in the third trimester of pregnancy and regresses spontaneously post-delivery.

**Conclusion:**

This case report emphasises the importance of recognizing PDL as a key differential for pigmentary changes in pregnancy, characterized by abrupt, well-demarcated lines, typically on the lower limbs. Prompt recognition of this self-limiting condition prevents unnecessary investigations and treatments. Counselling patients on the benign course of these changes is recommended to alleviate patient anxiety and address psychosocial concerns, as well as cosmetic concerns which are more notable in skin of colour patients.



**Abstract N°: 2223****Expression of the aryl hydrocarbon receptor (AhR) in facial melasma skin compared to healthy perilesional skin.**Carolina Nunhez Da Silva<sup>1</sup>, Tony Grassi<sup>1</sup>, Helio Miot<sup>1</sup>, Ana Cláudia Cavalcante Espósito Lemos<sup>\*1</sup><sup>1</sup>Faculdade de Medicina de Botucatu, Unesp, Botucatu, Brazil**Introduction & Objectives:**

Melasma is an acquired hypermelanosis that primarily affects women with phototypes III–V, especially in intertropical regions. Recent Google Trends data reveal a 54.4% global increase in melasma-related searches, correlating with national carbon dioxide emissions and hinting at environmental contributions. The aryl hydrocarbon receptor (AhR), present in numerous cell types, translocates to the nucleus when activated and regulates cell proliferation, differentiation, apoptosis, inflammation, and pigmentation. AhR is activated by pollutants—including polychlorinated biphenyls, dioxins, and polycyclic aromatic hydrocarbons (PAHs)—as well as by endogenous metabolites generated by ultraviolet radiation (UVR). In melanocytes, it influences tyrosinase expression, linking environmental factors to melanogenesis. We investigated AhR expression in melasma compared to adjacent healthy skin in 20 women with facial melasma.

**Materials & Methods:**

Each participant underwent two biopsies (lesional and non-lesional), totaling 40 specimens. After fixation and paraffin embedding, sections were stained with hematoxylin and eosin (H&E) and processed for immunohistochemical detection of Ki67 (to assess proliferation) and AhR (to evaluate receptor localization and activation). The main endpoint was the total number of AhR-labeled nuclei in the epidermis (400×) per field, quantified in a blinded manner. Staining in pilosebaceous units was also examined for nuclear and cytoplasmic positivity. Viable epidermal thickness was measured in three interfollicular regions, while Ki67 immunostaining provided a proliferation index (HSCORE). Statistical comparisons used a linear mixed-effects model with  $p < 0.05$  as the significance threshold, and sample size was calculated to detect a difference in AhR expression  $> 10\%$  ( $\alpha = 0.05$ ,  $\beta = 0.2$ ).

**Results:**

Melasma epidermis exhibited significantly higher nuclear AhR labeling versus healthy skin (1.3 vs. 1.1 nuclei/field;  $p = 0.03$ ), without cytoplasmic staining in the epidermis. In contrast, pilosebaceous units showed both nuclear and cytoplasmic AhR positivity more frequently in melasma (70% vs. 30%;  $p = 0.03$ ). Furthermore, melasma lesions had reduced epidermal thickness (187 vs. 207  $\mu\text{m}$ ;  $p < 0.01$ ) yet showed elevated proliferative activity (HSCORE 36 vs. 27;  $p = 0.02$ ). No correlation emerged among proliferation index, epidermal thickness, or AhR expression ( $p > 0.3$ ).

**Conclusion:**

These findings underscore the relevance of environmental factors—particularly pollution—in the pathogenesis of melasma, potentially accounting for its higher incidence in urban settings. UVR also induces the high-affinity AhR ligand formylindole-(3,2-b)-carbazole (FICZ), highlighting a synergistic effect between UV exposure and pollutants in driving hyperpigmentation. In conclusion, our study demonstrates enhanced AhR activity in the epidermis and pilosebaceous units of melasma skin, reinforcing the importance of considering both UV and pollutant exposure when addressing melasma.



