Abstract N°: ID-16

Topic: Hair and nail disorders

Long-term effectiveness and maintenance of response to Baricitinib in adult patients with severe Alopecia Areata: A retrospective observational study in Greece (ROSE-G)

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Introduction

Alopecia areata (AA) is a chronic autoimmune disease that requires long-term treatment. Baricitinib, a selective JAK inhibitor, approved for the treatment of severe AA, has demonstrated long-term efficacy and safety in clinical trials and is currently being studied in pediatric patients aged six and above. In two Phase 3 trials, baricitinib 4 mg monotherapy demonstrated maintenance of efficacy over 104 weeks, with 90.7% of patients who achieved SALT ≤20 at week 52 sustaining this response at week 104 (1). Whilst real-world studies have confirmed the short-term effectiveness of baricitinib, evidence of its sustained benefit in routine practice remains scarce. To address this gap, this analysis examined the long-term effectiveness and maintenance of response in patients with severe AA treated with baricitinib in real-world settings.

Materials and Methods

ROSE-G was a retrospective observational study conducted across five Greek hospitals. Adult patients (≥18 years) with severe AA (Severity of Alopecia Tool [SALT] score ≥50) treated with baricitinib since June 2022, with at least 36 weeks of follow-up data, were included. The effectiveness of baricitinib was measured as the percentage of patients who achieved SALT score ≤20 at weeks 24 and 36. In practice, follow-up data extended beyond these time points, allowing for assessment at week 52 and up to week 104. Data on baseline characteristics, treatment patterns, maintenance of response, and regrowth of non-scalp hair were also collected. Descriptive analyses were performed.

Results

A total of 128 patients (71.1% women; mean age 44.1 ± 14.5 years) were included. At baseline, patients had a mean AA duration of 13.3 ± 12.7 years and a mean SALT score of 85.0 ± 18.2. Most patients (98.4%, n = 126) started baricitinib at 4 mg daily. At weeks 24, 36, and 52, 10.2% (n = 13), 21.9% (n = 28), and 43.8% (n = 56) of patients achieved SALT score ≤20, respectively. Among week 52 responders, 98.1% (n = 53) maintained effectiveness up to 104 weeks. A total of 60.3% (n = 35/58) of patients with severe AA (SALT score 50-94) achieved SALT score ≤20, in contrast to 30.0% (n = 21/70) of those with very severe AA (SALT score 95-100) at week 52. Among patients with a duration of current AA episode of 4 years or less at the start of baricitinib treatment, 48.2% (n = 39/81) achieved a SALT score ≤20 at week 52, in contrast to 36.2% (n = 17/47) of patients with an episode duration of over 4 years. At week 52, 47.5% (n = 29/61) experienced major or

complete eyelash regrowth, 42.7% (n = 32/75) experienced major or complete eyebrow regrowth, and 52.4% (n = 11/21) experienced major or complete beard regrowth.

Conclusions

In ROSE-G, baricitinib demonstrated sustained effectiveness in patients with severe AA, with nearly half achieving SALT score ≤20 at 52 weeks and most maintaining response up to 104 weeks. The sustained response observed in ROSE-G aligns with findings from the BRAVE-AA1 and BRAVE-AA2 Phase 3 trials. Clinically meaningful regrowth was also observed in patients with eyebrow, eyelash, or beard involvement at 52 weeks. Patients with less severe disease and shorter episode duration tended to have better outcomes, underscoring the potential benefit of early treatment initiation. These findings support baricitinib as a long-term therapeutic option for severe AA in routine clinical practice.

Abstract N°: ID-33

Topic: Hair and nail disorders

Topical Minoxidil Reported Hair Discoloration: A Cross-Sectional Study

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Introduction

Minoxidil belongs to the vasodilator medication class, and it was first approved in the 1970s as an antihypertensive drug indicated for refractory hypertension. However, due to one of its adverse effects, hypertrichosis, topical formulations were introduced to stimulate and enhance hair growth and slow hair thinning.
Topical minoxidil is the mainstay treatment for androgenetic alopecia (AGA). However, it is also an off-label treatment for many hair disorders.

This study aims to investigate a phenomenon witnessed in practice with limited reports in the literature, which is the effect of minoxidil on hair color changes.

Materials and Methods

We conducted an observational study using two face-validated questionnaires that dermatologists altered to assess minoxidil's hair discolouration risk. This Saudi Arabian survey collected data in October and November 2022. One questionnaire targeted the population, while the other targeted dermatologists.

Results

Survey 1 included 453 patients, 56.7% of whom were 18-24 and mostly female. It's interesting that 26% (n=118) detected hair greying and 14.8% (n=67) noticed other color changes. With P-values of 0.0001, longer-term minoxidil users and those with a family history of hair greying had higher hair discolouration. Dermatologists completed Survey 2 (57 participants). Nearly 60% of dermatologists have ten years of experience. 42.1% of dermatologists saw grey hair after minoxidil use. 17.5% of doctors blame minoxidil for hair graying. This observational study examined the data of over 400 patients to determine if minoxidil could cause hair discoloration.

Conclusions

This observational study examined the data of over 400 patients to determine if minoxidil could cause hair discoloration. Based on the data, we hypothesize that this drug may cause hair discoloration with prolonged use and in people with a family history of hair greying.

Abstract N°: ID-65

Topic: Hair and nail disorders

Management of Chemotherapy-Induced Alopecia: A Systematic Review and Meta-Analysis

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Introduction
An estimated 65% of chemotherapy patients are predicted to experience chemotherapy-induced alopecia (CIA) and potential alterations in the color, texture, quantity, and growth of their hair. In addition to experiencing psychological distress, patients with CIA may refuse chemotherapy or stop taking it altogether. Our systematic review and meta-analysis were conducted to assess the current state of research on CIA treatment options and preventative strategies, compiling information on their effectiveness, safety, and effects on patient outcomes.

Materials and Methods
The review adhered to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines and included searches of databases such as PubMed, EBSCO, Medline, Google Scholar, Wiley, and Web of Science. It was registered in PROSPERO with ID: CRD420251082500. The Cochrane risk-of-bias tool for randomized trials (RoB2) was employed to evaluate the risk of bias in the studies. We used RevMan 5.4.1.Dichotomous data were analyzed as proportions and a 95% confidence interval (CI). Statistical heterogeneity among the studies was assessed using I-squared (I^2) and chi-squared (Chi^2) statistics. I^2 values of 50% were indicative of high heterogeneity.

Results
Our review included 13 randomized and quasi-experimental trials that demonstrated that scalp cooling reduced moderate-to-severe chemotherapy-induced alopecia by more than half. Acceptable hair preservation rates in cooling arms ranged from 75% to 95%. In a meta-analysis of three trials, scalp cooling increased the odds of maintaining cosmetically acceptable hair by over fourteen times. In a separate meta-analysis of four trials (n = 262), scalp cooling reduced the odds of moderate-to-severe alopecia by 90%. Additionally, the patient-reported need for wigs or head coverings decreased from a control range of 45–84% to 5–33%. Adverse events were predominantly mild, including headaches, chills, and cold sensations. Treatment discontinuation due to side effects occurred in fewer than 30% of patients who received cooling. Across three RCTs, adverse events occurred in 62/150 cooled patients versus 0/95 controls, yielding a pooled OR of 86.63 for any event.

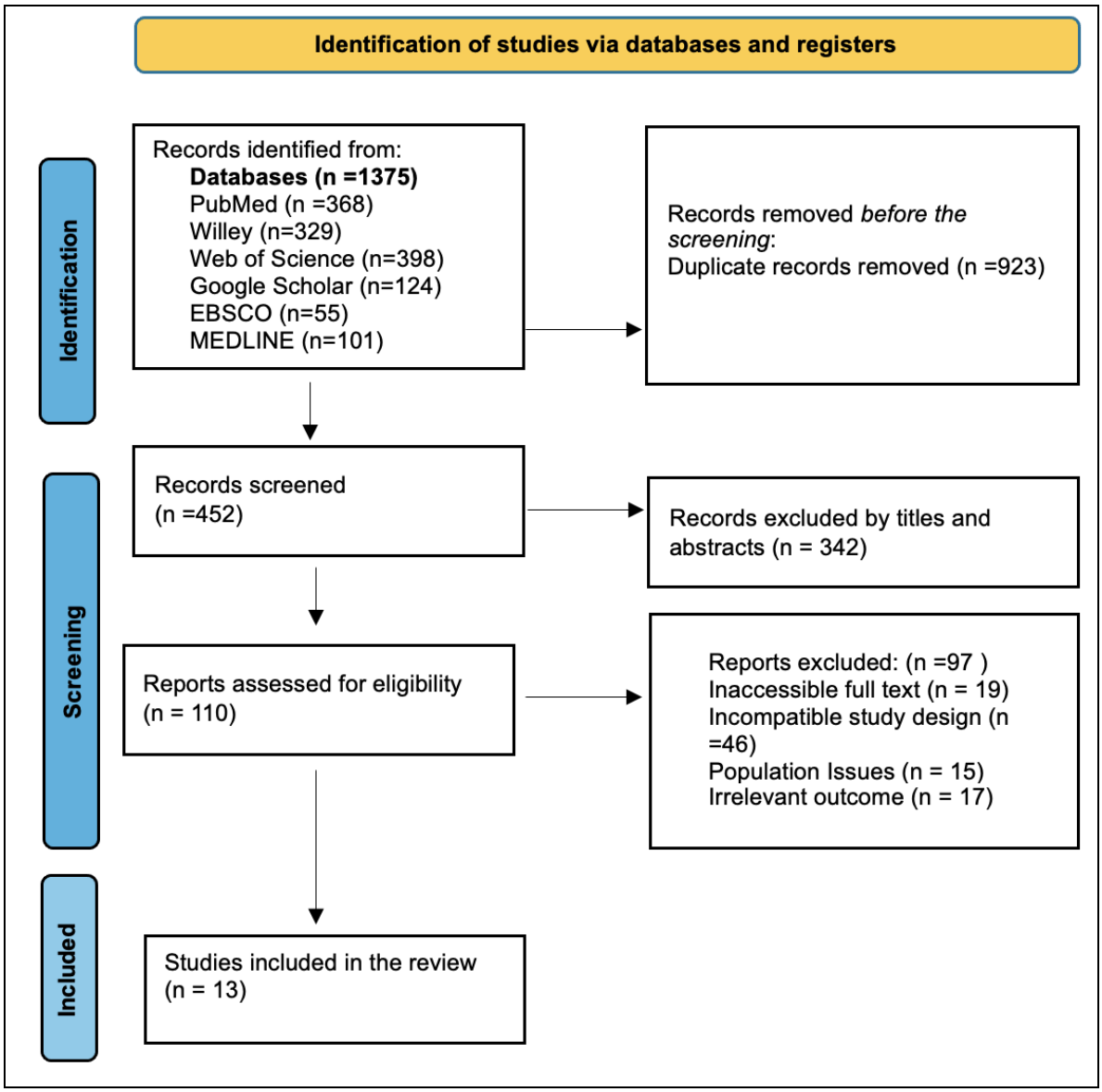

Figure 1: Schematic representation of the criteria for selecting studies in the systematic review

Conclusions

This review highlights that scalp cooling effectively reduces chemotherapy-induced hair loss, achieving hair preservation rates of 75–95%. Cooling should start 20–30 minutes before treatment, continue throughout the treatment, and last an additional 20–150 minutes afterward. Patients generally report high satisfaction, and side effects, such as mild headaches and chills, are rarely severe enough to stop treatment. Shorter post-infusion cooling times (20–45 minutes) are equally effective, allowing for improved workflow. These findings support the incorporation of scalp cooling into standard care for chemotherapy patients. Future research should focus on optimizing cooling schedules, assessing the cost-effectiveness of this treatment, and improving access to it.

Abstract N°: ID-67

Topic: Hair and nail disorders

Nail clipping histopathological examination : a new diagnosis tool for nail unit psoriasis in children, report of three cases.

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Introduction

Psoriasis is a common inflammatory skin disease, with nail involvement affecting 7–13% of children, often significantly impacting quality of life. Pediatric nail psoriasis presents diverse alterations depending on the nail structure involved, and diagnosis is challenging due to parental concerns and the invasive nature of conventional biopsies. Histopathological examination of nail clippings is a non-invasive method that can provide valuable diagnostic clues. We present three pediatric cases of nail psoriasis diagnosed using nail clipping histopathology.

Materials and Methods

We conducted a descriptive review of three pediatric patients with suspected nail psoriasis. Each underwent clinical and dermoscopic assessment, followed by mycological examination. Distal nail clippings were obtained and processed with hematoxylin–eosin and PAS staining. Histopathological features were analyzed and correlated with clinical findings to confirm the diagnosis.

Results

Patient 1: A 16-year-old boy with a 2-year history of nail changes, including onycholysis, pitting, oil drops, and subungual hyperkeratosis. No personal or family history of psoriasis. Previous antifungal therapy with terbinafine was ineffective. Dermoscopy supported clinical findings. Nail clipping revealed hyperkeratosis, parakeratosis, neutrophilic infiltrate, and absence of fungal elements on PAS stain, confirming psoriatic onychodystrophy. Local and matricial steroid injections were initiated.
Patient 2: An 11-year-old girl with 18 months of diffuse nail involvement. Physical exam showed trachyonychia of fingernails and toenails, splinter hemorrhages, and an erythematous plaque in the flexural genital area. Parents declined biopsy, but nail clipping examination showed hyperkeratosis, parakeratosis, and neutrophilic infiltrate with negative PAS stain, confirming nail psoriasis. Topical corticosteroid therapy was initiated.
Patient 3: A 16-year-old girl with family history of psoriasis presented with diffuse onycholysis. Clinical examination revealed finely scaly erythematous plaques in axillary, submammary, and umbilical folds. Nail clipping histopathology confirmed nail psoriasis. Topical corticosteroids were recommended.

Conclusions

Nail involvement is common in psoriasis: nearly 80% of patients will experience it during their lifetime. However, less than 5% have isolated nail involvement. Nail clipping is a simple and efficient procedure that detaches the distal part of the nail without the risk of permanent nail dystrophy can provide important clues for various nail diseases. In our cases, nail clipping allowed for prompt diagnostic insight where traditional biopsy might have been traumatic. The histological criteria for nail psoriasis include subungual hyperkeratosis, parakeratosis, and the presence of serous lakes and polynuclear cells. Although some signs, particularly the presence of neutrophils, are common to onychomycosis, PAS negativity in the absence of hyphae is a strong argument in favor of psoriasis. Furthermore, studies have shown a correlation between histological abnormalities and the severity of psoriasis: in children, the presence of polynuclear cells and serous lakes is associated with a higher PASI score, and the presence of serous lakes with a higher NAPSI score.

Nail clipping histopathological examination is particularly useful in the paediatric population, as it avoids the need for a nail unit biopsy, which is often traumatic for the child, and enables early initiation of treatment. Although nail clippings are easy to obtain, this method remains underused in the diagnosis of nail disease. This technique requires experience, and we encourage physicians to send more nail clipping specimens, as it allows a reliable diagnosis in most cases.

Abstract N°: ID-74

Topic: Hair and nail disorders

Hair Care Cosmetic Habits: Between Tradition and Modernity

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Introduction
The in-depth study of hair cosmetic product usage and habits among Moroccans has provided rich and nuanced insights, revealing trends and preferences specific to the Moroccan context. The key findings of this research highlight the diversity of hair care practices in Morocco, shaped by cultural, climatic, socio-economic, and individual factors.

Materials and Methods
This is a cross-sectional conducted with the aim to explore how the interplay between traditional and modern practices shapes the choices, preferences, and hair care rituals of Moroccans, and how this dynamic interaction has influenced beauty standards within Moroccan society. This study includes 510 participants who completed a questionnaire covering socio-economic background, dermatological history, hair type, and styling habits, as well as their use of traditional and modern cosmetic practices, related side effects, and personal preferences.

Results
The variety of hair textures observed, with a predominance of wavy hair, illustrates the richness of capillarity diversity within the Moroccan population. This diversity underscores the importance of tailored hair care approaches to different hair textures, in order to adress each individual's specific needs. With regard to hair health concerns, the results indicate significant rates of hair loss but relatively low rates of alopecia among the Moroccan population. This highlights the need for increased focus on preventive measures and treatment options for hair loss, while acknowledging the population's relative resilience to alopecia. Moreover, preferences in hairstyling reveal a strong tendency toward wearing hair loose, a choice likely influenced by cultural and aesthetic norms specific to Morocco. The variety of hairstyles observed reflects a society that embraces diverse forms of individual expression through hair. In terms of hair care practices, the study demonstrates frequent use of hair masks, highlighting an awareness of the importance of intensive hair care. However, the varied use of specific products—such as dry shampoos and scalp exfoliating scrubs—suggests a wide range of routines and personal approaches to hair maintenance. Importantly, the finding that nearly 70% of participants reported adverse effects following hair straightening procedures showing the urgent need for greater public awareness regarding these practices, as well as the promotion of safer alternatives to minimize associated risks.

Conclusions
This study provides an in-depth understanding of the habits and preferences of Moroccan consumers in relation to hair cosmetic products. The findings offer a solid foundation for developing targeted marketing strategies and designing products that are tailored to the specific needs of this population, thereby supporting a more holistic and culturally informed approach to hair health and well-being in Morocco.

Abstract N°: ID-78

Topic: Hair and nail disorders

Evaluation of clinical, ETIOLOGICAL & DERMOSCOPIC features of melanonychia

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Introduction

Melanonychia, presenting as brown-black nail pigmentation, may occur in longitudinal, transverse, or diffuse patterns and arise from diverse benign, infectious, and malignant causes. Few Indian studies have comprehensively evaluated all three patterns using both clinical and dermoscopic correlation.

Materials and Methods

Aims & Objectives:

- To evaluate the clinical, dermoscopic, and etiological features of melanonychia.
- To correlate clinical and dermoscopic findings with underlying causes.

