

**Abstract N°: 57****Creating a foundational Language for Scar Morphology**

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**Introduction & Objectives:** This abstract explores the primary presenting concern of patients presenting at a high-volume scar clinic over a consecutive 5 year period, to determine a comprehensive “lingua franca” foundational language of scar morphology.

**Materials & Methods:** The study used a retrospective chart analysis of a single surgeon practice over 5 consecutive years. Presenting primary complaints were retrieved from patient charts, grouped into collective descriptor terms, which were, in turn used to arrive to thematic domains, based on consensus operational definitions.

**Results:** Individual patient's primary presenting complaints (n=2520) were recorded at first presentation. Basic Demographic Details were: M:F 62:38, Fitzpatrick Skin Type 25(1-2): 48(3-4): 23(5-6), Civilian to Military 89:7; Atrophic 24: Hypertrophic/Keloid53:Dehisced 2: Other 21. Languages: English, Italian, French, Arabic.

Presenting complaints were codified into 42 items, which were then categorised into 14 collective descriptor terms. The latter were organised into five overarching themes. The themes (and their incidence as the main presenting complaint (in parentheses) were: loss of function (10%) contour 41%; texture (12%); vector (13%); colour (24%). (n=2,520 consecutive individual patient episodes, complete data sets available in 94.2% of patient charts). Structured literature searching reported 10 published classification systems, capturing 25 terms which were relatable to 4 out of 5 domains.

**Conclusion:** This is the largest analysis of scar morphological presenting complaints to date, the first to formally recognise loss of function as a category. We believe this work sets a foundation for intraprofessional and doctor-patient communication, evaluation, and outcome measures with emerging technology.

**Abstract N°: 115****Combination treatment on clinical improvement in rosacea patients**Gyulnara Fimochkina<sup>1</sup>, Anna Sokolova<sup>2</sup><sup>1</sup>Clinic GF Estet, Dermatovenerology, Ekaterinburg, Russian Federation, <sup>2</sup>Ural Research Institute of Dermatology, Venerology and Immunopathology, Dermatovenerology, Ekaterinburg, Russian Federation**Introduction & Objectives:**

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

**Materials & Methods:**

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

**Results:**

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

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

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

**Conclusion:**

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

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

**19<sup>TH</sup> EADV Symposium - St. Julian's - Malta**  
**16 MAY - 18 MAY 2024**  
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**Abstract N°: 189****Delayed inflammatory reaction after HA.**Agnieszka Owczarczyk-Saczonek<sup>1</sup>

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**Introduction & Objectives:**

Hyaluronic acid (HA) is a natural component of the extracellular matrix. The identical structure of the molecule in all living organisms is its main advantage, as it translates into the minimal probability of immunogenicity. Nonetheless, in some cases, after several weeks, months, or even years, there might be a delayed hypersensitivity reaction (DIR).

**Materials & Methods:**

This lecture includes a discussion of the potential mechanisms of DIR reactions to HA along with the mechanisms of reaction (size of the molecule, additives to HA products, the technology of HA production, biofilm component).\*\*

The modifications of the chemical structure of HA, additives, and individual predispositions in a patient may be the cause of unpredictable reactions, leading to serious health consequences. Products of unknown origin, poorly purified, or including bacterial DNA are particularly dangerous.

**Results:**

The onset of the DIR is most often caused by: different infections (sinusitis, infection of the urinary or respiratory tract, teeth), facial trauma, dental procedures, monthly bleeding, or vaccination (including vaccination against COVID-19). The triggering factor causes an increase in serum interferon concentration, which stimulates a regional immune response associated with macrophage activation.

An essential element of the clinical picture of the reaction is the fact that it occurred in most patients in all the sites and at the same time, with HA applied even before, regardless of the type of filler, the number of injections, or the volume of injections.

**Conclusion:**

DIR is a major diagnostic challenge that should include: the exclusion of infection, histopathological examination (features of granulomatous dermatitis), imaging tests (ultrasonography, MRI), and laboratory tests (complete blood count, CRP).

The treatment includes antibiotics with good penetration into the skin and subcutaneous tissue, glucocorticosteroids, and hyaluronidase.

**Abstract N°: 238****Successful treatment of facial erythema with a 577-nm yellow light diode laser : case reports**

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**Introduction & Objectives:**

Vascular disorders affecting the skin, particularly facial erythema, facial telangiectasia, and many others influence negatively the psychological status of individuals. Laser is one of the most common options, which can be used in the management of vascular lesions. It targets intravascular oxy-hemoglobin to destruct various vascular lesions. The yellow light diode laser, at 577 nanometer (nm), has an ideal wavelength for treating cutaneous vascular disorders. The aim of this case report was to assess the efficacy and safety of the 577-nm yellow light diode laser in facial erythema.

**Materials & Methods:**

A total of 4 patients who were seen at our clinic with facial erythema treated with the yellow laser were retrospectively evaluated. The patients were diagnosed with a clinical examination and detailed history. No biopsy was taken from any patient for the diagnosis. All of the patients were treated with 577-nm yellow light diode laser at 4-week intervals, for four sessions (Scanner mode, 15-18 J/cm<sup>2</sup>). The assessment of the treatment was made based on clinical examination, digital photographs, and fading of the erythema and telangiectasias in the lesions. Four weeks after the last session, the patient's satisfaction with the treatment was evaluated with patient's global assessment score. Improvement was rated as excellent (75%–100%), very good (50%–74%), good (25%–49%), and poor (<25%).

**Results:**

Significant clinical improvement (75–90%) was observed in all patients. The treatment was very well tolerated. No side effect was observed except for a few patients who had mild to moderate erythema fading away in 12–24 hours. This case series has shown that the 577-nm yellow light diode laser is a very effective, safe, and well-tolerated treatment for facial erythema.

**Conclusion:**

Yellow laser is 577-nm light diode laser of which wavelength is ideal for treating vascular lesions. It is a very influential method for the treatment of vascular disorders, which the intended target is intravascular oxyhemoglobin. Theoretically, wavelengths that match the absorption maximum of oxyhemoglobin, such as the 577-nm, should produce the greatest effect. We consider that the 577-nm yellow light diode laser is a useful treatment choice with pleasing outcomes for patients in the treatment of vascular lesions or other vascular-based lesions such as facial erythema.



**Abstract N°: 281****Interest of a specific dermocosmetic product in sensitive skin: first study in Thailand**

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**Introduction & Objectives:**

Sensitive skin syndrome (SSS) is characterized by neurogenic inflammation and barrier function alteration, leading to unpleasant sensations, sometimes associated with clinical signs such as redness, in response to stimuli that normally should not provoke such sensations. It has an impact on patients' quality of life as symptoms occur immediately following exposure in response to different stimuli (chemical, mechanical, thermal, pollution...). Consequently, the use of adapted skin care products is essential for patients suffering from SSS. In this context, the tolerance and efficacy of a specific dermocosmetic cream was evaluated in subjects presenting SSS in Thailand, where no study has been yet published.

**Materials & Methods:**

In an open-label, single-center, prospective study, 39 subjects reporting facial sensitive skin with the Burden of Sensitive Skin (BoSS) score equal or higher than 20 (out of 56), applied the cream twice daily for 28 days (D28). There were 34 women and 6 men with mean age 43 years old, predominantly having dark phototypes (IV: 55%, V: 30%). The assessment of the clinical signs (redness, dryness, roughness, squames) were performed by both the investigators and the subjects using a 11-point scale at baseline and D28. Similarly, the functional signs (itching, tightness, tingling, heat sensations and pain) and the quality of life (BoSS questionnaire) were evaluated by the subjects. Adverse events were reported by the subjects during the study if noticed, and the global cutaneous acceptability was evaluated by the dermatologists at D28 using a 4-point rating scale. In addition, the skin hydration (Corneometer) and the transepidermal water loss (Tewameter), were evaluated at baseline and D28.