**Abstract N°: 2229****eruptive lentiginosis in a 28 year old women**

Inas Chikhaoui<sup>1</sup>, Sara Nejjar<sup>1</sup>, Ghita Basri<sup>1</sup>, Khalqui Slamti<sup>1</sup>, Madiha El Jazouly<sup>1</sup>, Soumia Chiheb<sup>1</sup>

<sup>1</sup>Cheikh Khalifa Bin Zayed Al Nahyan Hospital, Casablanca

**Introduction & Objectives:**

Eruptive lentiginosis is a rare dermatological condition characterized by the sudden appearance of multiple lentigines without prior sun exposure or familial history. We present the case of a 28-year-old woman with phototype III skin who developed a progressive facial eruption of lentigines, raising diagnostic and therapeutic challenges.

**Materials & Methods:**

A 28-year-old woman with no significant medical history, including no digestive disorders or prior skin conditions, presented with a progressive onset of facial lentigines over six months. Clinical examination revealed multiple, well-defined, brown macules distributed symmetrically across her face. Dermoscopy confirmed the lentiginous nature of the lesions. No systemic symptoms or family history of similar conditions were reported. Laboratory tests, including hormonal and metabolic panels, were performed to rule out associated systemic conditions.

**Results:**

Eruptive lentiginosis is a diagnosis of exclusion, often requiring differentiation from other pigmentation disorders such as Peutz-Jeghers syndrome, LEOPARD syndrome, or drug-induced hyperpigmentation. Similar cases in the literature describe young adults presenting with sudden-onset lentigines without systemic involvement. For instance, a 2020 case report highlighted a 25-year-old woman with eruptive lentiginosis confined to the face, with no associated systemic abnormalities, similar to our patient. Another study in 2018 reported a 30-year-old man with generalized eruptive lentiginosis, emphasizing the need to rule out endocrine or genetic syndromes.

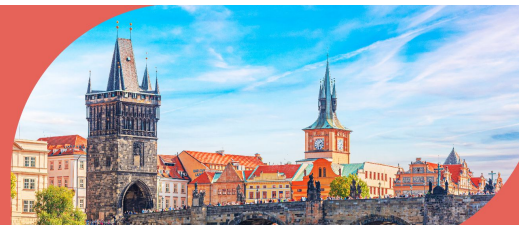
The pathogenesis of eruptive lentiginosis remains unclear, but it may involve genetic or environmental triggers affecting melanocyte activity. Some theories suggest a role of hormonal changes or inflammatory processes, though no definitive evidence exists.

The management of eruptive lentiginosis involves a step-by-step approach: First, a thorough diagnostic workup is essential, including clinical and dermoscopic examination, laboratory tests to exclude systemic associations, and histopathological examination if necessary. Second, regular monitoring is recommended to detect any late-onset systemic manifestations. Finally, treatment focuses on cosmetic interventions, such as laser therapy or topical depigmenting agents, for patients concerned about the aesthetic impact. Reassurance and psychological support are also crucial, as the condition, though benign, can significantly affect self-esteem.

**Conclusion:**

This case highlights the importance of a thorough clinical and diagnostic approach to eruptive lentiginosis, particularly in young patients with no underlying systemic conditions. While the condition is benign, it can significantly impact quality of life due to its cosmetic implications. Further research is needed to better understand its etiology and optimize treatment strategies.



**Abstract N°: 2243****Standardized in vivo method using high-resolution diffuse reflectance spectroscopy for evaluating sunscreen effectiveness against ultraviolet A and high-energy visible light**

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**Introduction & Objectives:**

Accurate and reliable evaluation of sunscreen performance is necessary to ensure adequate balanced sun protection against ultraviolet light (UV) and high-energy visible light (HEV), depending on an individual's skin phototype and skin condition. The objective of this study was to investigate the importance of methodological considerations for standardized evaluation of sunscreen performance to protect against UVA, especially long UVA1, and HEV.

**Materials & Methods:**

In an open in vivo study, 6 commercial sunscreens were applied on the backs of subjects (n=15) to evaluate the performance against UVA and HEV using a robust protocol of hybrid diffuse reflectance spectroscopy (HDRS), based on validated ISO methodology. High-resolution absorbance spectra were obtained between 310-450 nm using a 1 nm step-size. The region 365 nm to 450 nm was compared with a method using linear interpolation from four discrete wavelengths (365 nm, 405 nm, 435 and 450 nm).