Materials & Methods:

A cross-sectional study was conducted on 120 patients with melanonychia at tertiary care centre over 18 months. All underwent detailed history, clinical and dermoscopic examination of the nail plate, matrix, bed, and fold. Investigations included KOH mount, fungal culture, nail clippings, biopsy, and serum vitamin B12 estimation.

Results

Mean age was 34.5 years; males 78, females 42. Brown pigmentation predominated (104 cases). Patterns: longitudinal 61, diffuse 48, transverse 17. On clinical examination, melanonychia bands/abnormal pigmentation were seen in 31; irregular borders 12, homogeneous color bands 15, longitudinal ridges 7, thinning 6, thickening 4, dystrophy 3, hemorrhage 2, splitting 2, trachyonychia 1, and subungual growth 1. On dermoscopy, normal nail plate in 90; brown-black bands 31; irregular borders 12; color variegation 15; faint streaks and satellite globules better visualized. Regular parallel lines indicated benign lesions; multicolor irregular bands indicated fungal causes; crisscross/blurred lines with periungual pigment (Hutchinson's sign) suggested melanoma. Additional findings: nail matrix normal in 118, pitting in 2; nail bed normal in 112, onycholysis 6, subungual hyperkeratosis 4; nail fold normal in 119, Hutchinson's sign 1. KOH positive in 38/54, nail clippings positive in 4/6. Fungal culture: Trichophyton (2), Aspergillus niger (1), A. fumigatus (1); 2 negative. Biopsy (14 cases): fungal 6, melanoma 2, nevus 2, psoriasis 2, negative 2.

Conclusions

This study highlights the rarity of comprehensive Indian data evaluating clinical, dermoscopic, and etiological correlations of melanonychia across all patterns. Dermoscopy emerged as a vital, non-invasive diagnostic tool that

enhances visualization of subtle pigmentary features, enabling early differentiation between benign, infectious, and malignant causes. Recognizing the wide spectrum of etiologies—from common racial and fungal melanonychia to rare melanoma and systemic associations—is crucial for accurate diagnosis, timely management, and prevention of unnecessary interventions.

Abstract N°: ID-79

Topic: Hair and nail disorders

Comparative Efficacy of 5% Minoxidil, Redensyl–Capixyl–Procapil (RCP), and Combination Therapy in Adult Male Androgenetic Alopecia: A Prospective Observational Study

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Introduction

Androgenetic alopecia (AGA) is the most common form of non-scarring hair loss, affecting about 50% of men by age 50. It results from increased follicular sensitivity to dihydrotestosterone (DHT), causing progressive miniaturization of hair follicles and conversion of terminal hairs into vellus hairs. The Norwood–Hamilton classification, a seven-grade visual scale, is widely used to assess and monitor disease severity.

Diagnostic tools such as global photographic assessment and trichoscopy provide objective evaluation and enhance diagnostic accuracy. Trichoscopic features of AGA include hair shaft diameter variation, increased vellus-to-terminal hair ratio, yellow dots, and peripilar signs.

Topical 5% minoxidil, an FDA-approved potassium channel opener, promotes hair growth by prolonging the anagen phase and improving microcirculation. However, side effects such as itching, dryness, and shedding can reduce adherence. Recently, topical cosmeceutical complexes—Redensyl, Capixyl, and Procapil (RCP)—have shown promise due to their multi-targeted mechanisms and better tolerability. Redensyl stimulates dermal papilla cells; Procapil inhibits 5α-reductase and improves follicular metabolism; Capixyl enhances hair density through biomimetic peptides and red clover extract.

The study emphasized combining clinical, photographic, and patient self-assessment tools for comprehensive outcome evaluation.

This study aimed to compare the clinical efficacy and safety of minoxidil monotherapy, RCP monotherapy, and their combination in male AGA.

Materials and Methods

A hospital-based, prospective, quantitative study enrolled 96 male patients with AGA (Norwood–Hamilton grade II–V), divided equally into three groups: 5% minoxidil monotherapy, RCP monotherapy, and combination therapy (RCP morning, minoxidil night). Patients were followed for 12 months at baseline, 3, 6, 9, and 12 months. Efficacy was evaluated using the Norwood–Hamilton scale, trichoscopy, global photographic assessment, Investigator Global Assessment (IGA), and a patient self-evaluation questionnaire. Data were analyzed using ANOVA, Kruskal–Wallis, Chi-square, and repeated-measures ANOVA tests.

Results

After 12 months, combination therapy showed the greatest improvement in hair density, trichoscopic parameters, and overall patient satisfaction ($p < 0.001$). Both RCP and minoxidil monotherapies demonstrated comparable efficacy with modest improvement from baseline ($p < 0.05$). Investigator and patient assessments correlated strongly with objective findings. No major adverse effects were reported; mild itching and dandruff occurred in a few patients in the minoxidil group, resolving with emollient shampoo use.

Conclusions

Combination therapy with Redensyl–Capixyl–Procapil and 5% minoxidil demonstrated superior efficacy and comparable safety to monotherapies. This dual approach may enhance patient satisfaction and adherence, offering an effective treatment option for male androgenetic alopecia. All treatments were well tolerated with only mild, transient side effects. Combination therapy appears to offer a synergistic benefit and may be considered an effective option for adult males with AGA.

Abstract N°: ID-83

Topic: Hair and nail disorders

Monilethrix: A Case Report From Saudi Arabia

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Introduction
Monilethrix is a rare structural disorder of the hair shaft characterized by increased fragility and patchy, dystrophic alopecia. We report a case of an 18-year-old medically free female who presented with short and brittle hair since early childhood.

Materials and Methods
The patient underwent trichoscopic examination to evalute hair shaft abnormalities. Findings were further assessed and confirmed through light microscopy and hair shaft analysis.

Results
Clinical examination demonstrated short, brittle scalp hair with diffuse fragility and patchy dystrophic alopecia. Hair shafts were easily broken and coluld be extracted with minimal traction. Similar involment was observed in the eyebrows and eyelashes, while body hair appeared normal. Trichoscopic evaluation revealed characteristic beaded hair shafts with regularly spaced elliptical nodes and intermittent constrictions, in addition to broken hairs, vellus hairs, and yellow dots. Light microscopy and hair shaft analysis confirmed the presence of monilethrix. No associated systemic abnormalities were identified.

Conclusions
This case represents a mild yet classic presentation of monilethrix, emphasizing the diagnostic value of trichoscopy as a rapid, non-invasive tool for identifying characteristic hair shaft abnormalities. Early recognition of this condition is essential to avoid unnecessary investigations and to provide appropriate counseling and supportive managment. Increased awareness of trichoscopic findings can fragility disorders.

Abstract N°: ID-132

Topic: Hair and nail disorders

Split-Scalp Case Series of Non-Ablative Fractional 1550-nm Diode Laser Plus 2% Topical Minoxidil Versus Minoxidil Alone in Asian Women (Fitzpatrick IV–V) With Female Pattern Hair Loss

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Introduction

Female pattern hair loss (FPHL) especially in Fitzpatrick skin types IV-V presents unique therapeutic challenges, and evidence supporting energy-based devices as adjunctive treatments remains limited. The non-ablative fractional 1550-nm diode laser therapy has been proposed to enhance hair follicular cycling and regrowth by inducing dermal microthermal zones capable of stimulating wound-healing pathways associated with perifollicular remodelling and neo-angiogenesis. Prior studies in Asian populations have suggested potential benefit, but these have predominantly examined laser monotherapy or compared laser with topical agents. Evidence in women with Fitzpatrick IV–V skin remains scarce. To date, there are no reports evaluating non-ablative fractional 1550-nm laser as an **adjunct** to topical 2% minoxidil in a **split-scalp design** among Asian women. This study aims to explore the preliminary efficacy and safety of this combined approach in female pattern hair loss.

Materials and Methods

We conducted an ongoing prospective split-scalp case series including adult female participants (Fitzpatrick IV–V) with clinically diagnosed female pattern hair loss (Sinclair grade 2–4). All participants applied 2% topical minoxidil solution twice daily to entire affected scalp throughout the study period; minoxidil was withheld on laser treatment days and resumed the following day. One randomly assigned scalp half received adjunctive treatment with non-ablative fractional 1550-nm diode laser at 4-week intervals for three sessions, while the contralateral half served as a minoxidil-only control. Standardized global photography and dermoscopic imaging of marked target areas were performed at baseline and Weeks 4, 8, and 12. The primary outcome was percentage change in hair density (hairs/cm^2) at Week 12. Secondary outcomes included changes in terminal hair density, hair shaft diameter, investigator-rated global improvement, patient-reported satisfaction, and adverse events.

Results

Data acquisition is ongoing. Interim analyses from the first enrolled cases indicate visible improvements in hair density and global appearance on the laser-treated side compared with the minoxidil-only side, without unexpected safety concerns. Mild and transient erythema was the most common observation after laser sessions. Full 12-week quantitative outcomes from all participants will be presented.

Conclusions

This split-scalp case series explores the adjunctive role of non-ablative fractional 1550-nm diode laser in female pattern hair loss among women with Fitzpatrick IV–V. Preliminary observations suggest potential synergistic benefit when combined with topical minoxidil, with good tolerability. Final results may help guide clinical decision-making and support the development of controlled trials evaluating fractional laser therapy as a complementary approach for hair regeneration in darker phototypes.

Abstract N°: ID-156

Topic: Hair and nail disorders

Dermoscopic Follow-up of Pediatric Nail Matrix Nevi

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Introduction

Nail matrix nevus (NMN) is the most common cause of longitudinal melanonychia (LM) in the pediatric population; however, it may present with clinical and dermatoscopic features mimicking nail matrix melanoma (NMM), leading to significant diagnostic challenge. In children, unnecessary biopsies may result in permanent nail dystrophy and may also show atypical histopathological findings, which further emphasizes the importance of follow-up–oriented management. The aim of this study was to evaluate the clinical and dermatoscopic characteristics and long-term natural course of pediatric NMN, to define benign dynamic patterns observed during follow-up, and to contribute to the differential diagnosis by reducing unnecessary biopsies.

Materials and Methods

A total of 72 pediatric patients (36 girls and 36 boys), with lesion onset between 0 and 12 years of age, who were clinically and/or dermatoscopically diagnosed with NMN and followed at a tertiary dermatology center (2006–2024), were included in the study. Demographic characteristics, dermatoscopic findings and long-term follow-up data were retrospectively reviewed and recorded. Patients were classified as congenital, late congenital, or acquired NMN according to the age at onset. Initially, baseline dermatoscopic features of NMN subgroups were evaluated; subsequently, changes in pigmentation, band width, pattern fluctuation, and regression observed during follow-up were analyzed. Regression was categorized as minor (<50%), partial (≥50% but incomplete), and complete (100%). Possible risk factors associated with regression were also evaluated using logistic analysis.

Results

The mean age of the patients was 5.03 ± 3.48 years. Lesions were located on the fingernails in 88.9% of cases and on the first digit in 48.6%. Fitzpatrick skin types III–IV were predominant (84.7%). The pigment band width involved <1/3 of the nail plate in 58.3% of patients; longitudinal lines were irregular in 83.3%, and pigmentation was predominantly two-colored in 68.1%. Multichromatic pigmentation (≥3 colors) was observed in 31.9%, loss of parallelism in 59.7%, triangular band in 27.8%, globules in 26.4%, fine dust-like dots in 56.9%, Hutchinson's sign in 12.5%, distal fibrillar pattern in 6.9%, and spiral melanonychia in 12.5% of cases. The mean follow-up duration was 41.4 ± 33.1 months. During follow-up, fading in pigmentation was observed in 51.4%, darkening in 15.3%, and darkening followed by fading in 8.3% of patients. Band width increased in 43.1%, decreased in 22.2%, and showed an increase followed by a decrease in 8.3%. An increase in globules was noted in 8.3%, fine dust-like dots in 9.7%, and pattern fluctuation in 4.2% of cases. Complete regression was observed in 23.6% of patients. No significant differences in baseline dermatoscopic patterns or regression rates were found between congenital and acquired NMN. In logistic regression analysis, only spiral melanonychia was significantly associated with regression (p = 0.001) (Table-1).

Characteristics		All lesions (n = 72)
Width of melanonyx	Less than one-third of the nail plate	42 (58,3)
	One-third to two-thirds of the	18 (25.0)

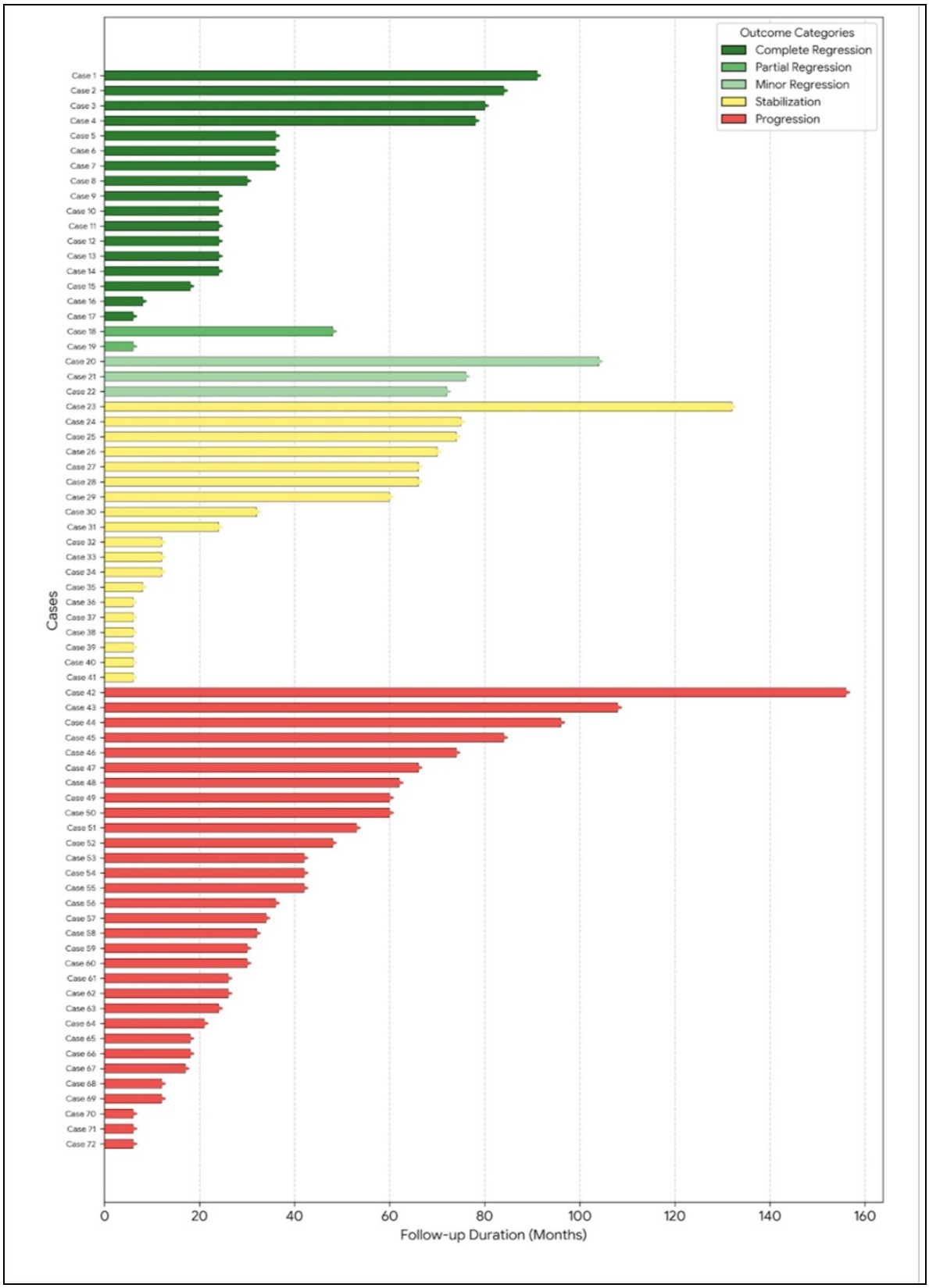
Width of melanonychia, n(%)	nail plate	[illegible]
	More than two-thirds of the nail plate	9 (12,5)
	Totality of the nail plate	3 (4,2)
Pattern of longitudinal microlines, n(%)	No streak	1 (1,4)
	Irregular pattern	60 (83,3)
	Regular pattern	11 (15,3)
Color of longitudinal microlines, n(%)	LB, DB	49 (68,0)
	LB, DB, grey	1 (1,4)
	LB, DB, grey, blue, black	4 (5,6)
	LB, DB, grey, black	2 (2,8)
	LB, DB, leukonychia	1 (1,4)
	LB, DB, black	13 (18,0)
	DB, black, blue	1 (1,4)
	LB, yellow	1 (1,4)
Number of colors of longitudinal microlines, n(%)	2	49 (68,1)
	3	17 (23,6)
	≥4	6 (8,3)
Loss of parallelism, n (%)	Absent	29 (40,3)
	Present	43 (59,7)
Triangular Band, n (%)	Absent	52 (72,2)
	Present	20 (27,8)
Globules, n(%)	Absent	53 (73,6)
	Present	19 (26,4)
Fine dust-like dots, n (%)	Absent	31 (43,1)
	Present	41 (56,9)
Hutchinson sign localization, n(%)	Absent	63 (87,4)
	Hyponychium	2 (2,8)
	Proximal and lateral nail folds	4 (5,6)
	Hyponychium and proximal and lateral nail folds	3 (4,2)
Hutchinson's sign, n (%)	Absent	63 (87,5)
	Present	9 (12,5)
Micro-Hutchinson's sign, n(%)	Absent	70 (97,2)
	Present	2 (2,8)
Pseudo-Hutchinson's sign, n(%)	Absent	45 (62,5)
	Present	27 (37,5)
Distal Fibrillar Pattern, n(%)	Absent	67 (93,1)
	Present	5 (6,9)
Spiral Pattern, n(%)	Absent	63 (87,5)
	Present	9 (12,5)
Nail plate free edge involvement, n(%)	Dorsal	2 (2,8)
	Ventral	25 (34,7)
	[illegible]	[illegible]

	Both dorsal and ventral	45 (62,5)
Nail dystrophy, n(%)	Absent	64 (88,9)
	Present	8 (11,1)
Change in pigmentation, n(%)	Fading	37 (51,4)
	Darkening	11 (15,3)
	Darkening followed by fading	6 (8,3)
	Stable	18 (25,0)
Change in band width, n(%)	Increase	31 (43,1)
	Decrease	16 (22,2)
	Increase followed by decrease	6 (8,3)
	Stable	19 (26,4)
Increase in globules, n(%)	Absent	66 (91,7)
	Present	6 (8,3)
Increase in fine dust-like dots, n(%)	Absent	65 (90,3)
	Present	7 (9,7)
Pattern fluctuation, n (%)	Absent	69 (95,8)
	Present	3 (4,2)
Complete regression, n(%)	Absent	55 (76,4)
	Present	17 (23,6)
Partial regression (≥50%) , n(%)	Absent	70 (97,2)
	Present	2 (2,8)
Minor regression (<50%), n(%)	Absent	69 (95,8)
	Present	3 (4,2)

Baseline clinical and dermatoscopic features, as well as dynamic changes observed during follow-up in pediatric nail matrix nevi (NMN) (n = 72) LB: Light Brown, DB: Dark Brown

Conclusions

This study demonstrates that the natural course of pediatric NMN is not static but represents a dynamic biological process with marked variability (Table 2). Our findings support that the vast majority of pigmented nail bands appearing in the prepubertal period are consistent with benign NMN and can be safely monitored with regular clinical and dermatoscopic follow-up. Dermatoscopic features considered suggestive of melanoma in adults—such as irregular lines, multichromatic pigmentation, globules, loss of parallelism, and Hutchinson's sign—may also be frequently observed in benign nevi during childhood and should not be used as sole indications for biopsy in pediatric patients. The identification of dynamic dermatoscopic features such as spiral melanonychia and pattern fluctuation provides a novel perspective on the biological behavior of NMN. The absence of melanoma on long-term follow-up supports individualized, follow-up–based management guided by shared decision-making in pediatric patients.