**Results:**

After 28 days of use, the cream significantly reduced all the clinical signs according to the investigators and the subjects, 36% and 68% for skin redness, 59% and 72% for skin dryness, 44% and 74% for skin roughness and 51% and 77% for squames, respectively, compared to baseline. Similarly, the cream significantly decreased itching 80%, tightness 75%, tingling 73%, heat sensations 81% and pain 83%. In addition, the skin hydration significantly increased by 15% while the TEWL decreased by 6% at D28 vs baseline, demonstrating a skin barrier function restoration. The BoSS total score was reduced by 12% at D28, close to statistical significance ( $p=0.057$ ), tending to show an improvement of the quality of life. Finally, 87.5% of the subjects presented a good to very good tolerance to the cream according to the dermatologists.

**Conclusion:**

The studied dermocosmetic product was judged as suitable for a daily use in Thai patients suffering from SSS. In addition to a good tolerance, it helped improve SSS symptoms, skin barrier function and patients' quality of life.

**Abstract N°: 330****Vitamin D deficiency and skin quality**

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**Introduction & Objectives:**

Recent research has illuminated the influence of vitamin D on the tumor suppressor protein p53, which plays a role in DNA damage and telomere integrity. Additionally, investigations are underway to elucidate the impact of vitamin D on senescence-associated secretory phenotype (SASP), encompassing its effects on matrix metalloproteinases (MMPs), insulin-like growth factor (IGF-1), IGF binding proteins (IGFBPs), IGF receptor (IGFR), fibroblast growth factor-23, tumor necrosis factor-alpha (TNF- $\alpha$ ), interferon-gamma (INF- $\gamma$ ), and interleukins (IL-1/6/9/17). Given these insights, our objective is to discern skin changes resulting from vitamin D supplementation and to establish dosages required to attain a minimum cholecalciferol plasma concentration triggering structural and morphological alterations in the skin.

**Materials & Methods:**

We studied 60 female patients of reproductive age. We measured the levels of 25-hydroxyvitamin D in the serum of all patients. Based on these measurements, we categorized the patients into three groups: Group I - patients with vitamin D insufficiency (21-30 ng/ml); Group II - patients with vitamin D deficiency (10-20 ng/ml); and Group III - patients with acute vitamin D deficiency (5-10 ng/ml). To assess the influence of vitamin D on the skin, we utilized 3D visualization of the skin using the Antera device, and we conducted histological examinations of skin biopsies taken from the abdominal area.

**Results:**

In Group I, vitamin D was orally administered at 5000 IU daily for three months. In Group II, the daily dose was 10,000 IU; for Group III, an intramuscular injection of 200,000 IU of vitamin D was initially given, followed by a transition to 5000 IU per day orally. After three months of treatment, both groups exhibited an elevation of vitamin D levels to 40-60 ng/ml. Upon achieving optimal vitamin D levels, visual inspection of the skin revealed a reduction in pronounced hyperkeratosis and an improvement in facial complexion.

A comparison of 3D images using the Antera system showed enhanced skin texture in 42 patients (70%). According to the three-dimensional visualization images, there was an average reduction of wrinkle depth by 0.03 mm, a decrease in melanin content by 0.15 units, a reduction in pore visibility by 0.01 mm, and skin texture alignment by 0.02 mm in both groups.

Histological examination yielded the following findings within one age group: the severe vitamin D deficiency group displayed more prominent basophilia than the other groups, along with edema of collagen fibers. Post-treatment, a decrease in basophilia and thickening of the epidermis were observed. Remarkably, these changes were observed at suboptimal serum vitamin D concentrations of 23-27 ng/ml.

**Conclusion:**

Vitamin D administration exerts a favorable impact on the skin's structural, morphological, and visual characteristics. These changes are evident even at suboptimal concentrations of cholecalciferol. Achieving an average serum vitamin D level necessitates a minimum 3-month vitamin D intake; for acute deficiency, intramuscular administration of vitamin D in higher doses is also advisable. Vitamin D can be regarded as a geroprotector and can find application within anti-aging

protocols.

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**Abstract N°: 503****Evaluation of efficacy and safety of non-ablative 1550-nm fractional laser for facial syringoma: A case-series study**Tae Min Kim<sup>1</sup>, So Young Kwon<sup>2</sup>, Soyun Cho<sup>\*1, 2</sup><sup>1</sup>Seoul National University College of Medicine, Dermatology, Seoul, Korea, Rep. of South, <sup>2</sup>Seoul Boramae Hospital, Dermatology, Seoul, Korea, Rep. of South**Introduction & Objectives:**

At present, syringoma treatment is unsatisfactory, with CO<sub>2</sub> laser, cryotherapy and chemical peels leaving residual lesions, edema, erythema, post-inflammatory hyperpigmentation and/or permanent scarring. In the present study, we set out to evaluate the efficacy and safety of 1550-nm non-ablative fractional laser for treatment of facial syringoma.

**Materials & Methods:**

We retrospectively analyzed the medical records of syringoma patients who underwent 1550-nm fractional laser treatment. Two blinded dermatologists assessed the treatment efficacy of syringoma based on randomized clinical photographs before and after treatment, using the Periorbital Syringoma Severity Index (PSSI) score and a global improvement scale. Additionally, the types and duration of any side effects occurring after the treatment were evaluated.

**Results:**

A total of 7 patients underwent 19 sessions of 1550-nm fractional laser treatment, averaging 2.7 sessions per patient (median, 2 sessions). The female-to-male ratio was 6:1, with 3 patients (42.9%) having prior experience with CO<sub>2</sub> laser. The pre-treatment PSSI score improved from 3.85 to 2.86 after treatment ( $p=0.04$ ). Notably, 2 patients (28.6%) showed excellent improvement, and 2 patients (28.6%) exhibited a good response. There was a strong correlation observed between the number of sessions and both the global improvement scale ( $r=0.776$ ,  $p=0.04$ ) and PSSI score reduction ( $r=0.707$ ,  $p=0.07$ ). No permanent scarring or dyspigmentation was observed post-laser treatment, and transient edema in 3 patients resolved on average after 13.7 days (median, 7 days).

**Conclusion:**

The 1550-nm non-ablative fractional laser demonstrated clinically significant improvement for facial syringoma. Considering its non-ablative nature and short down-time, the 1550-nm fractional laser is a safe and effective treatment alternative.

**Abstract N°: 733****Safety and tolerability of HA dermal fillers using cannulas: a retrospective observational study on infraorbital rejuvenation and non-surgical rhinoplasty using the microcannula technique**Anastasia Tzouma<sup>1</sup>, Aikaterini Karaiskou<sup>1</sup>, Vasiliki Koukaki<sup>1</sup>, Ioanna Vlassi<sup>1</sup><sup>1</sup>Tzouma Clinic | Dr Anastasia Tzouma | Hilton Area, Athina, Greece

**Introduction & Objectives:** Hyaluronic acid dermal fillers (HA fillers) are vastly used in aesthetic dermatology for volume restoration and reshaping of anatomical facial regions, including the infraorbital hollow and nose. The cannula technique for injecting those particular sites is increasingly popular in recent years, as it is thought to improve patient comfort, safety and treatment tolerability compared to the traditional use of sharp hypodermic needle injections. One of the benefits of cannula is the single point of entry, reducing the number of injection points during facial rejuvenation. In addition, cannulas are typically at least 1 inch in length, allowing for a larger area to be treated. Cannulas have shown lower risk at penetrating vessels than correspondingly sized needles, leading to less major vascular complications that can occur after injecting the periorcular and nasal area, and are believed to cause less minor technique-related complications such as pain, malar edema, bruising and ecchymosis on the site of the injection than needles.

**Materials & Methods:** Medical records of the author's private practice were retrospectively reviewed from January 2023 to November 2023 on a total of 307 patients. 239 patients were injected in the infraorbital area for volume replacement (Group A) and 68 patients were injected for nasal reshaping (Group B). In all cases, a sterile gel of 20mg/mL cross-linked hyaluronic acid with 0.3% lidocaine was injected with a flexible, blunt dome-shaped 25-Gauge cannula. Group A patients were injected using the micro-droplet or/and fan technique at a supraperiosteal level along or below the orbital rim under the defect on the infraorbital hollow. The volume range of HA filler used was 1 ml for both eyes (~0.5 per site). Group B patients were injected with bolus and retrograde linear application from a single, medial entry point from the anterior nasal spine to the nasal tip, in the musculoaponeurotic layers and suprapericondral and supraperiosteal layers to avoid injury or cannulation of the vessels. The volume range of HA filler used was 0.7-1 ml. Patients were asked to follow up on the 5-10th day post-procedure reporting pain, swelling, bruising/ecchymosis or any other complication may occurred.