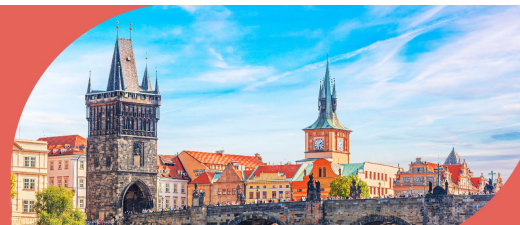
**Results:**

The sunscreen ranking observed using the in vivo high-resolution spectral representation (1 nm steps) method was not consistently reproduced by the method using four discrete wavelengths with linear interpolation. Differences between the two methods were observed in the range of 380-400 nm leading to misclassification in the rank of protection depending on the methodology used.

**Conclusion:**

The absorption profile in the UVA and HEV light ranges of each sunscreen was determined accurately and reliably by diffuse reflectance spectroscopy with measurements every nanometer. Sunscreen performance characterization will depend on the methodology and applying linear interpolation from broader wavelength bands may give inaccurate results



**Abstract N°: 2325****pigmentary disorders and cosmetic procedures**Inas Chikhaoui<sup>1</sup>, Sara Nejjar<sup>1</sup>, Maria Charaa<sup>1</sup>, Ghita Basri<sup>1</sup>, Madiha El Jazouly<sup>1</sup>, Soumia Chiheb<sup>1</sup><sup>1</sup>Cheikh Khalifa Bin Zayed Al Nahyan Hospital, Casablanca**Introduction & Objectives:**

A 49-year-old woman with Fitzpatrick skin phototype III presented with multiple hypochromic lesions on the forehead, evolving over several months. The lesions were small, well-defined, and arranged in a distinct pattern. The patient had no significant medical history, but a detailed interview revealed a history of Botox injections five months prior for the treatment of forehead wrinkles. This case highlights the importance of considering iatrogenic causes in the evaluation of hypopigmented skin lesions and discusses the potential mechanisms and differential diagnoses

**Materials & Methods:**

The patient underwent a thorough clinical examination, including dermoscopy and Wood's lamp evaluation, to assess the morphology and distribution of the lesions. A detailed medical history was taken, focusing on prior cosmetic procedures, skin care routines, and any history of trauma or infection. Photographic documentation was performed to monitor the progression of the lesions. A review of the literature was conducted to identify similar cases and potential etiologies.

**Results:**

The hypochromic lesions in this patient corresponded precisely to the injection sites commonly used for forehead Botox administration. This spatial correlation suggests a potential causal relationship. Possible diagnoses include post-inflammatory hypopigmentation, localized vitiligo triggered by trauma, or an immune-mediated response to Botox. Literature reports similar cases where Botox injections led to hypopigmentation, possibly due to disruption of melanocyte function or local inflammatory changes.

A review of the literature identified a few documented cases of hypopigmentation following Botox injections. For instance, a case report by Smith et al. (2018) described a 45-year-old woman who developed hypopigmented patches at Botox injection sites, similar to our patient. Another study by Lee et al. (2020) suggested that mechanical trauma from injections or an immune response to the toxin could impair melanocyte activity. However, these cases remain rare, and the exact mechanism is still unclear.

**Conclusion:**

This case highlights a rare but significant adverse effect of Botox injections, emphasizing the importance of patient counseling and awareness among practitioners. While Botox remains a safe and effective treatment for wrinkles, clinicians should be vigilant for cutaneous side effects, including hypopigmentation. Further studies are needed to elucidate the pathophysiology and establish preventive strategies.





**Abstract N°: 2353**

**Extensive Mongolian spots: atypical presentation**

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**Introduction & Objectives:**

Mongolian spots are congenital, hyperpigmented, and predominantly grayish blue macules with irregular margins that may be observed in infants at birth or during the first few weeks of life. They are most commonly present in the lumbosacral and gluteal regions, occasionally the lower limbs, back, flanks, and shoulders, and tend to fade during the first 2 to 3 years of life. They are considered atypical when they are aberrant in location; are extensive; are persistent; or are progressive.

We report the case of an infant with atypical extensive Mongolian spots.