Follow-up duration (months) and clinical outcome categories (complete regression, partial regression, minor regression, stabilization, and progression) in individual pediatric nail matrix nevi (NMN) cases

Abstract N°: ID-168

Topic: Hair and nail disorders

Clinical Phenotypes in Lichen Planopilaris: The Role of Cutaneous Lichen Planus and Scalp Involvement Patterns

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Introduction
Lichen planopilaris (LPP) is a primary lymphocytic cicatricial alopecia with a heterogeneous clinical presentation. The clinical significance of concomitant cutaneous lichen planus (LP) and different scalp involvement patterns remains incompletely defined. The aim of this study was to characterize clinical phenotypes of LPP by examining associations between cutaneous LP, scalp involvement patterns, and demographic and clinical features.

Materials and Methods
This retrospective cohort study included 45 patients with LPP evaluated at a tertiary referral center between January 2023 and November 2025. Demographic characteristics, disease duration, presence of cutaneous LP, systemic comorbidities, scalp involvement patterns, and treatment modalities were extracted from medical records. Comparisons between patients with and without cutaneous LP were performed using appropriate statistical analyses.

Results
Concomitant cutaneous LP was identified in 9 patients (20.0%). Patients with cutaneous LP were significantly older at presentation than those without skin involvement (mean difference, 9.5 years; $p = 0.039$). A reversal of the typical female predominance was observed in the LP-positive subgroup, with males showing higher odds of concomitant cutaneous involvement, although this did not reach statistical significance. A trend toward a higher prevalence of systemic comorbidities was also observed in LP-positive patients. Scalp involvement patterns demonstrated marked heterogeneity. Notably, none of the patients with occipital involvement had concomitant cutaneous LP. Frontal involvement was associated with earlier presentation, whereas occipital involvement was associated with longer disease duration at presentation.

Conclusions
Lichen planopilaris exhibits clinically relevant heterogeneity. Concomitant cutaneous involvement and specific scalp patterns may define distinct clinical phenotypes with potential implications for disease classification and management.

Abstract N°: ID-171

Topic: Hair and nail disorders

Familial true leukonychia: A case report with review of the literature

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Introduction

True leukonychia is a rare nail disorder characterised by persistent white discoloration of the nail plate resulting from abnormalities in the nail matrix. It can present in various forms, including total, partial, transverse, longitudinal or punctate, and is classified as true, apparent or pseudoleukonychia based on the site of pathology.

Materials and Methods

This report describes two brothers with long-standing, non-syndromic familial true leukonychia of all fingernails, highlighting the clinical features, diagnosis, and the importance of awareness of this rare presentation. We also conducted a literature search to identify published reports of hereditary, familial, or idiopathic true leukonychia. The databases PubMed, Scopus, and Google Scholar were searched from inception to March 2025. The keywords and Medical Subject Headings used in combination included ‘Leukonychia’, ‘Nails’, ‘Hereditary Diseases’, ‘Familial’, ‘Idiopathic’, and ‘True leukonychia’. Search queries were combined using Boolean operators, e.g., (Leukonychia OR ‘true leukonychia’) AND (hereditary OR familial OR idiopathic) AND (nails).

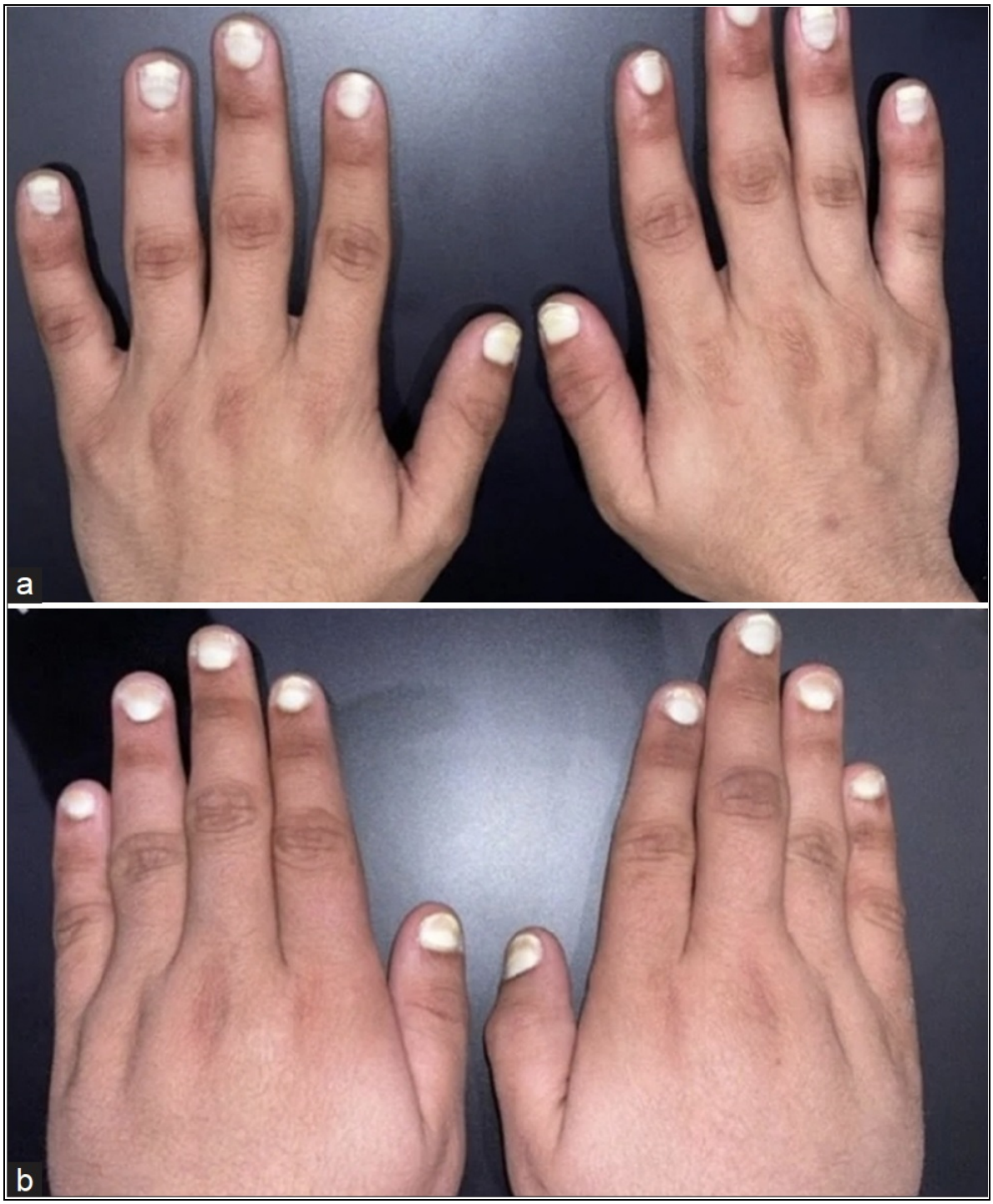

Figure 1: Familial true leukonychia in two brothers. (a) Clinical photograph of a 25-year-old male patient (older brother) presenting with porcelain-white fingernails affecting all digits, sparing the toenails. (b) Clinical photograph of a 29-year-old male patient (younger brother) presenting with porcelain-white fingernails affecting all digits, sparing the toenails.

Results

We report two brothers with lifelong leukonychia affecting all fingernails and sparing toenails. Both were otherwise healthy, with no history of systemic illness, medication use, or chemical exposure. Examination showed porcelain-white fingernails with non-blanching whitening and normal periungual tissue. Laboratory tests, including complete blood count, micronutrient levels, and fungal cultures, were normal. No other family members were affected. Based on clinical features, absence of systemic disease, and positive family history, a diagnosis of familial idiopathic true leukonychia was made. The term “idiopathic” is retained because no genetic testing was performed, and the exact etiology remains unknown. The absence of PLCD1 gene testing is acknowledged as a limitation, as mutations in this gene have been associated with hereditary leukonychia. Familial true leukonychia is a benign, non-progressive condition. Recognition of familial patterns is crucial in avoiding unnecessary investigations and providing reassurance to patients.

Table 1: Reported cases of familial or idiopathic true leukonychia in the literature.

Author (Year)	Age/ Sex	Clinical features	Duration (years)	Inheritance pattern	Associated features	Outcome/treatment
D'Souza *et al.* (2015)[11]	10/M	Partial to total leukonychia	6	NS	None	Zinc+amino acids (improved)
Chaudhry and Black (2006)[12]	31/F	Transverse leukonychia	19	NS	None	Resolved during pregnancy
Eller and Anderson (1928)[13]	15/M	Total leukonychia	1	NS	None	NR
Stewart *et al.* (1985)[14]	23/M	Total and partial leukonychia	10	NS	None	NR
Lee *et al.* (2004)[15]	26/M	Total leukonychia except left thumb	13	NS	None	NR
Park *et al.* (2005)[2]	26/M	Partial to total leukonychia	13	NS	None	NR
Claudel *et al.* (2001)[16]	12/M	Partial and total leukonychia post steroids	1	NS	Post-steroid use	Spontaneous resolution
De and Handa (2007)[17]	66/M	Total leukonychia	2 months	Familial	Lichenoid drug rash with hereditary total leukonychia	Oral dapsone 100 mg/ day and reassurance after no change
Bongiorno and Aricò (2009)[18]	34/M	Partial and total leukonychia	11	NS	None	NR
Arsiwala (2012)[9]	35/M	Total fingernail and subtotal toenail leukonychia	23	NS	None	NR
Bakry *et al.* (2014)[19]	12/M	Total leukonychia	8	NS	None	NR
Kim *et al.* (2014)[20]	19/M	Partial and total toenail leukonychia	0.08	NS	None	NR
Dlova and Tosti (2014)[5]	20/M	Total leukonychia	8	NS	None	NR
Dlova and Tosti (2014)[5]	12/M	Total and partial leukonychia	Since birth	NS	None	NR
Verma and Thakur (2014)[21]	24/M	Fingernail total, toenail partial	2	NS	None	NR
Neki (2014)[22]	29/M	Total leukonychia	9	NS	None	NR
Angoori and Koppada (2015)[23]	30/M	Total leukonychia	Since childhood	Familial	None	NR
Angoori and Koppada (2015)[23]	32/M	Total leukonychia	24	Familial	None	NR
Canavan *et al.* (2015)[24]	25/M	Total and partial leukonychia	1	NS	None	NR
Das *et al.* (2016)[25]	14/M	Total leukonychia	10	NS	None	NR
Mathachan *et al.* (2020)[10]	20/M and 18/M	Total and partial leukonychia	1 and 3	Familial	None	NR
Freeman *et al.* (2021)[26]	17/M	Total leukonychia	6	NS	None	NR
Pandey and Pathak (2022)[27]	17/M	Total and partial leukonychia	3	NS	None	NR
Lin and Wee (2024)[28]	8/M	Total leukonychia+nail fold eczema	1.5	NS	Nail fold eczema	NR
Almaani *et al.* (2024)[29]	22/M	Recurrent total leukonychia	7	NS	None	NR

M: Male, F: Female, NR: Not reported, NS: Not stated

Table 1: Reported cases of familial or idiopathic true leukonychia in the literature

Conclusions

Familial true leukonychia is a very rare but harmless nail condition, presenting as lifelong, stable white discoloration of the fingernails without systemic associations. Awareness of this benign entity is essential to avoid unnecessary investigations, misdiagnosis as systemic disease or fungal infection, and inappropriate treatments. The present report of two affected brothers with identical findings and no other family history highlights the importance of careful history-taking, clinical examination, and recognition of familial patterns. While genetic testing was not performed in our patients, representing a limitation, it may help confirm suspected hereditary cases in future studies. In most cases, including ours, no treatment is required; reassurance and periodic observation are sufficient.

Abstract N°: ID-224

Topic: Hair and nail disorders

Injectable Platelet-Rich Plasma in Female Androgenetic Alopecia: Evidence Gaps Behind a Popular Therapy

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Introduction

Female androgenetic alopecia (FAGA) is the most common cause of patterned hair loss in women and is associated with a significant psychosocial burden, negatively affecting quality of life and self-esteem. Current therapeutic options for FAGA are limited, particularly non-hormonal treatments, and often provide modest or variable clinical benefit. As a result, interest in regenerative and biologic therapies has increased in recent years.

Injectable platelet-rich plasma (PRP) has gained widespread popularity as a treatment for female hair loss due to its proposed ability to stimulate follicular activity through the release of growth factors and cytokines. Despite its increasing use in everyday clinical practice, the scientific evidence supporting PRP in women remains heterogeneous. Published studies vary considerably in patient selection, outcome measures, PRP preparation techniques, injection protocols, and follow-up duration. Moreover, female-specific randomized controlled data are scarce, and standardized treatment recommendations are lacking.

The objective of this review is to critically evaluate recent clinical evidence on the efficacy of injectable PRP in female androgenetic alopecia and to identify key evidence gaps that underlie its widespread clinical adoption.

Materials and Methods

A focused literature review was conducted using PubMed/MEDLINE and Scopus databases, including studies published between January 2021 and January 2026. Eligible studies involved adult women with clinically and/or trichoscopically confirmed female androgenetic alopecia treated with injectable autologous PRP. Studies including mixed interventions, hair transplantation, microneedling, non-androgenetic alopecias, or non-original article types were excluded. Primary outcomes included changes in hair density, hair shaft thickness, global photographic assessment, and patient-reported outcomes. Secondary outcomes included PRP preparation and injection protocols, durability of response, predictors of treatment efficacy, and safety.

Results

Only two randomized controlled trials exclusively enrolling women with female androgenetic alopecia met the inclusion criteria, together including fewer than 100 female participants. Across both trials, injectable PRP consistently improved objective trichoscopic parameters, particularly hair density and hair shaft thickness, compared with baseline and, where applicable, placebo. Favorable global photographic assessments and patient-reported satisfaction were also reported. However, comparative effectiveness versus standard therapy varied across outcome measures. Importantly, PRP preparation methods and injection protocols were incompletely reported and lacked standardization, limiting reproducibility and inter-study comparability. Data on long-term efficacy and predictors of response were insufficient.

Conclusions

Despite its widespread use in clinical practice, injectable PRP for female androgenetic alopecia is supported by a limited body of high-quality randomized evidence. While short-term improvements in density- and thickness-based outcomes

appear reproducible, substantial evidence gaps persist regarding protocol standardization, durability of response, and optimal patient selection. Well-designed, standardized, female-specific randomized trials with longer follow-up are urgently needed to define the precise role of PRP in FAGA.

Abstract N°: ID-254

Topic: Hair and nail disorders

Fibrosing Alopecia in a Pattern Distribution in a Young Male Patient: A Diagnostic Pitfall

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Introduction
Fibrosing alopecia in a pattern distribution (FAPD) is a relatively recently described form of lymphocytic cicatricial alopecia showing overlapping clinical and histopathological features of lichen planopilaris and androgenetic alopecia. The condition primarily affects androgen-dependent areas of the scalp, while recent multicentre data also indicate a higher prevalence among older women. Herein, we report a young male patient diagnosed with fibrosing alopecia in a pattern distribution following further evaluation due to poor response to conventional androgenetic alopecia treatment to raise awareness of this under-recognized entity.

Materials and Methods
A young male patient presenting with progressive hair loss underwent detailed dermatological examination, trichoscopic assessment, and scalp biopsies for diagnostic evaluation.