**Results:** Most common minor complications reported on day 1-10 post-injection for both groups were malar edema (Group A n=40, 16,7%/ Group B n=9, 13,3%), mild pain (Group A n=9, 3,8%/ Group B n=3, 4,4%) and bruising (Group A n=9, 3,8%/ Group B n=0, 0%) on the site of injection. No major complication such as skin necrosis, vascular occlusion, granulomatosis occurred. All patients except for one individual (n=306, 99,7%) were able to return to their activities right after the injection.

**Conclusion:** Injecting HA fillers with the microcannula technique is a safe, well-tolerated procedure for both tear-trough rejuvenation and nasal reshaping, causing minimum and reversible complications. No major complications are common and patients experience a comfortable procedure with no significant recovery time.

**Abstract N°: 944****A randomized controlled clinical study on the efficacy and quality of life improvement of sensitive skin subjects using a specific dermocosmetic product**

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**Introduction & Objectives:**

Sensitive skin syndrome (SSS) is a common skin condition defined by the occurrence of unpleasant sensory perceptions such as tightness, tingling, heat sensations, or itching in response to physical, thermal, chemical, hormonal, psychological, or other stimuli that normally do not provoke such sensations. Sensitive skin may have a normal appearance or be accompanied by clinical signs such as redness. It has an impact on patients' quality of life as symptoms occur immediately following exposure in response to different stimuli. In this context, we evaluate a dermocosmetic cream versus neutral cream on the tolerance, efficacy and quality of life improvement of subjects with SSS in Poland.

**Materials & Methods:**

A double-blind randomized clinical study was performed on 100 subjects presenting common following features: self-reported facial sensitive skin, a Burden of Sensitive Skin (BoSS) total score equal or higher than 20 (out of 56) and responsiveness to the lactic acid stinging test (LAST) with redness (Mexameter). One group (n=50) applied the cream once to twice daily for 56 days (D56) and the other one (n=50) a placebo. The group using the cream was composed of 40 women and 10 men with mean age 43 years and phototypes II (54%) or III (46%). The assessment of the clinical signs (redness, dryness, roughness, squames) were performed by both the dermatologists and the subjects using a 11-point scale at D0, D28 and D56. With a similar scale, the functional signs (itching, pain, tightness, tingling, heat sensations) were self-evaluated. In addition, LAST-induced stinging sensations and redness, and the quality-of-life improvement (via the BoSS questionnaire) were evaluated at D0, D28 and D56. Adverse events were reported by the subjects during the study if noticed, and the global cutaneous acceptability was evaluated by the dermatologists at D56 using a 4-point rating scale.

**Results:**

Compared to baseline, the cream significantly reduced all the clinical signs according to the dermatologist/subjects from D28: -20%/-28% for skin redness, -51%/-53% for skin dryness, -67%/-62% for skin roughness and -71%/-69% for squames, and similarly at D56 -30%/-41% , -78%/-76%, -88%/-83% and -93%/-87%, respectively. Moreover, the cream significantly decreased at D28 and D56, tightness -57% and -77%, tingling -80% and -93%, heat sensations -71% and -81%, and itching -64% and -73%, respectively.

Compared to placebo, all previous clinical and functional signs were statistically improved. Stinging sensations and redness induced by lactic acid significantly decreased by -53% and -9% at D28, and -91% and -15% at D56, respectively, thanks to the cream, and were significantly reduced compared to than the placebo. Similarly, the BoSS total score was significantly reduced by -20% at D28 and -30% at D56 suggesting a quality-of-life improvement, and also significantly vs placebo. Finally, all the subjects presented a very good tolerance compared to 80% of the subjects who applied the placebo, according to the investigators.

**Conclusion:**

Showing very good tolerance and efficacy on SSS symptoms, associated with an improvement on the quality of life, this dermocosmetic product is well adapted for daily use application by patients suffering from SSS.

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**16 MAY - 18 MAY 2024**  
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Abstract N°: 960

## The safety and efficacy study of new collagen synthesis peptides injection for Correction of the Nasolabial Fold

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### Introduction & Objectives:

The wrinkles on the nasolabial folds (NLFs) are the most common concerns in aging. Hyaluronic acid (HA)-derived injectable fillers have been widely used to reduce the appearance of nasolabial folding. However, the filler of the nasolabial folds is not fixed, so the cosmetic satisfaction is lower than that of other areas. This study investigated the efficacy and safety of the new collagen synthesis peptides in the treatment of nasolabial folds (NLFs) in H&E study and clinical study whether the collagen synthesis peptides could be an alternative substance to fillers.

### Materials & Methods:

Following strict inclusion and exclusion criteria, the authors screened 46 women aged 25-65 with moderate to severe NLFs. According to a split-face design, the selected right-side NLFs received collagen synthesis peptides intradermally ("NLF Rx group"); the selected left-side NLFs received saline (placebo) ("NLF Lx group"). With the treatment interval of 2 or 3 weeks, all patients received the same treatment as before and total 3 sessions. The total study follow-up was after 8 weeks of final treatment, with objective assessments based on the skin imaging technologies. H&E and Masson's trichrome stain were done from the tissue of the treated areas in 2 patients.

### Results:

Enrollment progress were done between January and June 2023 up to a total of 46 women and 92 NLFs. All treated women completed the two-month follow-up without serious side effects. The skin imaging demonstrated that wrinkles significantly improved in the NLF Rx after 8 weeks compared with baseline. The results of the patient satisfaction survey are as follows. 1) Effectiveness : exist (45/46 persons, 98%) vs absence (1/46 persons, 2%) 2) Satisfaction : an average of 8.47 out of 10 on a scale of 10 3) Discomfort : 1 foreign body symptoms lasting 3 days, 36 nothing, and 9 pain answered 4) When asked if they would recommend it to others, 95%(44/46 persons) said they would recommend it, and 4%(2/36 persons) said they would not. The biopsy confirmed collagen proliferation in Masson's trichrome stain and no visible abnormality in H&E study.

### Conclusion:

This study confirmed that collagen synthesis peptides might be a valuable and effective option to rapidly improve the NLFs in individuals with moderate to severe NLFs. Well-designed trials in larger treatment groups will hopefully confirm these early promising results.



**Abstract N°: 1063****Treatment of Erythrotelangiectatic Rosacea with Laser and Topical Beta Blocker: A Split-Face Case Study**

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**Introduction & Objectives:** Erythematotelangiectatic rosacea (ER) is the most common subtype of rosacea, yet it responds poorly to most standard topical and oral treatments typically used for rosacea.<sup>1</sup> Pulsed-dye laser (PDL) therapy is one of the most effective treatments for ER since it uses selective thermolysis to target superficial blood vessels.<sup>1</sup> Nevertheless, even with PDL, patients may still experience recurrences and persistent flushing, and often require regular PDL treatments for maintenance. Oral  $\beta$ -blockers carvedilol and propranolol have demonstrated efficacy in reducing persistent erythema and flushing associated with ER, yet these may lead to bradycardia and hypotension.<sup>2</sup>

Timolol maleate, a potent nonselective  $\beta$ -blocker used for treatment of infantile hemangiomas, acts through vasoconstriction, inhibition of angiogenic factors (e.g., vascular endothelial growth factor [VEGF]), suppression of inflammatory mediators, and induction of apoptosis.<sup>3</sup> This report presents a split-face case study where topical timolol was utilized as an adjunctive treatment after PDL to address severe ER.

**Materials & Methods:** A 63-year-old male, previously treated with oral antibiotics for 10 years for rosacea, presented with persistent facial burning, erythema, and telangiectasias despite six prior PDL treatments at non-medical facilities, the latest being one year prior. One session of PDL was administered at 595 nm to the forehead, cheeks, nose, and chin. Subsequently, the left side of the face was treated for four weeks with twice-daily topical timolol maleate 0.5% ophthalmic solution, while the right side received no further treatment. Response to therapy was assessed after four weeks using pre- and post-treatment photos and questions to the patient, focusing on changes in symptoms, erythema, and telangiectasias to evaluate the efficacy of the combined therapy.