**Materials & Methods:**

**Results:**

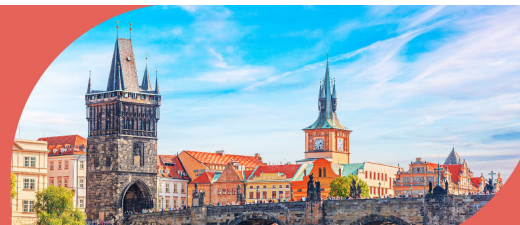
An 18-month-old male presented with multiple bluish-grey spots on his lumbosacral region, back, shoulders, and legs since birth, that are becoming less pigmented with time. He was born at term via cesarean delivery, to parents with no consanguinity. He cried immediately after birth and required no neonatal intensive care unit stay. There was no developmental delay. There was no history of loss of any acquired skills, seizures, stiffening or tightness of limbs, visual or hearing impairment.

Clinical examination revealed multiple symmetrical grayish blue macules with irregular shapes and margins on the shoulders, back, lumbosacral region and legs with the largest measuring 10x10 cm. The child was active, without signs of pallor, clubbing, cyanosis, generalised edema, or lymphadenopathy. Cranial nerve examination was normal. There were no tone abnormalities, and reflexes were elicited normally. Ophthalmological and neurological examinations were normal.

**Conclusion:**

Mongolian spots, although considered benign in nature, should raise suspicion for systemic disorders, even if they are asymptomatic if they persist beyond infancy or appear atypically. Physicians should be aware of atypical Mongolian spots and related conditions in order to further assess these patients for any underlying genetic disorders.



**Abstract N°: 2397****Pigmented demodicidosis : an under-recognized entity of facial hyperpigmentation**Daghari Douha<sup>1</sup>, Mouna Korbi<sup>1</sup>, Nesrine Ben Salah<sup>1</sup>, Zili Jamel Eddine<sup>1</sup><sup>1</sup>University Hospital Monastir, Dermatology Department, monastir, Tunisia**Introduction & Objectives:**

Facial Hyperpigmentation is a major cosmetic concern with a high negative impact on quality of life. Post-inflammatory hyperpigmentation and melasma are the most common causes. Herein we report a case of a man with erythema and diffuse facial hyperpigmentation with characteristic findings on dermoscopy suggesting the diagnosis of a rare entity "pigmented demodicidosis".

**Materials & Methods:**

NA

**Results:**

A 43-year-old man with dark skin type (Fitzpatrick 3) and a history of plaque psoriasis treated with a combination of calcipotriol and betamethasone cream presented to our department with persistent facial erythema and hyperpigmentation. He described flushing with starchy foods and exposure to sunlight. Clinical examination revealed diffuse facial erythema with visible telangiectasia and hyperpigmentation of the forehead, cheeks, and nose, sparing the upper and lower eyelids. Dermoscopy showed polygonal linear vessels, follicular openings with gelatinous material coming through and perifollicular white color. A specific finding was perifollicular and reticulated pigmentation. We did not perform a skin biopsy due to the characteristic dermoscopic appearance. The patient was treated with metronidazole cream. A follow-up visit was scheduled.

**Conclusion:**

Demodicidosis is a skin disorder caused by the Demodex mite, a common ectoparasite inhabiting the pilosebaceous units. Various skin manifestations have been classically described, such as erythematotelangiectatic rosacea, papulopustular rosacea, phymatous rosacea, and ocular rosacea. Recently, a new mysterious entity has been described as "pigmented demodicidosis", which combines both demodicidosis features and facial hyperpigmentation. Because of its rarity, published data are very limited. Furthermore, authors are still debating whether there is a real association between Demodex mites and facial pigmentation or whether their presence is a mere coincidence. We report a case of rosacea with diffuse erythema and facial hyperpigmentation in an immunocompetent patient. Dermoscopic examination revealed characteristic findings of polygonal linear vessels, follicular openings with white gelatinous material coming through and a diffuse reticular perifollicular pigmented network. Anti-demodectic treatment was prescribed and follow-up was planned to evaluate the response of demodicidosis and hyperpigmentation. Reporting this case highlights this ambiguous association and helps clinicians to be aware of this under-recognized type of facial hyperpigmentation that can be treated successfully with anti-demodectic topical treatment.