Results
A 22-year-old male presented with a three-year history of progressive hair loss. He reported previous use of topical minoxidil, which was discontinued due to worsening eczematous symptoms. He had no relevant medical history or regular medication use. Dermatological examination revealed diffuse thinning over the frontal, mid-scalp, and vertex regions, with a positive hair pull test.
Trichoscopic evaluation demonstrated marked hair shaft miniaturization, anisotrichosis, focal perifollicular and interfollicular scaling, and several empty follicular openings. Given the presence of perifollicular and interfollicular scaling together with loss of follicular ostia, cicatricial alopecia was suspected, and two scalp biopsies were done. Histopathological examination revealed a reduced number of terminal hair follicles in both specimens. In one sample, foreign body-type giant cell reactions to exposed keratin from destroyed follicles and fibrotic changes consistent with cicatricial alopecia were observed. Based on the combined clinical, trichoscopic, and histopathological findings, a diagnosis of fibrosing alopecia in a pattern distribution was established. The patient was started on topical minoxidil and hydroxychloroquine therapy.

Conclusions
Although the aetiology of FAPD remains incompletely understood, the observed response to antiandrogen therapies suggests a potential role of androgens in contributing scalp inflammation. Given its clinical overlap with androgenetic alopecia and its potential to cause irreversible scarring hair loss, early recognition of FAPD is crucial. Increased awareness of this entity may help prevent delayed diagnosis and improve therapeutic outcomes.

Abstract N°: ID-442

Topic: Hair and nail disorders

Herbal Remedies for Androgenetic Alopecia: Saw Palmetto-Friend or Foe?

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Introduction
Androgenetic alopecia (AGA) is the most prevalent form of hair loss in men and is associated with considerable psychosocial burden. While approved pharmacologic therapies are effective, concerns regarding adverse effects and long-term adherence have led to increasing interest in herbal and plant-derived alternatives. Numerous herbal agents have been proposed for AGA, yet their comparative efficacy and level of evidence remain unclear. This study aimed first to critically review the available clinical evidence on herbal remedies for AGA and subsequently to evaluate the efficacy and safety of a pure topical *Serenoa repens* (Saw Palmetto) extract in men with AGA.

Materials and Methods
The study was conducted in two phases. First, a structured literature review was performed to identify herbal remedies investigated for AGA, focusing on clinical outcomes, proposed mechanisms of action, and quality of evidence. Second, a prospective clinical study was conducted involving 38 healthy men aged 30–50 years with mild to moderate AGA. Participants applied a pure topical *Serenoa repens* extract lotion to the scalp twice daily for 12 weeks. Treatment efficacy was assessed using target area hair counts to measure total, terminal, and vellus hairs; global photographic assessment performed independently by three blinded dermatologists using a 7-point scale; and participant satisfaction evaluated using a 7-point self-assessment score. Safety was monitored through the reporting of adverse events.

Results
The literature review identified multiple herbal agents proposed for the management of androgenetic alopecia, primarily through inhibition of 5α-reductase activity and modulation of androgen signaling. Botanicals with reported activity in human, in vivo, or in vitro studies included *Serenoa repens*, *Camellia sinensis*, *Panax ginseng*, *Trifolium pratense*, *Cucurbita pepo*, *Rosmarinus officinalis*, *Curcuma aeruginosa*, *Sophora flavescens*, and selected essential oils (Figure 1). However, the reviewed studies demonstrated substantial heterogeneity in study design, sample size, formulation composition, and outcome measures. Most clinical investigations involved multi-ingredient preparations or lacked objective hair-growth assessments, limiting definitive conclusions regarding isolated efficacy.
In the clinical phase, topical application of pure *Serenoa repens* extract for 12 weeks resulted in significant improvements across all objective and subjective parameters. Total and terminal hair counts increased significantly, while vellus hair counts decreased ($p < 0.001$). Global photographic assessment performed by three blinded dermatologists demonstrated visible improvement in hair density and quality in the majority of participants. Participant satisfaction scores also increased significantly from baseline. The treatment was well tolerated, and no treatment-related adverse events were reported.

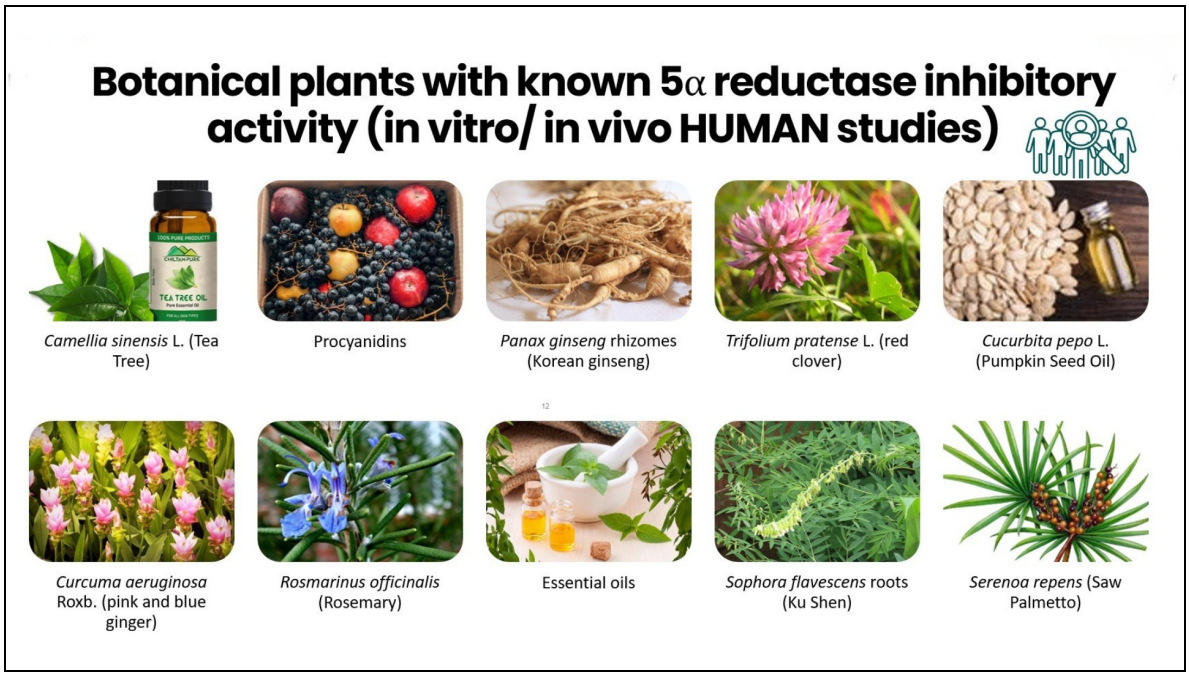

Figure 1. Botanical plants with known 5α reductase inhibitory activity (in vitro/in vivo HUMAN studies)

Conclusions

Current evidence supporting herbal remedies for androgenetic alopecia is limited by methodological heterogeneity, frequent use of multi-ingredient formulations, and inconsistent outcome measures. Among reviewed agents, *Serenoa repens* demonstrated the most consistent mechanistic rationale and clinical signal. The clinical phase of this study confirms that pure topical *Serenoa repens* extract is effective and well tolerated, with significant improvements in objective hair counts, photographic assessments, and participant satisfaction. These findings support the potential role of Saw Palmetto as a standalone herbal therapy and justify further large-scale, controlled trials to define its long-term efficacy and comparative effectiveness.

Abstract N°: ID-453

Topic: Hair and nail disorders

Yellow Nail Syndrome in Childhood: Diagnostic Challenges and the Possible Role of Nail Development–Related Genetic Variants

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Introduction

Yellow nail syndrome (YNS) is a rare disorder classically defined by the triad of yellow nail discoloration, lymphedema, and respiratory involvement.[1] The syndrome is predominantly sporadic and considered an acquired condition, although rare familial cases suggesting genetic susceptibility have been reported.[2,3] Importantly, no specific causative genetic mutation has been identified, and YNS is not regarded as a monogenic inherited disorder.[3,4]The diagnosis is primarily clinical, and the presence of two components of the classical triad is considered sufficient, particularly in pediatric patients who often present with incomplete or atypical manifestations.[5]
Lymphatic dysfunction is thought to play a central role in the pathogenesis of YNS. In selected cases, genes involved in lymphangiogenesis and nail development, such as FOXC2 and FZD6, have been investigated mainly to exclude hereditary disorders with overlapping phenotypes rather than to establish a genetic diagnosis.[4,6]

Materials and Methods

An 8-year-old female patient presented with nail dystrophy, yellow discoloration, slow nail growth, and recurrent pain and swelling of the left lower extremity. Her medical history was notable for patent foramen ovale. Dermatological examination revealed dystrophy, yellow discoloration, and cuticle loss affecting all 20 nails (Figure 1). Frontal bossing was also observed (Figure 2). Cranial and vertebral magnetic resonance imaging previously performed showed no abnormalities. Ophthalmologic, neurologic, and otorhinolaryngologic evaluations were unremarkable.
With a preliminary diagnosis of YNS, a nail plate biopsy was obtained, and the patient was referred to the medical genetics department because of early-onset diffuse nail involvement and recurrent unilateral lymphedema. Genetic testing focused on FOXC2 and FZD6 to exclude hereditary lymphatic and nail disorders. The patient was also evaluated by pediatric rheumatology, neurology, cardiology, and nephrology departments to investigate potential systemic or inflammatory causes.

Results

Pediatric evaluation, including thoracic computed tomography, electrocardiography, and echocardiography, revealed no pulmonary or cardiac involvement. Rheumatologic, neurologic, and nephrologic assessments were unremarkable. Histopathological examination of the nail plate biopsy demonstrated dense band-like bacterial aggregates resembling a biofilm beneath the nail plate, while fungal microorganisms were excluded. This finding, previously reported in YNS, may contribute to nail discoloration and dystrophy.[1] The findings were considered compatible with YNS.

Genetic analysis identified a heterozygous variant of unknown significance in the FZD6 gene, which has been associated with nonsyndromic nail disorder type 1.[7] No mutation was detected in the FOXC2 gene, supporting an acquired lymphatic dysfunction rather than a hereditary primary lymphedema disorder.[6] The patient was treated with lymphedema exercises and compression bandaging, resulting in a marked reduction in pain and edema. A topical compounded formulation containing tocopherol, clobetasol propionate, salicylic acid, and panthenol was prescribed,

and improvement in nail dystrophy and discoloration was observed after six months (Figure 4).

Conclusions

Pediatric presentations of YNS are rare and often lack the complete classical triad, which may delay diagnosis.[5] This case highlights that YNS should be considered in children presenting with unexplained diffuse nail dystrophy and recurrent limb edema, even in the absence of respiratory involvement. Although the detected FZD6 variant is not proposed as a causative factor, it may represent a genetic predisposition contributing to the nail phenotype, while the absence of FOXC2 mutations supports an acquired lymphatic dysfunction. Management is largely symptomatic, and in our patient both nail changes and lymphedema improved with conservative and supportive therapy, further reinforcing the role of lymphatic dysfunction in the pathogenesis of YNS.[1,2]

Abstract N°: ID-496

Topic: Hair and nail disorders

Comparative Efficacy of Salmon derived exosomes versus polydeoxyribonucleotide in androgenic alopecia

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Introduction
Androgenetic alopecia (AGA) treatment is evolving toward regenerative biologics. Polydeoxyribonucleotide (PDRN), a DNA-derived material, has shown promise by promoting angiogenesis via the adenosine A2A receptor. More recently, extracellular vesicles, particularly exosomes derived from salmon' tissue have emerged as a multifaceted alternative, delivering a complex cargo of growth factors, miRNAs, and cytokines. A direct comparative efficacy analysis of these two prominent biologic agents is lacking.

Materials and Methods
This was a single-center, randomized, evaluator-blinded, split-scalp study. Twenty patients with symmetrical AGA (Hamilton-Norwood III-IV) were enrolled. Exclusion criteria included minoxidil/finasteride use within 6 months and systemic illness. Each participant's scalp was divided; one randomized side received 1 mm microneedling of salmon-derived exosomes (5ml solution), and the contralateral side received PDRN injections . Primary outcomes were assessed at baseline (T0) and 12 weeks T1 via: 1) Quantitative Digital Phototrichogram (Aroma-SG): measuring hair density (hairs/cm²), hair diameter (µm), and anagen/telogen ratio. 2) Histopathological & Immunohistochemical Analysis: 4-mm punch biopsies from each treated area were analyzed for Ki67+ (proliferation) and CD31+/CD34+(vascularization/follicular stem cells) markers.

Results
Both treatments were well-tolerated. The exosome-treated sides demonstrated statistically superior outcomes. Phototrichogram: Exosomes induced a mean increase in hair density of 48.3 ± 9.1%, compared to 22.7 ± 7.4% for PDRN ($p<0.01$). Hair caliber increase was 32.1 ± 5.8% vs. 18.5 ± 6.2% ($p<0.05$), favoring exosomes. Histopathology: Exosome-treated biopsies showed a 4.2-fold increase in Ki67+ cells in the follicular bulb and a 3.5-fold increase in perifollicular CD31+ microvessel density, significantly higher than the 2.1-fold and 1.8-fold increases, respectively, observed with PDRN ($p<0.01$ for both). CD34+ follicular stem cell niche enhancement was also markedly greater in exosome samples.

Conclusions
While both biologics are effective, salmon roe-derived exosomes demonstrate significantly superior efficacy to PDRN in promoting hair regrowth in AGA. The profound clinical improvement correlates with a more robust histopathological stimulation of follicular keratinocyte proliferation and neovascularization. These findings suggest that the complex, multi-targeted cargo of exosomes offers a more potent regenerative mechanism than the single-pathway action of PDRN, positioning exosomes as a leading next-generation biologic therapy for hair restoration.

Abstract N°: ID-513

Topic: Hair and nail disorders

New ONew Onset of Hair Loss Disorders During the Coronavirus Disease 2019 Pandemic :A Korean Nationwide Population-Based Studynset of Hair Loss Disorders During the Coronavirus Disease 2019 Pandemic :A Korean Nationwide Population-Based Study

Sae Hee Kim*[1], Seungmin Park[1], Ji Won Lim[1], Yina Yoon[1], Jaeyoung Sung[1], Hyungseok Son[1], Changyong Kim[1], Da-Ae Yu[1], Yangwon Lee[1], Yongbeom Choe[1]

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Introduction
A higher frequency of hair loss disorders has been observed in patients with coronavirus disease 2019 (COVID-19) as well as in individuals who have received COVID-19 vaccination; however, large-scale population-based studies addressing this association remain limited.

Materials and Methods
This nationwide, population-based cross-sectional study analyzed individuals diagnosed with COVID-19 and COVID-19–free controls identified from the Korean National Health Insurance Service (NHIS) database between January 1 and December 31, 2021. Data on COVID-19 infection and vaccination status were integrated within the NHIS database. Multivariable logistic regression analyses were performed to compare odds ratios for hair loss disorders between groups.

Results
COVID-19 infection was associated with an increased risk of total alopecia (adjusted odds ratio [aOR], 1.076; 95% confidence interval [CI], 1.002–1.156); however, this association did not remain statistically significant after propensity score matching. No significant relationships were observed between COVID-19 infection and either alopecia areata or telogen effluvium. In contrast, COVID-19 vaccination demonstrated significant positive associations with total alopecia (aOR, 1.266; 95% CI, 1.191–1.346), alopecia areata (aOR, 1.243; 95% CI, 1.154–1.339), and telogen effluvium (aOR, 1.495; 95% CI, 1.133–1.974).

Conclusions
COVID-19 vaccination, but not COVID-19 infection, was associated with an increased risk of hair loss disorders. Nevertheless, considering the substantial benefits of vaccination in reducing COVID-19–related morbidity and mortality, vaccine-associated alopecia is likely to be comparatively mild and reversible. Physicians should therefore be aware of both the benefits and the potential adverse effects of COVID-19 vaccination when counseling patients.

Abstract N°: ID-571

Topic: Hair and nail disorders

Chemically induced transformation of human adipose-derived mesenchymal cells to hair-inducing dermal papilla-like cells

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Introduction
Androgenetic alopecia, affecting billions globally, is associated with significant psychosocial impact and potential health risks. Current pharmacological treatments have limited efficacy and often involve adverse side effects. Cell-based therapies utilizing dermal papilla cells (DPCs) show promise for hair follicle regeneration. However, the clinical translation of autologous DPC therapies is hindered by limited cell sources, and functional attenuation during in vitro expansion, and scalp injury at the donor sites. This study aims to establish a sustainable, minimally invasive cell source by transdifferentiating easily accessible and highly proliferative adipose-derived mesenchymal cells (ADMCs) into DPCs using a defined small chemical molecule cocktail, thereby facilitating clinical application for hair loss treatment.

Materials and Methods
ADMCs were isolated from human adipose tissue and directed to transdifferentiate into DPCs (ADMC-DPs) via induction with a defined small molecule combination for 7 days. The expression of DPC signature proteins (α-SMA, Versican, ALP) was analyzed by immunofluorescence and flow cytometry. The mRNA levels of hair follicle-related genes (NOGGIN, HEY1, ALPL, RSPO2, WNT3A) were assessed by RT-qPCR. In vivo functional validation was performed using the Patch assay hair follicle reconstitution model and a mouse model of hair loss. A comprehensive safety profile was evaluated, including microbiological testing, telomerase activity assay, chromosomal karyotyping, soft agar colony formation assay, in vivo biodistribution, and acute toxicity studies.

Results
ADMC-DPs consistently expressed key DPC markers (AKP, α-SMA, Versican) with positivity rates exceeding 90%, stable across ADMCs from multiple donors. Functionally, ADMC-DPs cooperated with mouse neonatal epidermal cells to regenerate hair follicles in the Patch assay, and promoted hair growth upon subcutaneous injection in alopecia mice. They also exhibited high expression of hair growth-related genes and activated the Wnt signaling pathway in the transplantation microenvironment, promoting hair follicle stem cell proliferation and differentiation. Completed safety evaluations have not raised any concerns to date.