**Results:** At the four-week assessment, both sides of the patient's face exhibited noticeable improvement in erythema and telangiectasias. The side treated with the combination of PDL and topical timolol demonstrated greater improvement in telangiectasias and erythema from baseline, particularly in the mid-cheek area. The patient expressed increased satisfaction and subjective relief, experiencing less burning and stinging on the timolol-treated side. No local or systemic adverse events were reported during the course of treatment.

**Conclusion:** Topical timolol may be a promising adjunctive treatment to PDL in effectively and safely reducing facial erythema, telangiectasias, and associated symptoms in severe ER. The improvement observed, along with the patient's reported satisfaction and absence of adverse events, suggests a potential advantage through enhancement of PDL efficacy and reducing disease recurrence. Further research is needed to validate and optimize the timing, risks, and benefits of this multimodal treatment strategy.

Abstract N°: 1066

## Resistant granuloma faciale eosinophilicum successfully treated with a combination of long pulsed Nd:YAG laser and DyeVL

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### Introduction & Objectives:

Granuloma faciale eosinophilicum (GF) is a relatively rare, chronic, benign inflammatory dermatosis, affecting mostly middle-aged males of Caucasian origin with unknown etiology. Clinically, it manifests as single or multiple, erythematous or red-brown papules, plaques or nodules, almost exclusively limited to the facial region. The disease is difficult to treat and prone to relapse. The authors present a case of successful treatment of resistant GF with the Nd:YAG laser.

### Materials & Methods:

42-year-old female patient was admitted to the Dermatology Department with one major and several smaller GF plaques localized on the right cheek. Lesions appeared 3 months prior to the admission, constantly growing. Patient did not report any history of systemic disease. The skin biopsy from the right cheek demonstrated massive inflammatory infiltration of neutrophils, lymphocytes and eosinophils in the dermis with focal hemosiderin deposits associated and no sarcoid granulomas. A diagnosis of granuloma faciale eosinophilicum was made. The patient was subsequently treated with oral methylprednisolone; oral hydroxychloroquine; topical tacrolimus 0.1%, oral dapsone and topical clobetasol. Due to the insufficient effect, laser therapy was introduced in three sessions in 1-month interval: first two sessions included DyeVL (500-600 nm) 12ms, 9 and 10 J/cm<sup>2</sup> followed by long pulsed Nd:YAG (1064 nm) 160 J/cm<sup>2</sup> while the third session included DyeVL 12 ms, 11 and 12 J/cm<sup>2</sup> followed by long pulsed Nd:YAG 160-210 J/cm<sup>2</sup>.

### Results:

The patient achieved great clinical improvement, with the lesions resolving completely, leaving only post-inflammatory hyperpigmentation. The patient did not experience any side effects except for increased *Demodex* skin colonization visible in dermoscopic examination, which may have been caused by applying excessive amount of emollients after laser treatment. After 1 year follow-up, no relapse was observed.

### Conclusion:

A combination of long pulsed Nd:YAG and DyeVL treatment may be a safe, effective option in the treatment of granuloma faciale eosinophilicum.



**Abstract N°: 1114****Bullous stretch marks: a case report**

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**Introduction & Objectives:**

Stretch marks or striae distensae are linear scars that appear where the dermis has been damaged by prolonged stretching of the skin. Their pathophysiology is multifactorial. In patients with edema, a bullous form may develop as a result of fluid accumulation preferentially in the striae. We report a case of a young patient with nephropathy who had developed bullous stretch marks. \*\*

**Materials & Methods: \*\*****Results:**

A 30-year-old patient with a history of peritonitis and nephropathy was referred to us for asymptomatic bullous lesions evolving for five days. Clinical examination revealed tense bullae with clear content, in a linear pattern following the path of stretch marks on the inner thighs and arms. In addition, she had edema of both lower limbs, which was white, soft and cup shaped. The diagnosis of bullous stretch marks was made. The patient was reassured regarding the benignity of this condition.

**Conclusion:**

Stretch marks frequently appear under a variety of physiological conditions, including pregnancy and during growth, or when there is an abrupt change in body weight. They can also be observed in pathological conditions such as Cushing's syndrome or when taking certain types of medication. In patients with edematous syndrome, bullous stretch marks may develop as a result of a preferential accumulation of fluid in atrophic striae. Few cases have been reported in the literature, and the majority of patients presented with edema due to hypoalbuminemia, as in our patient, or long-term systemic corticosteroid therapy. Treatment is based on management of the underlying edema.







Abstract N°: 1191

## The Effectiveness and Safety of Collagen-Stimulating Fillers for Correcting Nasolabial Folds : A systemic literature review and meta- analysis

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### Introduction & Objectives:

Nasolabial folds (NLFs) are crucial in facial aesthetics and are a key focus in facial rejuvenation procedures. Collagen-stimulating fillers are increasingly popular due to their extended effectiveness and biocompatibility.

### Materials & Methods:

This study aims to comprehensively evaluate the therapeutic effectiveness and safety of collagen-stimulating fillers in correcting NLFs. A comprehensive search of PubMed, Embase, and Cochrane databases was conducted to identify relevant randomized controlled trials published between 2000 and 2023. Nine studies meeting the inclusion criteria were selected, involving a total of 972 participants and focusing on polycaprolactone (PCL), poly-L-lactic acid (PLLA), and calcium hydroxylapatite (CaHA). Subsequently, a systematic review and meta-analysis were performed, utilizing the Wrinkle Severity Rating Scale (WSRS), Global Aesthetic Improvement Scale (GAIS), and assessments of adverse events.

### Results:

Out of 144 initially considered studies, 9 met the inclusion criteria, encompassing 299 participants for PCL, 291 for PLLA, and 382 for CaHA. PCL showed significantly greater improvement in GAIS (RR 3.14; 95% CI, 2.29–4.30,  $p < 0.001$ ) and WSRS (mean difference 0.71; 95% CI, 0.36–1.06,  $p < 0.001$ ) at the 12-month interval compared to hyaluronic acid (HA). CaHA showed a notable 12-month improvement in GAIS compared to HA (RR 1.51; 95% CI, 1.21–1.88,  $p < 0.001$ ). PLLA demonstrated superior wrinkle improvement compared to HA at week 24, particularly in individuals under 52 years of age. No severe adverse events were noted.

### Conclusion:

Collagen-stimulating fillers emerge as a promising, safe, effective, and durable option for correcting NLFs. However, cautious interpretation is necessary due to limited data and heterogeneity among included studies. Further high-quality clinical trials are essential to validate these findings and provide more robust evidence.



**Abstract N°: 1201****Persistent urticaria Induced after laser hair removal: A case series of 5 patients**Sevasti Afantenou\*<sup>1</sup>, Konstantina Mamali<sup>1</sup>, Amalia Tsiatoura<sup>1</sup><sup>1</sup>cdm medical group, Glifada, Greece**Introduction & Objectives:**

Laser hair removal is one of the most frequent cosmetic procedures. It is a safe, long lasting and permanent way for hair reduction, either for aesthetic or medical reasons. Usually, a mild perifollicular erythema and oedema are developed that they are fading away in few hours. The most common side effects are hyper- or hypo- pigmentation secondary to burning.

Although laser hair removal is a safe procedure if made by professionals, there have been described a few cases of persistent urticaria. It is believed that the rupture of the hair follicle by laser may release antigens that trigger a delayed hypersensitivity reaction. Therefore, dermatologists must be aware of this rare reaction. We present a case series of 5 patients of urticaria induced after laser hair removal.

**Materials & Methods:**

Five patients underwent laser hair removal for their first time and few hours later they developed erythematous perifollicular papules that were coalesced to form plaques with intense itching. No other symptoms were mentioned. Their medical history was free of any disease or known allergies.

**Results:**

All 5 patients were carefully examined and they had warm erythematous plaques with perifollicular oedema with accompanied itching. A diagnosis of persistent urticaria was made. The lesions in all patients were located on the lower extremities even though they had also treatments in another areas. In 4 of 5 patients topical clobetasol propionate was prescribed bid/7 days and in one patient an additional oral levocetirizine dihydrochloride was added due to severe itching for the 5 days. Lesions were improved after 2 to 3 days and they completely healed in 7- 10 days. Patients were reassured that by continuing the treatments the symptoms will not be so intense. Indeed, as treatments were continued and the number of hair was less the symptoms were improved or diminished.