Conclusions
We successfully established a method to generate DPCs via chemical induction of ADMCs. The resulting ADMC-DPs demonstrate robust hair follicle-inductive capability and a favorable safety profile in vivo and in vitro, highlighting their strong potential for clinical translation as a novel regenerative medicine strategy for androgenetic alopecia.

Abstract N°: ID-587

Topic: Hair and nail disorders

Low-temperature argon plasma therapy for androgenetic alopecia: preliminary clinical outcomes and tolerability

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Introduction
Androgenetic alopecia (AGA) is the most common form of hair loss and is associated with a significant psychosocial burden. Topical minoxidil remains a first-line therapy, however clinical response is variable and adherence may be limited. This has increased interest in device-based approaches and objective assessment using digital phototrichogram parameters such as hair density and hair shaft diameter. In this context, standardized quantitative monitoring is particularly important in early clinical experience and pilot studies to document potential treatment effects beyond subjective impressions. Low-temperature argon plasma is an emerging non-thermal modality that may modulate the scalp microenvironment, suggesting potential relevance for hair follicle activity in AGA.

Materials and Methods
This prospective observational pilot case series included three adult patients with clinically diagnosed AGA. Disease severity was classified according to the Norwood-Hamilton scale in men and the Ludwig scale in women. Two patients received low-temperature argon plasma as monotherapy, while one patient received combined therapy with low-temperature argon plasma and topical minoxidil. All patients completed a standardized treatment course consisting of 10 argon plasma sessions performed at 7-10-day intervals, applied to androgen-dependent scalp areas.
Treatment response was assessed using digital phototrichogram parameters, with a focus on hair density and mean hair shaft diameter. Patient-reported perceived improvement was collected to complement instrumental assessment. Safety and tolerability were evaluated through systematic recording of adverse events, local scalp reactions, including erythema, pruritus, edema, and procedure-related discomfort. Evaluations were performed at baseline and after completion of the treatment course.

Results
After completion of the 10-session course, all three patients demonstrated a positive clinical trend following low-temperature argon plasma therapy. Improvements were observed in phototrichogram-derived hair density and mean hair shaft diameter, accompanied by patient-reported perceived improvement. The procedures were well tolerated. No serious adverse events were recorded, reported reactions were limited to mild, transient local scalp effects and short-lasting discomfort, with no treatment discontinuations.

Conclusions
In this preliminary case series, low-temperature argon plasma therapy, used alone or in combination with topical minoxidil, was feasible and well tolerated, with early signs of clinical benefit in androgenetic alopecia based on objective phototrichogram parameters. Given the small sample size and non-comparative design, these findings should be interpreted cautiously. Nevertheless, they support further prospective studies with larger cohorts and comparative designs to quantify efficacy, assess the potential added value of combination therapy, and define optimal treatment protocols and follow-up duration.

Abstract N°: ID-595

Topic: Hair and nail disorders

Isolated Nail Involvement in Darier Disease Associated with Cardiac Arrhythmias: A Case Report

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Introduction

Darier disease is a rare autosomal dominant genodermatosis caused by mutations in the ATP2A2 gene, leading to impaired keratinocyte adhesion due to disrupted intracellular calcium homeostasis. Clinically, it typically presents with seborrheic keratotic papules and plaques, while nail involvement most commonly occurs in association with cutaneous lesions. Isolated nail-limited Darier disease represents a rare and diagnostically challenging clinical variant. Disturbances in calcium homeostasis may extend beyond the skin and potentially involve extracutaneous tissues, including the cardiovascular system.

Materials and Methods

A 56-year-old male presented with a six-year history of progressive distal fingernail plate fragility and lamellar splitting, accompanied by hypertrophy of the great toenail plates. The comprehensive clinical evaluation included dermoscopic analysis, routine laboratory investigations, and direct mycological examination of nail plate scrapings. A systematic assessment for cutaneous and mucosal involvement was conducted, along with a detailed review of the patient's cardiological history and serial follow-up data. Genetic analysis was not performed.

Results

Clinical examination revealed prominent longitudinal erythronychia and leukonychia of the fingernails, along with pathognomonic V-shaped distal notching of the thumbnails and pronounced subungual hyperkeratosis of the great toenails. No cutaneous or mucosal lesions were observed. Laboratory tests were within normal limits, and fungal cultures were negative. Nail dermoscopy demonstrated hallmark features of Darier disease-related nail involvement and proved diagnostically valuable in the absence of cutaneous findings or a positive family history. The patient had a confirmed history of cardiac arrhythmias and remained under regular cardiological surveillance.

Conclusions

Nail-limited Darier disease represents an uncommon and likely under-recognized clinical variant, which may contribute to diagnostic delay. In such cases, dermoscopy serves as a critical non-invasive diagnostic adjunct, facilitating early recognition in the absence of classical cutaneous manifestations. The concurrence of isolated nail involvement and cardiac arrhythmias may reflect a broader systemic disturbance in calcium regulation, underscoring the importance of interdisciplinary evaluation in selected patients.

Abstract N°: ID-600

Topic: Hair and nail disorders

Polarized versus diffractive microscopy in distinguishing scarring from non-scarring alopecia

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Introduction
Alopecia is broadly classified as non-scarring (follicles preserved; potentially reversible) or scarring (permanent follicular destruction). On scalp biopsy sections, this distinction may be difficult when fibrous tracts are subtle. Polarized light microscopy can rapidly highlight collagen birefringence within fibrous tracts, whereas the diagnostic value of diffractive microscopy is less established. We compared these two simple, low-cost modalities to determine their ability to distinguish scarring from non-scarring alopecia and to describe additional polarized-light patterns.

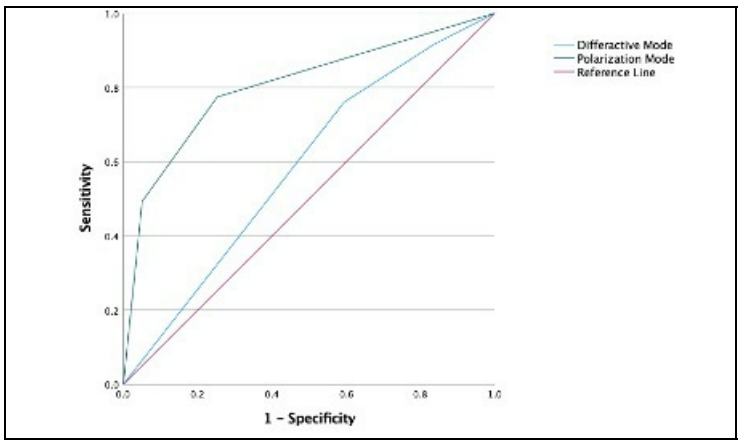
Materials and Methods
We retrospectively reviewed 152 anonymized horizontal scalp biopsy slides obtained for alopecia evaluation. Based on the final clinicopathologic diagnosis, cases were classified as non-scarring (n=80) or scarring alopecia (n=72); subtypes were recorded. Slides were assessed in group sessions and scored by consensus using polarized and diffractive microscopy (hand diffraction created by partially shading the illumination path). Fibrous tract presence was recorded as present/absent. In tract-positive cases, tract intensity was graded in each mode (0 absent, 1 weak, 2 moderate/strong). Segmental involvement was recorded (infundibulum, isthmus, infundibulum plus isthmus, or entire tract). Under polarized light, the dermal level of maximal signal was categorized (superficial dominant, mid-dermis dominant, or diffuse), and a circumferential perifollicular bright halo was recorded as present/absent. Group comparisons used chi-square/Fisher exact tests and Mann–Whitney U tests as appropriate. Receiver operating characteristic analysis evaluated diagnostic performance.

Results
Fibrous tracts were evaluable in 150 of 152 cases (one lichen planopilaris case with extensive fibrosis and one alopecia areata case lacked identifiable tracts). In diffractive mode, intensity distributions differed between scarring and non-scarring alopecia ($p=0.029$): moderate/strong intensity was seen in 54/71 (76.1%) scarring cases versus 47/79 (59.5%) non-scarring cases. In polarized mode, separation was clearer ($p<0.001$): moderate/strong intensity occurred in 35/71 (49.3%) scarring cases but only 4/79 (5.1%) non-scarring cases, while absent intensity predominated in non-scarring alopecia (59/79, 74.7%). Polarized intensity showed good discrimination (area under the receiver operating characteristic curve 0.804; $p<0.001$) with high specificity (94.9%) and modest sensitivity (49.3%) at score 2. Diffractive intensity showed limited discrimination (area under the curve 0.585; $p=0.071$). Segmental tract distribution did not significantly differ between groups ($p=0.068$) and the isthmus was most commonly involved. Maximal polarized signal was most often mid-

dermal in both groups (p=0.638). A circumferential perifollicular bright halo was more common in non-scarring than scarring alopecia (25% vs 11.1%; p=0.046) and was enriched in androgenetic alopecia (63.2% vs 12.0% in non-androgenetic cases; p<0.001).

Conclusions

Polarized light microscopy outperformed diffractive microscopy for distinguishing scarring from non-scarring alopecia on horizontal scalp sections. A moderate-to-strong fibrous tract signal on polarized microscopy is a highly specific adjunctive marker favoring scarring alopecia, whereas diffractive microscopy based on intensity alone provides limited additional value. The perifollicular circumferential halo on polarized microscopy appears associated with non-scarring processes, particularly androgenetic alopecia, and should not be over-interpreted as true follicular scarring.



Receiver operating characteristic (ROC) curves comparing fibrous tract intensity (score 0–2) for distinguishing scarring from non-scarring alopecia in diffractive and polarized modes. The reference line indicates no-discrimination performance (AUC = 0.50).

Abstract N°: ID-715

Topic: Hair and nail disorders

Flavonoid-Enriched Houseleek Extract (FEHE) to combat reactive hair loss: revealed efficacy on oxidative stress guardian NRF-2 in *ex vivo* hair follicle

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Introduction

Reactive hair loss, or Acute Telogen Effluvium (ATE), is one of the most common forms of nonscarring alopecia, characterized by abrupt and diffuse hair shedding following a trigger event like severe stress or seasonal change. ATE forces anagen hair follicles (HF) to simultaneously enter the catagen regression phase, causing temporary synchronized hair loss.

Oxidative stress (OS) is recognized as the chief cause of premature entry of HF in catagen. Among cellular responses to combat OS, the transcription factor NRF-2 (Nuclear Factor, Erythroid 2 Like 2) is the master regulator of redox balance, initiating a prominent downstream cascade of detoxifying enzymes. While honouring its key role in skin for long, the study of NRF-2's involvement in the HF is sparse. Still, in 2017 Haslam *et al.* validated its presence, activation and functionality in all compartments of isolated *ex vivo* HF, along with promising insights against OS-induced premature entry in catagen for hair loss prevention.

Considering the importance of restoring HF antioxidative system, Flavonoid-Enriched Houseleek Extract (FEHE) was selected for its renown antioxidant properties, including proven NRF-2 stimulation in skin keratinocytes. This study aimed to evaluate the relevance of incorporating FEHE in topical treatment against ATE, to combat OS-induced premature catagen entry *via* NRF-2 in the follicle.

Materials and Methods

Forty-eight human hair follicles were isolated by microdissection from a phototype II 62-year-old woman scalp biopsy, and kept in survival in recognized Philpott *ex vivo* model for 10 days. HF were systemically treated every two days with 0.01% FEHE, or left untreated. On days (D) D0, D6 and D10, NRF-2 expression was assessed by immunostaining with monoclonal anti-NRF-2 antibody (Abcam, ab76026, clone EP1809Y) on formalin-fixed paraffin embedded 5µm-thick serial sections of all HF compartments, with semi-quantification by CellSens software (Olympus) image analysis. HF length was measured from the bulb to the hair tip on pictures taken with Olympus DP camera to estimate hair elongation rate (µm/day). For statistical analysis of the results, Student t-test was applied on the raw data of NRF-2 semi-quantification and HF length.

Results

At D0, NRF-2 was found differentially expressed along the HF, with stronger expression in the bulb. After ten days of culture, NRF-2 bulbar expression decreased significantly by -59%** ($p<0.01$) in untreated HF. In contrast, follicles treated with FEHE maintained NRF-2 expression in the bulb by +62%* ($p<0.05$) compared to the untreated control.

In parallel, untreated HF growth slowed down after 6 days of survival, as measured by -49%** ($p<0.01$) of elongation during the remaining 4 days, while FEHE-treated HF displayed stable elongation rate with no significant slowdown.

Conclusions

In this study, NRF-2 expression pattern along the hair follicle corroborated previously reported data, validating the model. **Flavonoid-Enriched Houseleek Extract (FEHE) effectively preserved NRF-2 bulbar expression, while stabilizing HF elongation rate and delaying premature interruption of HF elongation in *ex vivo* model.** Considering the recognized stressful environment in which *ex vivo*-cultured HF evolve, this study allowed transposing the great efficacy of NRF-2 activation from skin to stress-induced hair loss problematics.

Incorporating Flavonoid-Enriched Houseleek Extract (FEHE) in the formulation of anti-reactive hair loss topical treatments is a compelling strategy to protect anagen hair follicles from oxidative stress-induced premature entry into catagen.

Abstract N°: ID-749

Topic: Hair and nail disorders

Congenital Trichorrhexis Nodosa Involving Scalp Hair and Eyebrows Diagnosed by Dermoscopy and Microscopy: A Case Report

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Introduction

Trichorrhexis nodosa is a hair shaft disorder characterized by nodal defects and cortical fiber splitting, leading to increased hair fragility and breakage. It can be congenital or acquired and often presents with impaired hair growth. Non-invasive diagnostic techniques such as dermoscopy (trichoscopy) and light microscopy play a crucial role in identifying characteristic structural abnormalities. We present a congenital case involving both scalp hair and eyebrows.

Materials and Methods

An 18-year-old patient with lifelong hair fragility and growth impairment was evaluated clinically, dermoscopically, and microscopically. Dermoscopic examination of scalp and eyebrow hairs was performed using a handheld dermoscope. Hair shaft samples were obtained and analyzed under light microscopy. Laboratory investigations including complete blood count, thyroid function tests, and nutritional parameters were conducted to exclude systemic causes.

Results

Clinical examination revealed dry, brittle, unevenly short scalp hair and sparse, fragile eyebrow hairs. Dermoscopy demonstrated multiple white nodes along the hair shafts with brush-like cortical fiber splitting. Light microscopy confirmed nodal fractures with fraying and separation of cortical fibers, consistent with trichorrhexis nodosa. Laboratory findings were within normal limits. No family history of similar hair disorders was reported.

Conclusions

This case illustrates the diagnostic value of combining dermoscopy and microscopic examination in hair shaft disorders. The involvement of both scalp hair and eyebrows, along with normal laboratory findings and absence of external trauma, supports a congenital etiology. Early recognition allows appropriate counseling and preventive measures to minimize further hair damage. Trichoscopy is a practical and efficient tool in routine dermatologic practice.

Abstract N°: ID-807

Topic: Hair and nail disorders

Isotretinoin as a Treatment Option for Alopecias

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Introduction

Oral isotretinoin (13-cis-retinoic acid) is a synthetic derivative of vitamin A. Its use is supported by well-established anti-inflammatory and immunomodulatory properties affecting cutaneous biology. Retinoic acid isomers were originally identified for their critical role in cellular differentiation and their ability to inhibit epithelial tumorigenesis through lysosomal stabilization and regulation of epithelial cell proliferation. Isotretinoin exerts its effects primarily through binding to retinoic acid receptors (RARα, RARβ, and RARγ), thereby activating transcriptional pathways that regulate gene expression. Activation of these receptors results in diverse cellular effects, including modulation of the cell cycle, keratinocyte differentiation, apoptosis, and immune responses involving interleukin-2 (IL-2), interferon-γ (IFN-γ), and T- and B-lymphocyte function. In addition, isotretinoin promotes keratolysis, reduces neutrophil migration, and influences key signaling pathways such as epidermal growth factor (EGF). Collectively, these mechanisms support the expanding therapeutic potential of isotretinoin beyond acne, including its application in a variety of inflammatory skin diseases and selected hair disorders.

Materials and Methods

PubMed-indexed articles published within the past decade were identified using search terms including *“vitamin A,” “retinoids,” “isotretinoin,” “hair disorders,” “alopecia,”* and *“patchy hair loss.”* Each eligible study was systematically reviewed to assess the role of vitamin A and its derivatives in the treatment of hair disorders, with particular attention to their effects on hair growth, hair cycling, and associated patterns of hair loss.

Results

The efficacy of isotretinoin has been demonstrated across several hair disorders. In dissecting cellulitis, its therapeutic benefit is largely attributed to sebosuppressive and anti-inflammatory properties, as well as normalization of follicular keratinization. Fourteen studies involving a total of 76 patients reported the use of oral isotretinoin at doses ranging from 0.27 to 1 mg/kg/day over several months, with favorable clinical outcomes. In folliculitis decalvans (FD), isotretinoin exerts immunomodulatory effects that inhibit neutrophil migration into the skin, supporting its use as a potential treatment option. Evidence from four retrospective studies and two case reports or series described 89 patients—predominantly male—treated with oral isotretinoin at doses between 0.1 and 1.02 mg/kg/day for durations of 5 to 7 months. A large retrospective randomized clinical trial evaluated isotretinoin and acitretin in the treatment of frontal fibrosing alopecia (FFA). In this study, 54 patients received a daily dose of 20 mg of either agent, resulting in stabilization of disease progression after 12 months of therapy. In lichen planopilaris (LPP), the precise mechanism by which isotretinoin stabilizes hair loss and reduces inflammation remains unclear; however, proposed mechanisms include normalization of follicular keratinocyte antigen expression and reduction of inflammatory cellular infiltrates. Six small studies, comprising three retrospective cohort studies and three case series, reported outcomes in a total of 61 patients aged 29 to 60 years. Treatment durations ranged from 2 to 24 months, with clinical improvement observed as early as one month after initiation of therapy.

Conclusions

The use of isotretinoin and other vitamin A derivatives has generated significant interest in the treatment of hair disorders. For example, tretinoin has been shown to enhance the therapeutic effect of topical minoxidil in the management of androgenetic alopecia, as demonstrated in the study by Sharma et al. In contrast, high doses of vitamin A and its derivatives may exacerbate disease activity and negatively affect treatment response in alopecia areata. Additionally, isotretinoin may be utilized as part of combination therapeutic regimens for the management of discoid lupus erythematosus.

Abstract N°: ID-822

Topic: Hair and nail disorders

NAIL TIC DISORDERS

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Introduction

Nail tic disorders are classic examples of overlap between the speciality of dermatology and psychiatry. They are examples of body focused repetitive behaviors in which there is an irresistible urge or impulse to perform a certain behavior. The behavior is reinforced as it results in some degree of relief and pleasyre.
Nail tic disorders are common, yet poorly studied and understood. The literatures on nail tic are relatively rare.
Common nail tics include nail biting or onychophagia, onychotillomania and the habit tic deformity. Some nail tic disorders are uncommon or even rare as onychoteiriomania, onychotemnomania, onchodaknomania and bidet nails.
Onychphagia is a chronic nail biting behavior which usually starts during chilhood. It is often regarded as a tension reducing measure. Onychotillomania is recurrent pricking and manicuring of finger nails and/or toenails. In severe cases, it may lead to onychoatrophy due to irreversible scarring of the nail matrix. Very often, they occur in psychologically normal children but may sometimes be associated with anxiety.
Habit tic deformity is atype of nail dystrophy that results from habitual external truama to nail matrix.that manifests as nail changes. The patient is usually unaware of this behavior.
The cuticle is detached, damaged or even totally missed. Typically, the patient presents with a central linear depression surrounded by parallel transverse ridges running from proximal to distal end.
Onychotemnomania is a tendency to cut nails extremely short with scissor while onychoteiromania, the patients rub the nail continuously, so the nail plate becomes extremely thin, fragile and split easily.
Onychodaknomania is a frank psychotic behavior where the patient bits his finger nails between his teeth.
Management of nail tic disorders is challenging. Selective serotonin reuptake inhibitors are used in onychophagia with preliminary level 2 support. Frequent applications of distasteful topical preparations on the nail and periungual skin can discourage patients from biting and chewing their finger nails.
Non pharmacological modalities have been tried as psychotherapy, hypnosis, relaxation techniques and behavior therapy such as aversion technique.

Abstract N°: ID-837

Topic: Hair and nail disorders

Successful treatment of ophiasis using a 1550 nm non-ablative fractional laser and triamcinolone acetonide: a clinical case.

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Introduction

Ophiasis is a resistant form of nesting alopecia with damage to the marginal zone of hair growth, characterized by the high risk of progression and low therapy effectiveness[1]. The "gold standard" — topical/injectable corticosteroids (GCS) — provides remission in only 20-30% of patients[2]. Resistance is associated with the peculiarities of the immune response in the occipital region (increased expression of HLA-DR, high density of IL-17+ cells) and increased thickness of the dermis, limiting the drug penetration[3-5].

The use of GCS is also associated with practical limitations: painfulness of injections, risk of atrophy, inapplicability with extensive foci. Alternative methods (systemic immunosuppressants, JAK inhibitors, PUVA therapy) demonstrate limited efficacy and serious side effects, requiring careful monitoring[6,7].

A promising direction is combination therapy, which simultaneously overcomes local immune dysregulation and stimulates regeneration. Fractional nonablative lasers (1550 nm) are capable of providing transdermal delivery of corticosteroids and activating follicle regeneration through the Wnt/β-catenin pathway[8,9]. However, their use in ophiasis has not been sufficiently studied and is limited to isolated cases. There is no data on the use of a combination of a 1550 nm laser with an external triamcinolone acetonide in the available literature. This study is the first to present a successful clinical experience of this approach.

Materials and Methods

A 36-year-old patient with ophiasis. Status localis: fused foci of alopecia in the occipital and left temporal regions with the capture of the hairline in the form of the ribbon. The area of loose hair is not defined. The pull test is negative. The SALT index (Severity of Alopecia Tool) is 14.3%. Ineffective therapy with topical clobetazole preceded it. She underwent a course of 6 procedures with an interval of 4 weeks. Each procedure included exposure to a fractional nonablative laser (1550 nm, 15 MJ/cm2, density 20%, 6 passes) followed by application of a triamcinolone acetonide (TA) (10 mg/ml)solution. The results were objectively evaluated by the dynamics of the SALT index and photofixation. Safety and the absence of recurrence were monitored for 3 months after treatment.

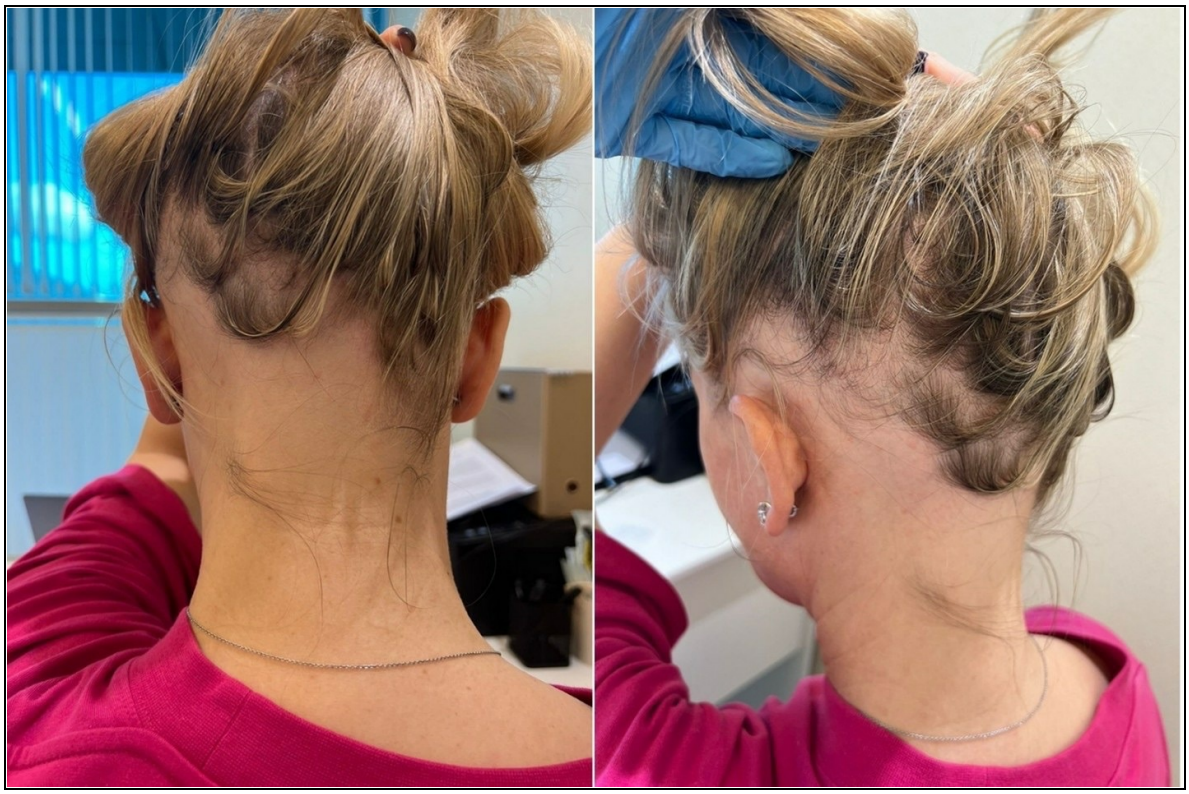

Fig. 1. Macro imaging of foci before the start of the therapy course.

Results

The growth of terminal hair was noted 1 month after the start of therapy. After 6 months, almost complete hair restoration was achieved with an improvement in the SALT index by 93% (from 14.3% to 1%). The method demonstrated excellent tolerability: the side effect was limited to short-term erythema. During the 3-month follow-up period, no recurrence was recorded.

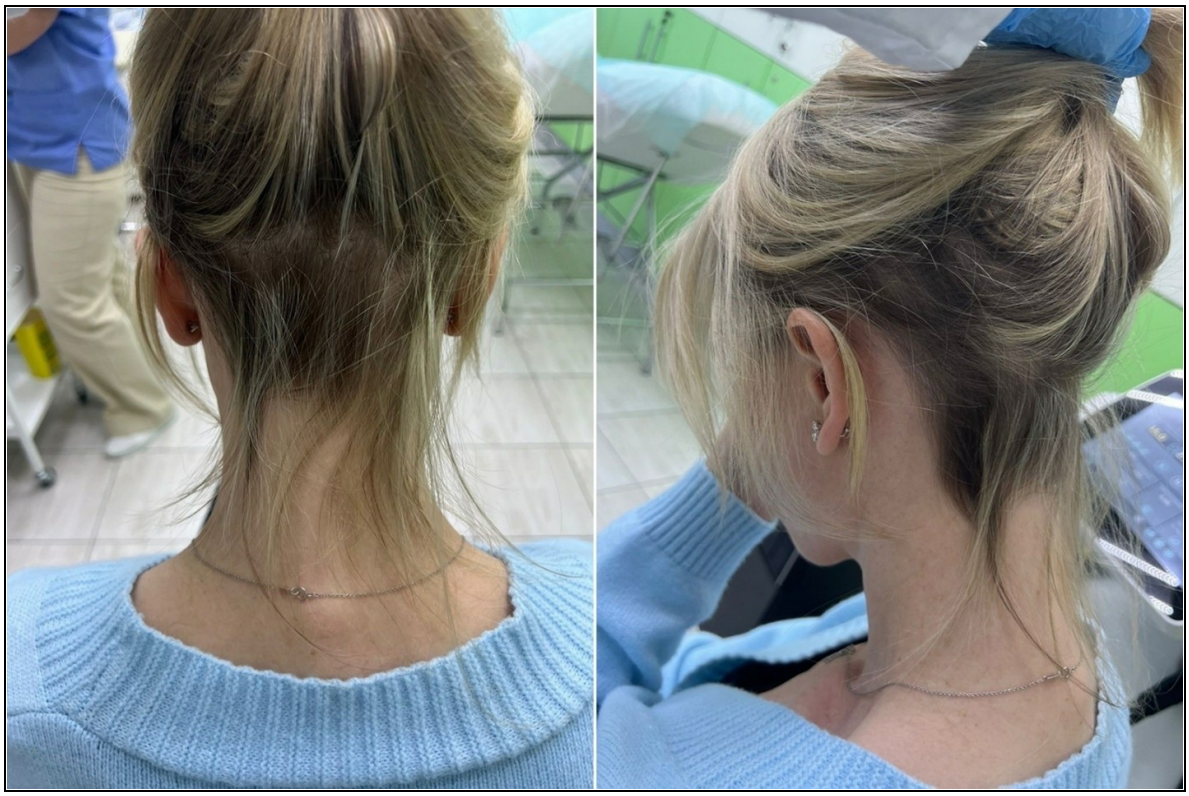

Fig. 2. Macro photography of foci after the end of the therapy course, 6 sessions of combined treatment: a 1550 nm fractional nonablative laser and a topical solution of triamcinolone acetonide.

Conclusions

The presented combination therapy has shown high clinical efficacy and a favorable safety profile in the case of resistant ophiasis. The synergistic effect is probably achieved due to enhanced transdermal TA delivery through laser microchannels and direct stimulation of follicular stem cells through activation of the Wnt/β-catenin pathway. The proposed treatment method may become an alternative for patients with resistance to topical corticosteroids, contraindications to systemic therapy, as well as patients for whom intraocular administration of corticosteroids is difficult due to the large lesion area or low pain threshold. Further controlled studies are needed to confirm these results.

Abstract N°: ID-857

Topic: Hair and nail disorders

Pharmacy-based drug survival of baricitinib in alopecia areata: treatment persistence through Week 130

Roberto Daza García[1], Alonso García Núnez[1], Antonio Alcalá Ramírez del Puerto[1], Guillermo Jiménez Thomas[1], Lourdes Rodríguez Fernández-Freire[1], Jose Juan Pereyra Rodríguez[1], Roman Barabash Neila*[1]

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Introduction
In routine practice, longitudinal severity measures in alopecia areata (AA) are often incompletely recorded, limiting real-world benchmarking. Drug survival derived from pharmacy dispensing data provides an objective, pragmatic endpoint to quantify treatment persistence and inform counselling.

Materials and Methods
We conducted a retrospective observational cohort study of patients treated with baricitinib for AA identified from hospital pharmacy dispensing records (data cut-off: 30 Dec 2025). Drug survival was defined as time from first dispensing to discontinuation. Discontinuation was operationalised as a permissible-gap rule: a gap >90 days without medication coverage (days of supply derived from dispensing data). Kaplan-Meier curves were estimated and persistence was reported at prespecified time points (Weeks 52/104/130). Sensitivity analyses varied the permissible gap (60/90/120 days).

Results
Seventy-seven patients were included; 17 discontinuations occurred and 60 patients were censored at the end of observation. Estimated persistence was 91.3% at Week 52, 75.1% at Week 104, and 68.7% at Week 130. Four patients (5.2%) showed a stop-restart pattern (≥2 dispensing episodes separated by a gap >90 days). Sensitivity analyses yielded similar persistence estimates at Weeks 104 and 130 (Week 104: 72.7%–76.8%; Week 130: 66.2%–70.2%).

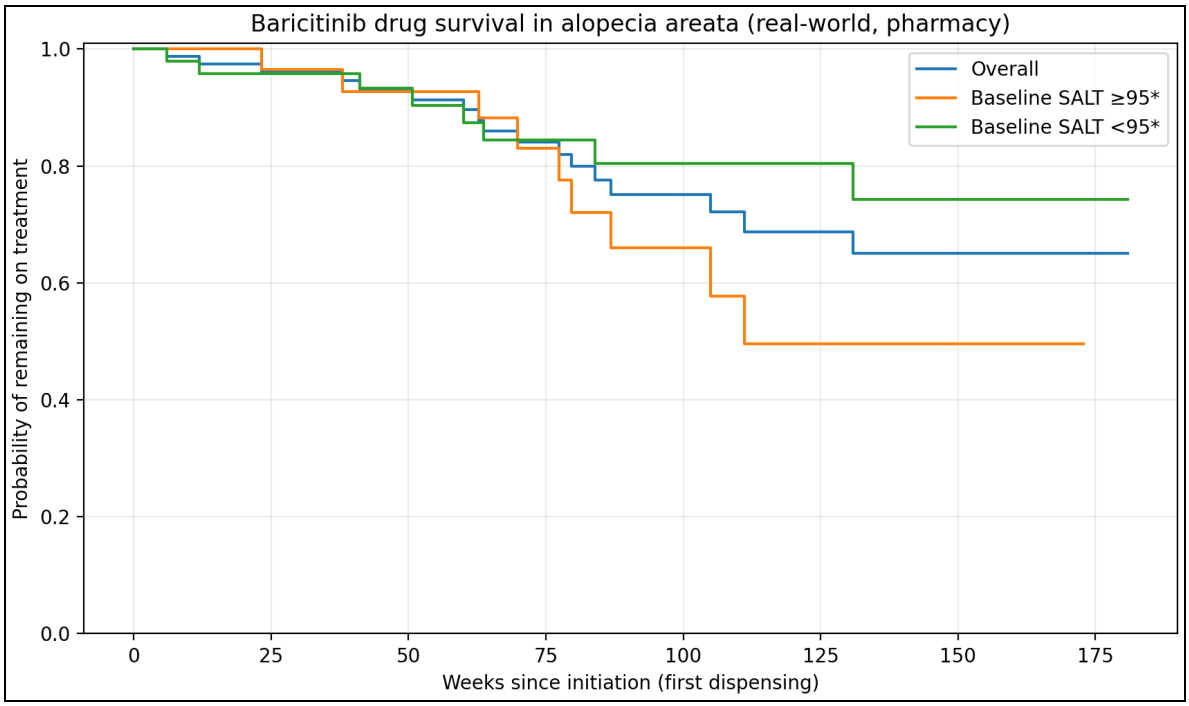

Figure 1. Kaplan–Meier drug survival of baricitinib in alopecia areata (real-world, pharmacy data). Time (weeks) is measured from first hospital-pharmacy dispensing to treatment discontinuation, defined as a gap >90 days without medication coverage; patients without discontinuation were administratively censored at the data cut-off (30 Dec 2025).

Conclusions

In this real-world AA cohort, baricitinib showed high treatment persistence through 2 years based on objective pharmacy dispensing data. Pharmacy-based drug survival is a robust and reproducible real-world endpoint when serial clinical severity measures are missing or inconsistently captured.

Abstract N°: ID-872

Topic: Hair and nail disorders

Comparative Efficacy of Platelet-Rich Plasma, Polynucleotide, Salmon-Derived Exosomes, and Combination Therapy in Androgenic Alopecia: A Randomized Clinical and Histological Trial

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Introduction
Androgenic alopecia (AGA) is a chronic condition driven by follicular miniaturization. While platelet-rich plasma (PRP) and polynucleotides (PDRN) are established treatments, novel agents like exosomes are emerging. This study aimed to clinically and histologically compare the efficacy of PRP, PDRN 2%, salmon-derived exosomes, and a triple-combination therapy in moderate AGA.