**Conclusion:**

Laser hair removal is a completely safe procedure for permanent hair reduction with no special side effects. Persistent urticaria is a rare complication that we have to keep in mind that it can be present. It is easily treated and patients must be reassured that symptoms will be improved during treatments.

**Abstract N°: 1219**

### **Attitudes of Renal Transplant Recipients towards Aesthetic Cosmetic Procedures**

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

The health challenges faced by kidney transplant recipients extend beyond renal functions, encompassing aesthetic concerns that impact their overall well-being. This study explores the interest, attitudes, reasons, and expectations of renal transplant recipients regarding aesthetic cosmetic procedures, particularly in addressing post-surgical scars, skin changes, and signs of aging. By delving into their apprehensions, the research aims to offer guidance and contribute to the psychological well-being of kidney transplant recipients.

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

The study included 76 kidney transplant recipients aged 18-65, attending Başkent University Faculty of Medicine's renal transplantation clinic between November 2023 and February 2024. Participants completed an 8-question survey as part of the data collection process.

#### **Results:**

A total of 76 participants, comprising 48 (63.2%) males and 28 (36.8%) females, were enrolled in the study.

Out of 76 surveyed, 16 (21.1%) showed interest in cosmetic procedures, with 10 (71.4%) being females. Regarding the perceived impact of cosmetic procedures on post-kidney transplant health, 25 (32.9%) participants did not expect any negative effects, 25 (32.9%) had specific concerns but considered the risks minimal, and 26 (34%) acknowledged potential negative effects. Among the 60 participants not interested in cosmetic procedures, 25 (41.7%) believed there could be negative effects.

Among the 16 individuals expressing interest in cosmetic procedures, 37.5% (6) had never undergone any procedure, while 25% (4) had previously had Botox, another 25% (4) had fillers, 12.5% (2) had PRP, 12.5% (2) had mesotherapy, and 6.25% (1 each) had undergone surgery, dermapen, and radiofrequency procedures.

Among the 10 participants who had previously undergone procedures, 8 sought medical advice before the procedure, with only 1 consulting a dermatologist.

Participants lacked interest in several cosmetic procedures: 52.6% for Botox, 46.1% for fillers, 44.7% for PRP, 46.1% for mesotherapy, 52.6% for surgery, 46.1% for dermapen, 50% for radiofrequency, and 47.4% for laser. The most common reasons for not considering these procedures were a lack of perceived need (52.8%) and a desire to maintain a natural appearance (47.2%). Three participants (3.9%) expressed fear of side effects specifically related to surgical procedures, while others did not mention concerns about potential side effects.

Regarding information sources about cosmetic procedures, 26 participants (34.2%) obtained information through doctor recommendations, while 43 participants (56.6%) had not sought any information.

#### **Conclusion:**

The study unveils a significant trend, with every 5 renal transplant patients, 1 of them contemplating cosmetic procedures.

However, the cautious approach of physicians in these cases emphasizes the necessity for enhanced communication. Patients heavily depend on doctor recommendations, making healthcare professionals pivotal in influencing decisions. The limited consultations with dermatologists underscore a critical gap, emphasizing the urgency for heightened awareness and patient education. The scarcity of literature highlights the unique value of this study, as there is no comparable research in the existing literature. Therefore, further research is imperative to comprehensively address the distinctive needs of renal transplant recipients in the realm of cosmetic interventions.

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**Abstract N°: 1223****Navigating skin health: the intersection of aesthetic procedures, cosmetics formulation, and sustainability**Liga Brunina<sup>1</sup>, Dina Mihailova<sup>2</sup>, Elina Konstantinova<sup>3</sup><sup>1</sup>LABRAINS, SIA, Rīga, Latvia, <sup>2</sup>Tālvīvalža iela 15, Rīga, Latvia, <sup>3</sup>ISMA, Informācijas sistēmu menedžmenta augstskola, Rīga, Latvia

**Introduction & Objectives:** Review explores the relationship between aesthetic procedures, cosmetics formulation, and sustainability in the context of maintaining optimal skin health. It evaluates the efficacy of conventional cosmetics while shedding light on potential side effects and environmental concerns. Emphasizing the imperative for sustainable and skin-friendly cosmetic formulations, the paper underscores the importance of post-procedure aftercare and managing the multifaceted processes of chronological and photoaging

**Materials & Methods:** A systematic approach, encompassing a literature review to gather evidence on the impact of aesthetic procedures, conventional cosmetics, and sustainability on skin health. A wide range of scientific publications, case studies, and environmental reports are analyzed to provide a comprehensive understanding.

**Results:** While conventional cosmetics serve to improve skin appearance and health, they often contain ingredients that may inadequately nourish the skin or potentially accelerate aging processes, thereby undermining their overall efficacy. For instance, propylene glycol, a ubiquitous solvent and skin conditioning agent in cosmetics, is generally non-toxic and non-carcinogenic but has been associated with skin irritation. Dermatological implications of cosmetic products are increasingly recognized as inseparable considerations. A growing trend towards sustainability has led to the minimization of solvents in manufacturing. This aligns with the application of technologies such as sorbent- and liquid-based microextraction, which aim to eliminate the use of organic solvents, thus creating a safer, less irritating product with reduced toxicity. A plethora of substances traditionally used in cosmetics have been linked with skin irritation, allergic reactions, and other undesired effects. Benzyl alcohol (BA) can lead to severe itching, skin redness and even eye irritation and vision problems. Sodium benzoate, glyceryl caprylate, preservatives can increase the risk of inflammation, oxidative stress, obesity, and allergies. Similarly, potassium sorbate, benzoic acid, salicylic acid, and dehydroacetic acid - allergic reactions, itching, skin cracking, burning. Ethyl alcohol and pentylene glycol are known to cause skin irritation or contact dermatitis, while sorbic acid linked to skin itching and contact dermatitis. PrG, a common ingredient in cosmetics, is associated with skin irritation and allergic reactions, especially in individuals with sensitive skin. This concern is particularly salient considering its widespread use. In studies, a cohort of patients reported skin sensitivity following the use of products with PrG, cases of contact dermatitis linked to ingredients such as ethyl alcohol and BA. These examples highlight the potential side effects of cosmetic ingredients and the need for careful evaluation.

**Conclusion:** It is evident that reducing or eliminating unnecessary solvents and harmful substances in cosmetic formulations is crucial for maintaining skin health. The development of sustainable and environmentally friendly cosmetics is essential, particularly in the context of post-procedure skincare and anti-aging products. By prioritizing skin-friendliness, cosmetics can meet individual skincare needs without compromising skin health or contributing to harm. Further innovation in this area is recommended to drive positive changes in the cosmetics industry.

**Abstract N°: 1226****Management of Oleoma Induced by Vitamin K1 Injection Using Laser-Assisted Drug Delivery**Oumayma Mani<sup>1</sup>, Chamli Amal<sup>1</sup>, Zeineb Gafsi<sup>1</sup>, Emna Bouattour<sup>1</sup>, Refka Frioui<sup>1</sup>, Anissa Zaouak<sup>1</sup>, Houda Hammami<sup>1</sup>, Samy Fenniche<sup>1</sup><sup>1</sup>Habib Thameur University Hospital, Dermatology, Tunisia**Management of Oleoma Induced by Vitamin K1 Injection Using Laser-Assisted Drug Delivery****Introduction & Objectives:**

Intramuscular injections are common medical procedures performed in infants for various purposes, including vaccination and medication administration. While generally considered safe, they can sometimes lead to unexpected complications. One such rare complication is the development of oleomas, characterized by chronic granulomatous foreign body reactions at the injection site. Oleomas are typically associated with the injection of lipophilic substances like oils, but to our knowledge, there are no case reports of oleomas induced by vitamin K1 injection. This case report presents an oleoma formation following a vitamin K1 injection in a 4-month-old male infant. Traditional treatments, including topical corticosteroids, proved ineffective, leading to the exploration of alternative therapeutic modalities. This report aims to highlight the potential implications of this case for clinical practice, including the recognition of oleoma as an uncommon complication of intramuscular injections in infants and the exploration of laser-assisted drug delivery as a therapeutic option.

**Results:**

A 4-month-old male infant presented with a skin lesion on the lateral aspect of the right thigh. Physical examination revealed a 4-cm erythematous infiltrated nodule surmounted by multiple painless erythematous papules and crusted erosions of up to 0.5 cm diameter on the lateral aspect of the right thigh. Histopathologic examination showed a dense inflammatory infiltrate of the dermis composed of giant cells phagocytizing lipid vacuoles, consistent with the diagnosis of oleoma. Topical corticosteroids applied once daily for a month were ineffective in improving the lesion. An ablative fractional CO<sub>2</sub> laser was used to treat the plaque followed by immediate application of topical corticosteroids. Significant improvement in the lesion was observed following four laser sessions at a 1-month interval, with a reduction in size, erythema, and consistency. No adverse events or complications related to laser therapy were reported.

**Conclusion:**

Oleomas induced by intramuscular vitamin K1 injection are uncommon but should be considered in infants presenting with skin lesions at injection sites. Ablative fractional CO<sub>2</sub> laser therapy shows promise as a novel treatment modality for oleomas, offering a safe and effective alternative to traditional therapies. Further studies are warranted to validate these findings and optimize the use of laser-assisted drug delivery in the management of oleomas and other granulomatous skin conditions.

**Abstract N°: 1324****The Mini-Facelift Technique for facial laxity and acne scars treatment using injectable collagen**Diogo Semedo\*<sup>1</sup><sup>1</sup>BEST medical concept, Aesthetic Medicine, Porto, Portugal**Introduction & Objectives:**

Collagen, historically a pioneering method in facial rejuvenation, is conventionally administered superficially in the dermal layer via needle with topical anesthetic. With the technical development of cannulas, deeper areas of the face become reachable with lower vascular risk. With this work, it is intended to show that the dermal/subcutaneous application of collagen at the SMAS/platysmal levels allows the deposition of new collagen, as well as biostimulation of the already existent collagen, at the lateral zones of the face. This technique improves facial contour and skin quality with natural results and minimal side effects. When paired with subcision, the application of injectable collagen appears to be valuable adjunct treatment to treat acne scars.

**Materials & Methods:**

A pilot study involving fifteen patients seeking facial rejuvenation, primarily for skin laxity, underwent a newly developed protocol for injectable collagen application, eliminating the need for anesthetic cream or local anesthetic. Among these, three patients with marked acne scars received subcision in conjunction with collagen injection. The treatment was administered over three sessions, spaced 15 days apart, with photographic documentation taken 15 to 21 days after the final session. The injectable collagen powder was reconstituted in 6 ml of saline solution and mixed until a homogenous solution was achieved. Application was performed using a 25G cannula without any anesthetic solution. Up to 0.2 ml per side was injected in specific areas such as the nasolabial sulcus, periorbicular, and tear trough area, tailored to patient complaints. All patients completed a GAIS (Global Aesthetic Improvement Scale) questionnaire to evaluate the results after the completion of the three-session protocol and an additional 15-21 days, coinciding with the final photography.

**Results:**

All patients reported improvements from their baseline status, with an average Global Aesthetic Improvement Scale (GAIS) score improvement of 2.1, indicating a 'much improved' result. Notably, all patients observed enhancements in facial contour, along with a satisfactory lifting effect. Improvements were also seen in skin quality and texture, including rhytid amelioration. Among the four patients who presented with acne scars and underwent subcision, there was a reported average GAIS score of 1.9 ('very much improved'), accompanied by a reduction in scar volume, redness, and overall improvement in skin texture. All patients reported low to very low procedural pain and erythema in the treated areas, which resolved spontaneously on the same day. Two patients experienced minor hematomas, which also resolved spontaneously without the need for medical intervention.

**Conclusion:**

All patients reported significant and satisfactory improvement without any serious side-effects, reflecting a notable 2.1 average increase on the Global Aesthetic Improvement Scale (GAIS). The technique used in this study effectively improved facial contour and reduced sagging in all patients, along with diminishing rhytids. Those with acne scarring specifically noted considerable improvement in both redness and scar volume, achieving an average GAIS improvement of 1.9. The chosen method of delivery expedited the application process and eliminated the need for topical or injectable anesthetic solutions, thus avoiding related side-effects and reducing both resource use and additional costs.





**Abstract N°: 1326**

**Body Sculpting and Rejuvenation with Injectable Collagen: treating the Hands, Neck, Arms, Decollete and Gluteal Augmentation**

Diogo Semedo\*<sup>1</sup>

<sup>1</sup>BEST medical concept, Aesthetic Medicine, Porto, Portugal

**Introduction & Objectives:**

Collagen injection protocols targeted at bodily areas remain underutilized, despite consistently yielding good results. This work aims to demonstrate that injectable collagen treatments produce favorable outcomes in bodily rejuvenation across various areas. A new potential indication emerges, as the subdermal application of injectable collagen in the buttock area using a cannula technique has shown noticeable volume increase from a single application. By utilizing a cannula instead of the traditional needle technique, faster application is achieved without the need for topical or injectable anesthetic solutions.

**Materials & Methods:**

A pilot study was conducted on 14 independent patients to assess the efficacy of a collagen injection protocol, each presenting with concerns related to skin laxity and/or volume deficiency in a single specific area. The treatment was applied to one of the following areas: hands, upper arms, neck, decollete, or gluteal area. Additionally, one patient with depressions in the leg and upper knee areas from liposuction complications was included, and subcision was performed in conjunction with the collagen treatment. The injectable collagen powder was reconstituted in 20 ml of saline solution until a homogenous mixture was obtained. Application was performed using a 25G cannula for all areas, except the gluteal area where a 22G cannula was employed. The dilution volume applied varied according to the treated area, and further dilution (double) was used when treating thinned areas such as hands, neck, and decollete. All patients completed a GAIS (Global Aesthetic Improvement Scale) questionnaire to evaluate the treatment's effectiveness one month post-treatment, which was corroborated with photographic documentation of the treated area.

**Results:**

The present cases showed successful rejuvenation of the reported areas with variable improvement, with amelioration of skin laxity, hydration and volumization. All patients reported improvements from their baseline status, with an average GAIS score improvement of 2.2 ("improved" to 'much improved' results). The hands were the area with biggest improvement (GAIS 1.6). One patient, with iatrogenic Civatte's poikiloderma, exhibited a notable reduction in vasculature and basal erythema. All patients reported low to very low procedural pain and erythema, with same-day spontaneous resolution. Minor hematomas were reported by four patients, requiring no medical intervention.

**Conclusion:**

All patients reported significant and satisfactory rejuvenation with no serious side-effects. Injectable collagen appears to be a valid tool when patients desire buttock augmentation with natural results, with noticeable improvements in skin texture and volume observed after a single session. Nonetheless, further studies for this new possible indication are needed. In spite of the existent knowledge of collagen's anti-inflammatory properties, the surprising result for the patient with iatrogenic Civatte's poikiloderma points to a need for more investigative work. The chosen delivery method allows for fast application without the need for topical or injectable anesthetic solutions, thereby avoiding anesthetic-related side-effects. This approach also saves resources and reduces costs.



**Abstract N°: 1619****Treatment of dermatosis papulosa nigra with 1064nm Nd:YAG laser: Report of two cases**

Mariem Abdelmalek<sup>1</sup>, Malek Ben Slimane<sup>1</sup>, Faten Rabhi<sup>1</sup>, Amira Laribi<sup>1</sup>, Kahena Jaber<sup>1</sup>, Raouf Dhaoui<sup>1</sup>

<sup>1</sup>Military hospital of Tunis, dermatology, Tunisia

**Introduction & Objectives:**

Dermatosis papulosa nigra (DPN) is a benign epidermal growth characterized by hyperpigmented papules on the face, the neck and upper trunk and is considered a common variant of seborrheic keratoses. It is chronic skin condition and no treatment is required for DPN, but patients often seek treatment for cosmetic reasons.

We report the use of a long-pulsed 1064 nm neodymium:yttrium-aluminum-garnet (Nd:YAG) laser for the successful treatment of DPN in two patients.