Materials and Methods
Eighty patients with moderate AGA (Norwood-Hamilton III-IV, Ludwig I-II) were randomly allocated into four equal groups (n=20). Group 1 received 5 sessions of autologous PRP injections at 2-week intervals. Group 2 received 5 sessions of PDRN 2% injections on the same schedule. Group 3 received 5 sessions of salmon tissue-derived exosomes delivered via a 1mm-depth dermapen. Group 4 received combination therapy (PRP + PDRN 2% + exosomes) for 5 sessions. Efficacy was assessed at baseline and 6 months post-final session using a standardized phototrichogram (hair density, thickness, anagen/telogen ratio). A 4mm punch biopsy from a pre-marked occipital area was performed at the same timepoints for histological evaluation of follicular proliferation (Ki67 immunohistochemistry) and neovascularization (CD31 marker).

Results
All groups showed significant improvement from baseline. The phototrichogram revealed the greatest increase in hair density and anagen hair percentage in Group 4 (Combination), followed by Group 3 (Exosomes), with Groups 1 and 2 (PRP and PDRN) showing comparable, moderate improvement. Hair shaft diameter improved significantly in all groups, most markedly in the combination group. Histological analysis demonstrated a significant upregulation of Ki67+ follicular keratinocytes and increased CD31+ perifollicular microvasculature in all post-treatment biopsies. The magnitude of increase for both Ki67 and CD31 was significantly higher in Group 3 and, most profoundly, in Group 4 compared to the PRP or PDRN monotherapy groups ($p<0.05$).

Conclusions
All modalities were effective for treating AGA. Salmon-derived exosome monotherapy demonstrated superior clinical and histological regenerative effects compared to PRP or PDRN alone, significantly enhancing follicular cell proliferation and perifollicular angiogenesis. The triple-combination therapy yielded the most pronounced outcomes, suggesting a synergistic effect. These findings support the potent efficacy of exosomes as a novel standalone treatment and highlight the potential of multimodal regenerative strategies for androgenic alopecia.

Abstract N°: ID-877

Topic: Hair and nail disorders

National Danish Guideline for the Management of Androgenetic Alopecia and Female Pattern Hair Loss

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Introduction
Androgenetic alopecia (AGA) and female pattern hair loss (FPHL) are the most common non-scarring alopecias and are frequently associated with significant psychosocial burden. Despite the availability of international guidelines, treatment practices vary considerably, and existing recommendations are not always fully applicable to national healthcare settings. Until now, no official national guideline for the management of AGA and FPHL has been available in Denmark.

The objective was to develop the first national Danish guideline for the diagnosis, treatment, and monitoring of AGA and FPHL, providing evidence-based, practical recommendations tailored to Danish clinical practice.

Materials and Methods
A multidisciplinary working group appointed by the Danish Dermatological Society systematically reviewed the available literature on AGA and FPHL, including randomized controlled trials, meta-analyses, observational studies, and international guidelines. The guideline was developed according to the GRADE framework, with evaluation of quality of evidence and strength of recommendations. Diagnostic criteria, treatment efficacy, safety profiles, and monitoring strategies were assessed. Separate treatment algorithms were developed for men and women.

Results
The guideline provides structured recommendations for diagnosis, including the role of trichoscopy, selective laboratory testing, and indications for scalp biopsy. Evidence-based treatment options are presented across topical, systemic, surgical, and adjuvant modalities. First-line therapy includes topical minoxidil for both sexes and oral finasteride for men. Second-line and off-label options, such as low-dose oral minoxidil, dutasteride, spironolactone, and procedural therapies (microneedling, PRP, LLLT), are addressed with graded recommendations. Gender-specific treatment algorithms outline stepwise management, indications for escalation, and monitoring of efficacy and adverse events.

Conclusions
This is the first national Danish guideline for AGA and FPHL, offering a comprehensive, evidence-based framework for clinical decision-making. The guideline aims to harmonize treatment practices, improve patient outcomes, and support informed, individualized management of hair loss in daily dermatological practice.

Abstract N°: ID-922

Topic: Hair and nail disorders

Topical exosomes as a treatment for alopecia androgentica

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Introduction

Androgenic alopecia is the most common type of alopecia. It has two main causes of onset- genetic predisposition, affecting certain hair follicules at a predetermined age and the important role of androgenic hormones, more specifically testosterone and dihydrosterone. Due to their influence the hair follicules reach regression phase earlier than usual and with time we can observe the predomination of remaining vellus hairs in the affected area.

Materials and Methods

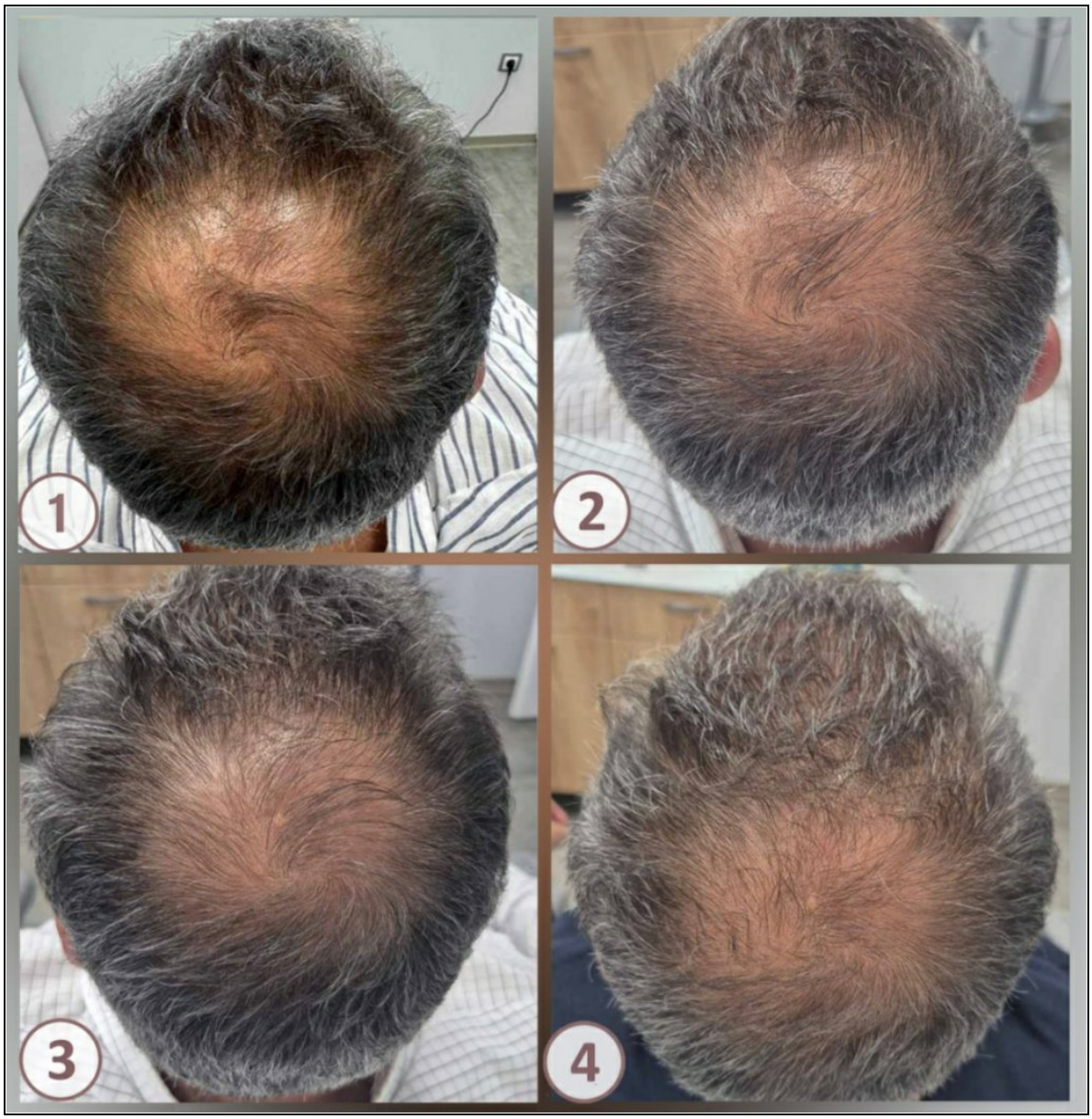
We present the clinical case of a 65-year-old patient. The patient complains of frontotemporal regression of the hair line and hair thinning at the parietal zone of the scalp. He informed us that he has had this condition for a few years and has been treated locally with Minoxidil 5% lotion with minor to no significant effect. He informed us that he does not want to have any systemic treatment due to personal concerns.

A treatment plan consisting of microneedling with needle length of 0.25mm and 0.50mm, immediately followed by topical application of 2.5ml highly purified exosomes solution was applied. The exosomes were plant based, derived from damascena rose stem cells and were prepared for application by diluting the 20mg vial, containing 10Md exosomes, with 4ml physiological saline 0.9% NaCl. The protocol that the patient had to follow was of at least four treatment sessions, with about three weeks in between each treatment session and at home application of the remaining solution to the affected areas.

Results

Microneedling is a great means of transdermal drug delivery, which simultaneously the hair follicules, buildup of new collagen and growth factors. Exosomes on the other hand are extracellular lipid vesicles, carrying important information and taking part in the regenerative processes of cells, containing growth factors, lipids, messenger-RNA and micro-RNA. They increase the synthesis of collagen type 1, regeneration and re-epithelization, proteins and are anti-inflammatory. If derived from plants they are safe to use topically and are not immunogenic.

Even after just three treatment sessions the patient was showing clear result of hair growth at the affected areas of the scalp. What is more, the new hair growth was visibly more pigmented than the rest of the untreated, unaffected zones. The patient informed us that the treatment was not painful and was enthusiastic to extend the protocol with two more treatment sessions for even better therapeutic result.



Conclusions

The wide spread of androgenic alopecia affecting about 80% of men at age 70 and 47.5% of men at 30-35 years old is a clear sign of the importance of variety of treatment modalities aiming to provide better clinical results and to improve the quality of life for the patients. Topical application of exosomes, preceded by microneedling is a new but promising therapeutic option. It could be especially useful for previously treated unsuccessfully cases or as a supplementary treatment, being an additional option for achieving a better result.

EA SYMPOSIUM DV 2026
ATHENS 7 - 9 MAY

Abstract N°: ID-935

Topic: Hair and nail disorders

Retronychia with Lateral Ingrowing Toenails: A Case Report of Successful Treatment

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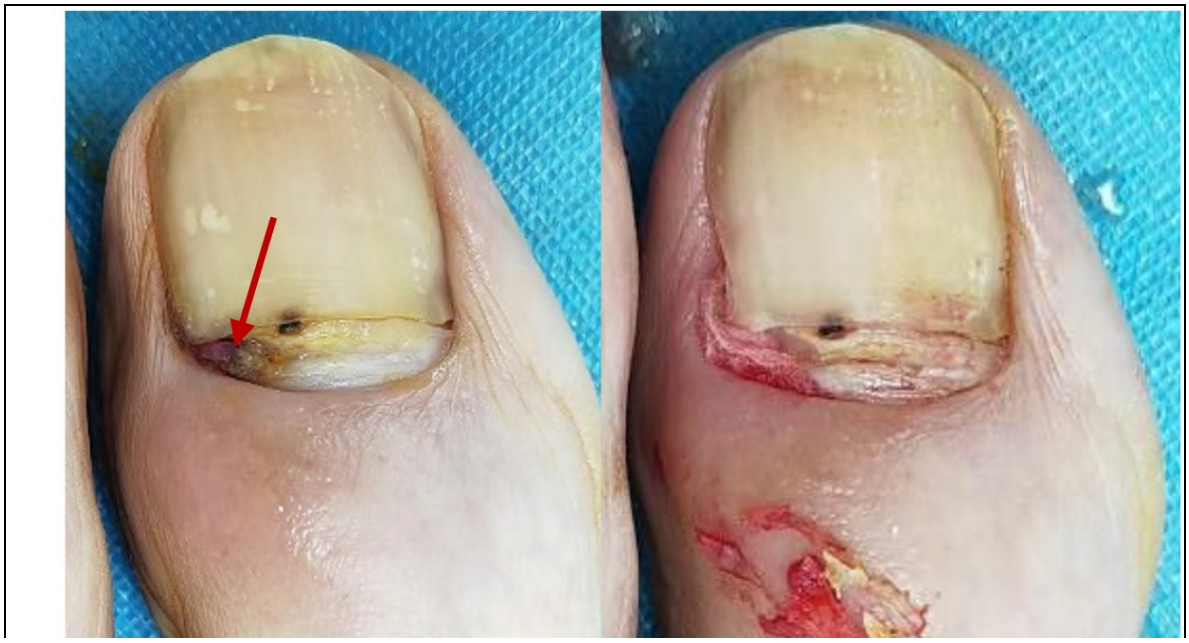
Introduction

Retronychia (RN) is a rare nail disorder characterized by disruption of longitudinal nail plate growth, resulting in proximal nail retraction and embedding of the nail plate into the proximal nail fold. Complete nail avulsion is generally regarded as the first-line therapeutic intervention. However, surgical management may be ineffective in cases complicated by concomitant lateral nail involvement. Herein, we report a case of persistent RN refractory to repeated surgical treatments that was successfully managed using a non-invasive nail orthotic approach.

Materials and Methods

A 68-year-old man presented with a two-month history of progressive erythema, purulent discharge, and inflammation of the proximal nail fold of the left hallux (Figure 1A). Conservative measures, including topical and systemic antibiotics, moist compresses, and phototherapy, failed to alleviate the symptoms. Imaging studies supported the diagnosis of RN, and the patient subsequently underwent complete proximal nail plate avulsion (Figure 1B). Although the initial inflammatory signs resolved, symptoms recurred within several months, necessitating a second surgical excision due to granuloma formation (Figure 1C, D). A third recurrence occurred five months after the second procedure, prompting the initiation of a staged orthotic treatment strategy. Nail bracing combined with cotton wisp insertion was applied, resulting in immediate pain relief and marked clinical improvement (Figure 1 E). After 10 months of continuous orthotic therapy, the nail plate width increased, the deformity was corrected, and no recurrence was observed at the 12-month follow-up(Figure 1 F).



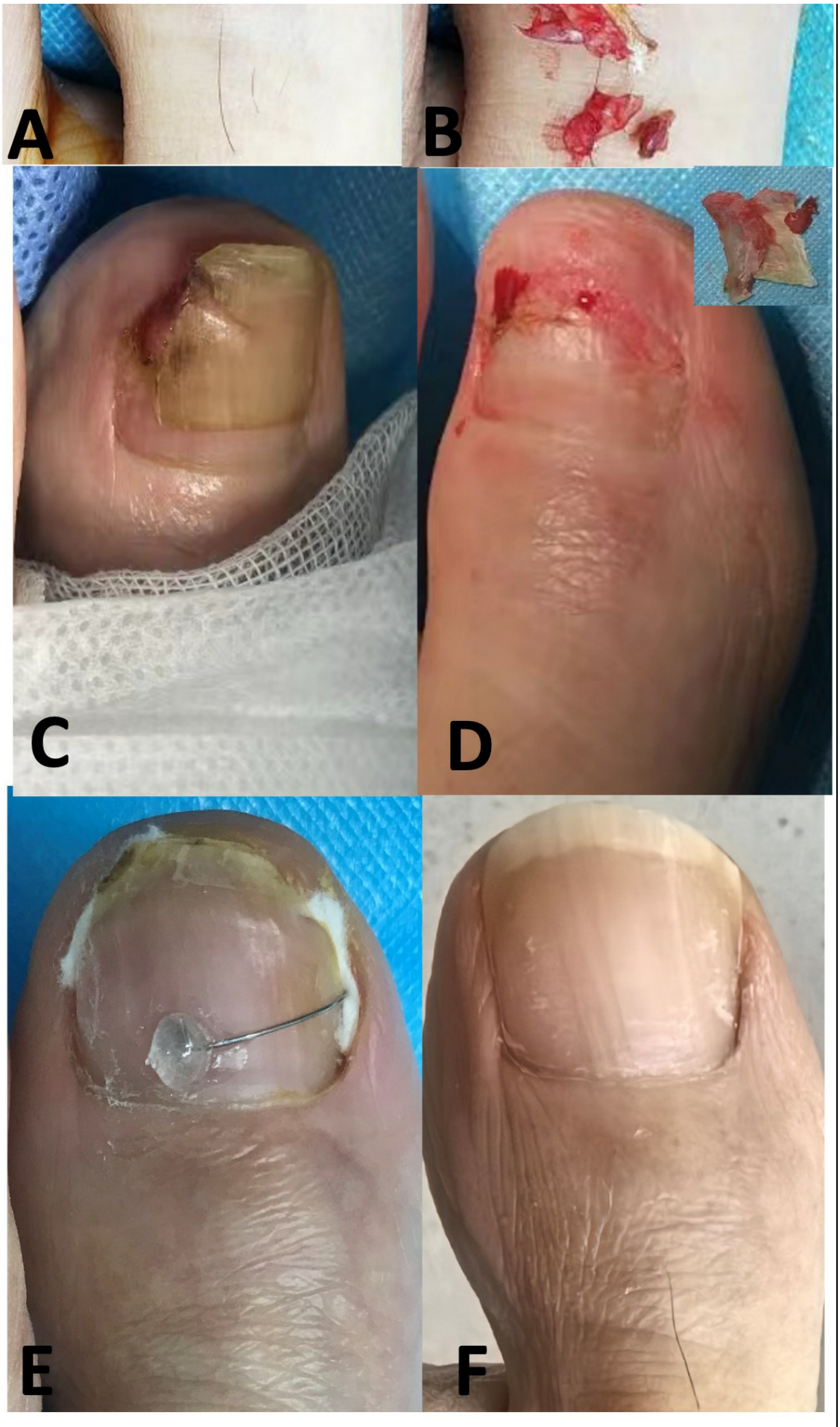


Fig 1. A, A whitish and bright, underlying nail plate was seen under proximal nail fold. B, A large number of nail fragments were removed from the inside of the proximal nail plate. C, A red granulomatous nodule was appeared under the old nail plate after 2 months. D, The granulomatous nodule and old nail plate were

removed. E, The patient received 1-sided nail brace treatment for the big toenails. F, The deformation degree of the nail plate was significantly improved after 12 months.