**Materials & Methods:**

A 52-year-old woman with a history of arterial hypertension presented to the clinical with a 5-year history of multiple papules that increased in number with age. Physical examination revealed a Fitzpatrick skin type IV with numerous 2-4 mm dark brown papules on her face. After discussion of various treatment options, the decision was made to treat with a long-pulsed 1064 nm Nd:YAG laser. The lesions were treated with the laser using a 6 mm spot size. The fluence used was 150 J/cm<sup>2</sup> and the pulse duration was set to 20ms. The procedure was well tolerated by the patient with minimal pain and no need for topical anesthesia. One month after the first session, the patient reported resolution of the lesions without scarring or evidence of pigmentary changes. At this visit, she received a full face treatment of all remaining lesions using the same settings as above.

The second case is a 45-year-old woman (Fitzpatrick skin type IV) with a family history of DPN who presented to the clinical with multiple dark brown papules on her face and inframammary fold. She was treated with the 1064 nm Nd:YAG laser in a one session procedure. The lesions were treated with the laser using a 6 mm spot size. The fluence used was 150 J/cm<sup>2</sup> and the pulse duration was set to 20ms.

**Results:**

DPN is a chronic skin condition that most commonly affects people of African and Asian descent. Many patients find these lesions unsightly and seek out physicians to discuss options for removal.

Treatments for DPN have included cryotherapy, electrodesiccation, and/or curettage. Pedunculated lesions have also been excised with scissors. It is well known that these treatment modalities (especially cryotherapy) can result in unsatisfactory cosmetic outcomes, including scarring and post-inflammatory hyper- or hypo-pigmentation.

Melanin is relatively weakly absorbed at the 1064-nm wavelength, making it safe to use on patients with darker skin tones. The short-pulsed 1064 nm Nd:YAG laser has been shown to be highly effective in removing pigmented lesions such as lentiginos and is also useful for black tattoo removal. Given the safety of the 1064 nm Nd:YAG laser in darker skin types, we achieved excellent cosmetic results with no side effects after a single treatment. In addition, our patients reported minimal discomfort and did not require anesthesia. The treatment time was also very fast, between 5 and 10 minutes per patient.

**Conclusion:**

We successfully treated two patients with DPN using a single treatment with a long-pulsed 1064 nm Nd:YAG laser. This modality provided excellent cosmetic results with no side effects. It is important to note that although our patients

experienced no adverse effects, the potential risks include pigmentary changes and possible scarring. Patients with DPN should be aware of these potential side effects before deciding to undergo this treatment. The authors also recommend treating a few “test areas” and confirming that the patient is satisfied with the results before embarking on a full face treatment.

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Abstract N°: 1682

## Examination of Severity, Prevalence, and Dominant Hand Correlation with Frontal and Glabellar Wrinkle Patterns: A Cross-sectional Study

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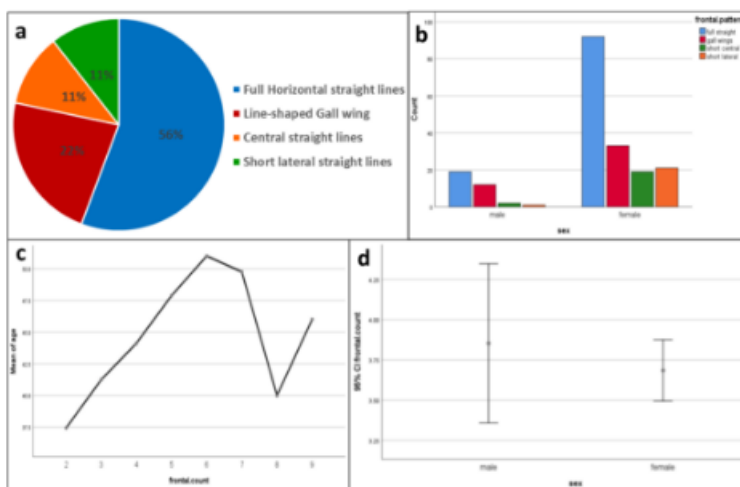
<sup>1</sup>Razi Hospital, Tehran University of Medical Sciences, Department of Dermatology, Tehran, Iran, <sup>2</sup>Misdiagnosis Association and Research Institute- MARI, Department of Dermatology, California, United States

**Introduction & Objectives:** The dynamic contractions of facial muscles result in facial lines which can persist even during rest and depend on wrinkle intensity, depth, and facial asymmetry. The study was aimed to investigate asymmetry in patterns of glabellar and frontal lines with regard to sex, age, and dominant hand in patients undergoing botulinum injections.

**Materials & Methods:** A cross-sectional study was conducted with 199 patients undergoing botulinum toxin injections at XXXX during 2021-2022. Photographs were obtained during states of resting, frowning, and eyebrow elevation. Two examiners, unaware of the dominant hand of the patients, scrutinized these images to analyse the glabellar wrinkle pattern and the dominant side of frontal wrinkles.

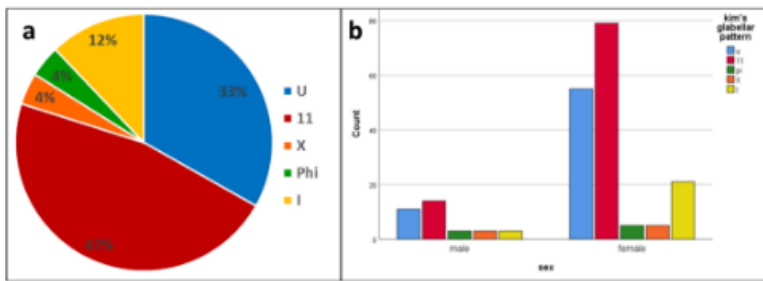
**Results:** Among the 199 individuals, 34 patients were males (17.1%) and 165 were females (82.9%). The age range varied from 24 to 69 years, with a mean age of 43.07 years. A total of 177 individuals (88.9%) identified as right-handed, while the remaining 22 (11.1%) were left-handed. No significant correlation was observed between positive history of botulinum injections and the number of forehead lines.

Full Horizontal Straight Lines were the most predominant frontal lines (55.8%) (Fig 1a). No significant gender-based differences in the frontal patterns was observed (Fig 1b). A significant positive correlation was observed between age and the number of forehead lines ( $r=0.310$ ,  $p=0.000$ ) (Fig 1c). No significant correlation was observed between the number of frontal lines and gender ( $r=0.050$ ,  $p=0.483$ ) (Fig 1d).



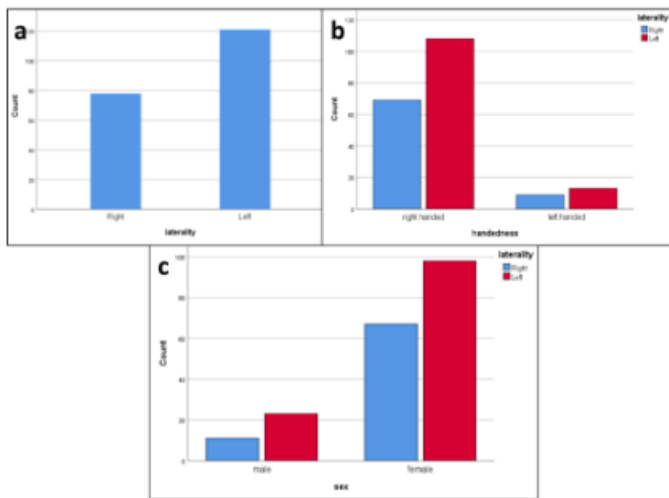
**Fig 1.** Prevalence of frontal wrinkles.

The most prevalent glabellar pattern was 11 (46.7%), followed by the U pattern (33.2%), I pattern (12.1%), and two Phi and X patterns (4.0%) (Fig 2a and 2b). No significant gender-related differences were observed in glabellar patterns ( $p=0.523$ ).



**Fig 2.** Prevalence of glabellar wrinkles.

A significant prevalence of lines on the left side was observed ( $p = 0.002$ ) (Fig 3a). No significant relationship between the dominant hand and the dominant side of forehead lines was observed ( $p=0.861$ ). Left-sided forehead lines were more common in both right-handed and left-handed individuals (Fig 3b). No significant association of gender and the dominant side of forehead lines was observed ( $p=0.369$ ). In both genders, the left side of the forehead exhibited more wrinkles (females,  $p=0.015$ ; males,  $p=0.038$ ) (Fig 3c).



**Fig 3.** Frequency of the dominant side of frontal lines in all participants.

**Conclusion:** The upper left facial region exhibits a higher tendency for wrinkles, regardless of gender and dominant hand patterns. This facial asymmetry provides significant insights for dermatological practices seeking to improve injection precision.



**Abstract N°: 1834****Combined application of adapalene 0.1% cream and combinations of plant extracts and hyaluronic acid in anti-aging therapy**Nevenka Urosevic<sup>1</sup>, Jadranka Markovic<sup>2</sup>, Milica Mijovic<sup>3</sup>, Aleksandra Markovic<sup>4</sup><sup>1</sup>Belupo Representative Office, Beograda, Serbia, <sup>2</sup>Beauty by Payot, Bulevar Mihalja Pubina 10D/82, New Belgrade, Serbia,<sup>3</sup>Univesity hospital center Dr Dragisa Misovic Dedinje, Beograda, Serbia, <sup>4</sup>Beauty by Payot, Belgrade, Serbia

**Introduction & Objectives:** Youthful appearance and wrinkle-free skin are the standard for the facial skin appearance of women over 45 years old. Aging skin is a biological process. Intrinsic aging is inevitable, unlike extrinsic aging (skin aging due to exposure to UV rays - photoaging), which can be alleviated by applying several strategies for skin rejuvenation. Applying topical retinoids in combination with topical preparations with hyaluronic acid is one of the most frequently applied and most available treatments in home care, for skin rejuvenation.

Adapalene is a stable, third-generation synthetic retinoid. This naphthoic acid derivative selectively binds to RAR  $\beta$  receptors in the epidermis and RAR  $\gamma$  receptors in fibroblasts in the dermis. Linking to RAR receptors affects the differentiation of cells and inhibits their proliferation, so it is used in the treatment of acne (approved indication by FDA and EMA) and photoaging (off-label indication). Adapalene has better profile side effects (irritation, redness, dryness of the skin) than other retinoids that can be used.

Plant extracts of Swiss Pine bark (or polyphenols), Wild Pansy, and White Horehound Extract combined with Hyaluronic Acid are found in the serum, day and night cream. These preparations have been clinically tested, and with their application, the skin becomes radiant, smooth, with less pronounced wrinkles, and protected from environmental factors that lead to skin aging.

**Materials & Methods:** This study included a group of 15 female patients aged 45+ who were followed up for a period of 12 months. The patients were given a questionnaire containing data on the skin's appearance (shine, age spots, fine and deep wrinkles, subjective assessment of appearance), which they filled out before the start of the application and after 12 months. The patients applied every morning for 12 months, serum and day cream. For the first month, they applied adapalene 0.1% cream (SONA cream) twice a week in the evening on clean and cleansed skin and 20 minutes after that night cream. Adapalene cream was applied three times a week for the next month and for the next ten months, every evening, with night cream.

**Results:** Out of 15 patients, three gave up after a month because they could not tolerate the unwanted effects of adapalene (pronounced redness, desquamation, and skin sensitivity). Twelve patients finished the entire treatment, and the analysis of the questionnaire led to the following results: skin radiance: 7 patients with a score of 4 at the beginning, gave a score of 7 at the end (4/7), five patients gave a score of 4/9; age spots: 12 is rated 2/8; subjective assessment of appearance: 5 patients gave a rating of 3/8; 4 female patients gave rating 3/9, and 3 patients gave a rating of 3/10.

**Conclusion:** From the results of the research and analysis of the questionnaire, it can be concluded that it is a simultaneous topical administration of adapalene 0.1% cream in the form of a cream in combination with a cream containing the combination of herbal preparations with hyaluronic acid that led to a significant improvement in the condition skin, after a year of regular application.

**Abstract N°: 1842****Combined application of adapalene 0,1% cream and combinations of plant extracts and hyaluronic acid in anti-aging therapy**

Nevenka Urosevic<sup>1</sup>, Jadranka Markovic<sup>2</sup>, Milica Mijovic<sup>3</sup>, Aleksandra Markovic<sup>2</sup>

<sup>1</sup>Belupo Representative Office, Beograda, Serbia, <sup>2</sup>Beauty by Payot, Belgrade, Serbia, <sup>3</sup>Univesity hospital center Dr Dragisa Misovic Dedinje, Belgrade, Serbia

**Introduction & Objectives:** Youthful appearance and wrinkle-free skin are the standard for the facial skin appearance of women over 45 years old. Aging skin is a biological process. Intrinsic aging is inevitable, unlike extrinsic aging (skin aging due to exposure to UV rays - photoaging), which can be alleviated by applying several strategies for skin rejuvenation. Applying topical retinoids in combination with topical preparations with hyaluronic acid is one of the most frequently applied and most available treatments in home care, for skin rejuvenation.

Adapalene is a stable, third-generation synthetic retinoid. This naphthoic acid derivative selectively binds to RAR  $\beta$  receptors in the epidermis and RAR  $\gamma$  receptors in fibroblasts in the dermis. Linking to RAR receptors affects the differentiation of cells and inhibits their proliferation, so it is used in the treatment of acne (approved indication by FDA and EMA) and photoaging (off-label indication). Adapalene has better profile side effects (irritation, redness, dryness of the skin) than other retinoids that can be used.

Plant extracts of Swiss Pine bark (or polyphenols), Wild Pansy, and White Horehound Extract combined with Hyaluronic Acid are found in the serum, day and night cream. These preparations have been clinically tested, and with their application, the skin becomes radiant, smooth, with less pronounced wrinkles, and protected from environmental factors that lead to skin aging.

**Materials & Methods:** This study included a group of 15 female patients aged 45+ who were followed up for a period of 12 months. The patients were given a questionnaire containing data on the skin's appearance (shine, age spots, fine and deep wrinkles, subjective assessment of appearance), which they filled out before the start of the application and after 12 months. The patients applied every morning for 12 months, serum and day cream. For the first month, they applied adapalene 0.1% cream twice a week in the evening on clean and cleansed skin and 20 minutes after that night cream. Adapalene cream was applied three times a week for the next month and for the next ten months, every evening, with night cream.

**Results:** Out of 15 patients, three gave up after a month because they could not tolerate the unwanted effects of adapalene (pronounced redness, desquamation, and skin sensitivity). Twelve patients finished the entire treatment, and the analysis of the questionnaire led to the following results: skin radiance: 7 patients with a score of 4 at the beginning, gave a score of 7 at the end (4/7), five patients gave a score of 4/9; age spots: 12 is rated 2/8; subjective assessment of appearance: 5 patients gave a rating of 3/8; 4 female patients gave rating 3/9, and 3 patients gave a rating of 3/10.

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**Abstract N°: 1953**

**CO2 LASER therapy in verrucous epidermal naevi**

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<sup>1</sup>Habib Thameur Hospital, Tunis, Tunisia

**Introduction & Objectives:**

Verrucous epidermal nevus are benign epidermal hyperplasias. Numerous treatments have been proposed, with disappointing results because of recurrences and scarring. CO2 laser represents an appealing alternative to conventional surgical removal.

**Materials & Methods:**

It was a retrospective study including patients treated with continuous CO2 laser for verrucous hamartoma from 2020 to 2023. A 10600nm ablative CO2 laser in continuous mode was used to vaporize the lesions using 9 watts of power with 20 ms duration pulse, under local anesthesia. The procedure was performed in defocused mode with a safety margin of 1 mm around the lesion. The dressing was then applied with an antibiotic ointment until complete healing.

**Results:**

7 patients (3 males and 4 females) were included, with a medium age of 26 years. Diagnosis was clinical, and histological examination was performed in only 3 cases. Hamartomas ranged in size from 1 cm to 30 cm. The epidermal verrucous nevus was situated on the neck or on the head for 85,7% of them, followed by involvement of the trunk, with a blaschkolinear arrangement in 3 cases. Treatment was satisfying in most of cases. Surgical removal was indicated in 2 cases.

**Conclusion:**

Epidermal hamartomas cause significant aesthetic discomfort. Continuous ablative CO2 laser is a simple and effective treatment. Aesthetic results are satisfying but moderate recurrences or hypertrophic scars can occur.