Results

While nail avulsion remains the standard treatment for RN, surgical approaches may fail to achieve sustained resolution in cases complicated by lateral nail ingrowth. In the present case, postoperative application of nail bracing and cotton wisp inserts proved to be an effective alternative, facilitating normal nail growth and preventing further recurrence. This case highlights the therapeutic potential of conservative interventions, such as nail orthosis, particularly in refractory or anatomically complex presentations of RN.

Conclusions

Nail bracing combined with cotton wisp insertion represents a promising, non-invasive alternative to repeated surgical procedures in the management of RN, especially when lateral nail involvement limits the effectiveness of conventional treatments. This case underscores the importance of individualized orthotic strategies in RN management and suggests that further studies are warranted to evaluate the broader applicability of this conservative approach.

Abstract N°: ID-938

Topic: Hair and nail disorders

Efficacy of Baricitinib in Adolescent Patients with Severe Alopecia Areata and Comorbid Atopic Dermatitis or Broader Atopic Background at 52 Weeks

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Introduction

Baricitinib (BARI), an oral, selective, Janus kinase inhibitor, is approved in many countries to treat severe alopecia areata (AA) in adults and moderate-to-severe atopic dermatitis (AD) in patients aged ≥2 years. Outcomes through week 52 in the phase 3 BRAVE-AA-PEDS trial (NCT05723198) showed that once-daily BARI 2mg or 4mg is also effective in adolescents (aged 12–17 years) with severe or very severe AA (hereafter referred to as severe AA).

Post hoc analyses were conducted to assess the efficacy of BARI for severe AA in adolescents with comorbid AD or a broader atopic background (AB), as these patients tend to have more severe AA and more systematic inflammation.

Materials and Methods

The analysis included two BRAVE-AA-PEDS cohorts of adolescents with severe AA for ≥1 year, current AA episode duration ≥6 months, Severity of Alopecia Tool (SALT) score ≥50, and failure of ≥1 prior treatment. Cohort 1 patients (N=257) were randomised 1:1:1 to BARI 2mg, BARI 4mg, or placebo; cohort 2 patients (N=166) were randomised 1:1 to BARI 2mg or 4mg. Patients randomised to BARI continued their assigned treatment through week 52. Data from patients randomised to BARI were pooled by dose level. Patients randomised to placebo were omitted from analyses because placebo nonresponders had been re-randomised to BARI 2mg or 4mg at week 36.

Week 52 efficacy was assessed in adolescents with comorbid AD, those with broader AB (historic or comorbid AD, allergic rhinitis, allergic asthma, or allergic conjunctivitis), and the overall sample of adolescents. Endpoints included achievement of SALT score thresholds (≤20, ≤10, =0), and clinician-reported outcome (ClinRO) eyebrow (EB) or eyelash (EL) hair loss scores of 0 or 1 with ≥2-point improvement from baseline.

Results

Analyses included 335 adolescents (119 with AB and a subset of 72 with AD; Table 1). Baseline demographics in atopic subgroups were comparable to those in the overall sample, except that AD and AB subgroups had higher proportions of Asian or Black/African American adolescents than the overall treatment groups. At baseline, slightly higher proportions

of patients in atopic subgroups than in overall groups had very severe AA (SALT score 95–100) and ClinRO EB or EL scores 2 or 3, confirming a trend for higher AA disease severity in atopic subgroups. Baseline Skindex-16 AA domain scores also indicated greater impacts on quality of life in atopic subgroups. About 65% of patients in atopic subgroups had immunoglobulin E levels ≥200, whereas such levels were observed in <50% of patients in the overall groups.

At week 52, SALT ≤20 was achieved in 52% of patients with AB on BARI 4mg and in 38% on BARI 2mg, similar to the response rates and dose-response pattern in the overall groups. In patients with AD, SALT ≤20 response rates were 46% with BARI 4mg and 49% with BARI 2mg, indicating similar efficacy across dose levels. These response patterns for SALT ≤20 were generally consistent for SALT ≤10, SALT=0, ClinRO EB, and ClinRO EL, except that EL responses with BARI 2mg were substantially higher in both atopic subgroups than in overall groups.

Conclusions

These findings show that BARI provides robust hair regrowth in adolescents with severe AA and comorbid AD or broader AB. Patients with AB had similar scalp and EB response rates to those in the overall adolescent sample, with BARI 4mg associated with substantially better rates than 2mg. Interestingly, response patterns in patients with AD were slightly different: efficacy was comparable across 2mg and 4mg doses for scalp, EB, and EL regrowth. Because of the small sample size of the AD subgroup, these results should be interpreted with caution. The trend of comparable efficacy across doses had not been observed in adult AA patients with comorbid AD.

Overall, efficacy of BARI in subgroups of adolescents with severe AA and comorbid AD or broader AB was comparable to that observed in the overall adolescent sample, despite the slightly higher baseline AA severity in atopic subgroups.

Table 1. Baseline Characteristics and Week 52 Efficacy Outcomes in Adolescents with Severe AA

	With Atopic Background [a]		With Atopic Dermatitis [b]		Overall	
	BARI 2mg (N=55)	BARI 4mg (N=64)	BARI 2mg (N=35)	BARI 4mg (N=37)	BARI 2mg (N=167)	BARI 4mg (N=168)
Baseline characteristics						
Age in years, Mean (SD)	14.3 (1.8)	14.5 (1.7)	13.9 (1.6)	14.4 (1.6)	14.6 (1.7)	14.5 (1.7)
Female, %	45.5	48.4	54.3	51.4	50.9	50.0
Race, % Asian Black/African American White	 32.7 7.3 52.7	 35.9 12.5 50.0	 40.0 11.4 37.1	 40.5 10.8 45.9	 23.4 6.6 64.1	 25.6 6.5 66.7
AA duration in years, Mean (SD)	6.0 (4.0)	6.0 (3.7)	5.9 (4.0)	6.2 (3.8)	6.6 (4.0)	6.1 (3.8)
Current episode duration in years, Mean (SD)	2.8 (1.7)	3.0 (2.1)	3.0 (1.8)	3.2 (2.1)	3.1 (2.0)	3.2 (2.1)
Prior systemic therapy, %	50.9	60.9	42.9	75.7	45.5	48.2
Immunoglobulin E ≥200, %	61.8	64.1	65.7	67.6	46.1	44.6
Skindex-16 AA domain score, Mean (SD)						
Symptoms	13.0 (16.1)	15.8 (15.7)	15.1 (14.9)	17.7 (16.0)	11.6 (14.1)	13.4 (13.8)
Emotions	44.7 (31.3)	53.9 (31.2)	40.5 (26.5)	58.7 (30.3)	46.3 (29.8)	41.2 (30.5)
Functioning	22.9 (28.7)	27.9 (27.5)	21.5 (26.7)	27.7 (28.7)	25.9 (26.3)	20.7 (25.5)
SALT score						
Mean (SD)	86.7 (18.4)	88.5 (17.4)	88.1 (18.0)	87.2 (17.7)	86.8 (17.7)	85.9 (18.0)
Very severe (95–100), %	60.0	67.2	62.9	62.2	57.5	56.5
ClinRO EB 2–3, % [c]	67.3	65.6	71.4	56.8	58.1	59.5
ClinRO EL 2–3, % [c]	63.6	59.4	65.7	56.8	52.7	50.0
Week 52 efficacy [d]						
SALT score ≤20, %	38.2	51.6	48.6	45.9	36.5	57.7
SALT score ≤10, %	30.9	39.1	37.1	35.1	28.7	45.8
SALT score =0, %	16.4	20.3	17.1	18.9	10.8	26.2
ClinRO EB response, % [e]	37.8 (N=37)	59.5 (N=42)	44.0 (N=25)	47.6 (N=21)	33.0 (N=97)	63.0 (N=100)
ClinRO EL response, % [e]	51.4 (N=35)	63.2 (N=38)	56.5 (N=23)	61.9 (N=21)	39.8 (N=88)	63.1 (N=84)

Abbreviations: AA, alopecia areata; BARI, baricitinib; ClinRO EB, clinician-reported outcome eyebrow hair loss; ClinRO EL, clinician-reported outcome eyelash hair loss; SALT, Severity of Alopecia Tool; SD, standard deviation.

[a] Patients with atopic background included patients in the comorbid atopic dermatitis subset, as well as patients with historic atopic dermatitis or historic or comorbid allergic rhinitis, allergic asthma, or allergic conjunctivitis.

[b] Patients with comorbid atopic dermatitis. These patients were also included in the atopic background subgroup.

[c] ClinRO EB (EL) Scores range from 0–3, with 0 reflecting no eyebrow (eyelash) hair loss, 1 reflecting minimal gaps and even distribution (spacing) of eyebrow hair (eyelashes), 2 reflecting significant gaps or uneven distribution (spacing) of eyebrow hair (eyelashes), and 3 reflecting no notable eyebrow hair (eyelashes).

[d] Calculated using non-responder imputation.

[e] Response was defined as week 52 score of 0–1 with ≥2-point improvement from baseline. N reflects the number of patients in the analysis population among patients with a score of ≥2 at baseline. Proportions with response are calculated using N as the denominator.

EA SYMPOSIUM DV 2026 ATHENS 7 - 9 MAY

Abstract N°: ID-986

Topic: Hair and nail disorders

Therapeutic Management of Nail Lichen Planus: A Systematic Review

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Introduction

Nail lichen planus (NLP) is a chronic inflammatory disorder that affects approximately 10% of patients with lichen planus and may lead to permanent nail damage and significant impairment in quality of life. Depending on involvement of the nail matrix and bed, clinical manifestations may include longitudinal ridging, nail plate thinning, pterygium formation, onycholysis, subungual hyperkeratosis, and irreversible nail loss. Despite its potential for long-term morbidity and psychosocial impact, there are no standardized treatment guidelines, no therapies specifically approved for NLP, and no validated outcome measures to assess treatment response. Management is therefore highly variable and largely guided by expert opinion and small observational studies.

Materials and Methods

We conducted a systematic review to evaluate the efficacy and safety of therapies used in the management of NLP. The review was registered with PROSPERO and conducted in accordance with PRISMA guidelines. PubMed, Embase, and Scopus were searched from database inception through November 2025 for studies reporting treatment outcomes in patients with NLP. Inclusion criteria included any clinical trials, case reports, cohort studies, case series, conference/abstract data reporting on patients with NLP receiving treatment with outcomes reported. Exclusion criteria included systematic reviews, literature reviews, and meta-analyses.

Results

A total of 37 records were included in the review, with a total of 269 participants. The mean age of the studies that included age is 37.71. Of the studies reporting sex, there were 151/240 (62.92%) males, and 89/240 (37.08%) females. Of the 269 participants, the most used therapy was intralesional steroid therapy, with 92/269 (34.20%) undergoing intralesional steroids. Of the other therapies, 6/269 (2.23%) underwent topical steroid therapy, 50/269 (18.59%) underwent systemic steroid therapy, 14/269 (5.20%) underwent JAK-inhibitor therapy, 19/269 (7.06%) underwent oral retinoid therapy, 45/269 (16.73%) underwent an alternative steroid-sparing immunomodulatory therapy, 1/269 (0.37%) underwent laser therapy, and 14/269 (5.20%) underwent a combination of therapies. Twenty-eight of the 269 (10.41%) did not undergo any treatment. While there was not a standardized way of reporting improvement amongst the studies, those undergoing intralesional steroid therapy had 1/92 (1.1%) with complete recovery and 25/92 (27.2%) with partial improvement. Those undergoing topical steroid therapy had 0/6 (0%) improvement. Those undergoing systemic steroid therapy had 17/50 (34.0%) with partial improvement and 31/50 (62.0%) with complete improvement. Those undergoing JAKi therapy had 9/14 (64.3%) with partial improvement and 5/14 (35.7%) with complete improvement. Those undergoing retinoid therapy had 13/19 (68.4%) with partial improvement and 4/19 (21.1%) with complete improvement. Those undergoing alternative steroid-sparing immunomodulatory therapy had 26/45 (57.8%) with partial improvement and 3/45 (6.7%) with complete improvement. Those with complete improvement were those undergoing mycophenolate mofetil and chloroquine therapy. Those undergoing laser therapy had 1/1 (100.0%) with partial improvement. Those undergoing a combination of therapies had 13/24 (54.2%) with partial improvement and 2/24 (8.3%) with complete improvement. Reported adverse events included local injection-related effects with intralesional steroids, systemic corticosteroid-related side effects, hypertension with cyclosporine, and mucocutaneous and laboratory abnormalities with oral retinoids. No adverse events were reported among patients treated with JAK inhibitors (Table 1).

Table 1. Treatment Modalities, Clinical Outcomes, and Reported Adverse Events

Treatment modality	Participants treated, n (%)	Partial improvement, n (%)	Complete improvement, n (%)	Reported adverse events
Intralesional corticosteroids	92/269 (34.20)	25/92 (27.2)	1/92 (1.1)	Pain, subungual hematoma formation, proximal nail fold hyperpigmentation, atrophy
Topical corticosteroids	6/269 (2.23)	0/6 (0)	0/6 (0)	Not reported
Systemic corticosteroids	50/269 (18.59)	17/50 (34.0)	31/50 (62.0)	Weight gain, transient cushingoid features, mood changes, gastrointestinal symptoms
JAK inhibitors	14/269 (5.20)	9/14 (64.3)	5/14 (35.7)	None reported
Oral retinoids	19/269 (7.06)	13/19 (68.4)	4/19 (21.1)	Xerosis, elevated liver enzymes, headache, cheilitis, mucocutaneous dryness, facial flushing
Alternative steroid-sparing immunomodulatory therapies†	45/269 (16.73)	26/45 (57.8)	3/45 (6.7)	Hypertension with cyclosporine
Laser therapy	1/269 (0.37)	1/1 (100.0)	0/1 (0)	Not reported
Combination therapies	14/269 (5.20)	13/14 (54.2)	2/14 (8.3)	Variable, not consistently reported
No treatment	28/269 (10.41)	—	—	—

†Complete responses in this category were observed with mycophenolate mofetil and chloroquine.

Conclusions

This systematic review underscores the heterogeneity of current treatment approaches for nail lichen planus and the critical need for validated outcome measures and well-designed controlled studies to inform evidence-based management strategies and improve patient care.

Abstract N°: ID-1026

Topic: Hair and nail disorders

Follicular unit composition as a marker of miniaturization in female androgenetic alopecia

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Introduction

Female androgenetic alopecia (FAGA) is a common cause of progressive hair thinning characterized by follicular miniaturization and region-specific involvement of the scalp. Digital trichoscopy has become an essential non-invasive tool for the quantitative assessment of hair disorders, allowing objective evaluation of parameters such as hair density, hair shaft diameter, and hair diameter diversity. While these metrics are well established as markers of miniaturization, the structural organization of hair follicles into follicular units has received comparatively less attention. Changes in follicular unit composition, particularly a shift toward single-hair units with loss of multi-hair units, may reflect an additional and clinically meaningful aspect of the miniaturization process. Investigating follicular unit composition may therefore provide complementary insight into disease severity and regional progression in FAGA.

Materials and Methods

This observational study included female patients with a clinical diagnosis of androgenetic alopecia who underwent digital trichoscopic evaluation as part of routine assessment. Standardized trichoscopic images were obtained using a digital dermoscopy system at fixed magnification. Quantitative measurements were performed at three predefined scalp regions: frontal, temporal, and occipital.

Trichoscopic parameters analyzed included follicular unit composition, expressed as the proportion of single-hair, double-hair, and triple-or-larger follicular units, as well as hair density, hair shaft diameter distribution, cumulative hair thickness, and regionally derived Sinclair scale. Follicular unit composition was used as the primary variable to assess structural changes associated with follicular miniaturization. Regional comparisons were conducted to evaluate differences between affected and relatively spared scalp areas.

Results

A total of 69 female patients with androgenetic alopecia were included in the analysis. Quantitative digital trichoscopy demonstrated distinct regional differences in follicular unit composition. The frontal scalp showed the highest proportion of single-hair follicular units (mean 44.7%) and the lowest proportion of triple or larger follicular units (21.5%). The temporal region displayed an intermediate pattern, with single-hair follicular units accounting for 41.8% and triple or larger units for 21.9%. In contrast, the occipital scalp exhibited relative preservation of multi-hair follicular units, with the lowest percentage of single-hair units (30.9%) and the highest proportion of triple or larger follicular units (33.1%).

These regional variations in follicular unit composition paralleled established markers of follicular miniaturization. Scalp areas with a higher proportion of single-hair follicular units demonstrated greater hair diameter diversity, a higher percentage of thin hairs, and reduced cumulative hair thickness compared with the occipital region. Increasing clinical severity, as reflected by regionally derived Sinclair scale values, was associated with a progressive shift toward single-

hair follicular units.

Conclusions

Follicular unit composition reflects structural changes associated with follicular miniaturization in female androgenetic alopecia. A predominance of single-hair follicular units and a reduction in multi-hair units characterize clinically affected scalp regions and parallel established trichoscopic markers of disease severity. These findings support follicular unit composition as a valuable complementary parameter in the quantitative assessment of female androgenetic alopecia and highlight its potential role in improving objective evaluation of disease severity and regional progression.

Abstract N°: ID-1090

Topic: Hair and nail disorders

Nail Patella Syndrome: Clinical Considerations to Avoid Misdiagnosis

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Introduction

Nail-patella syndrome (NPS), which is also referred to as hereditary osteo-onychodysplasia syndrome, represents a rare autosomal dominant genetic disorder with an incidence estimated at approximately 1 in 50,000 individuals within the United States. (1, 2) The condition is characterized by a classic clinical tetrad, including abnormalities of the nails, knees, and elbows, in addition to the presence of iliac horns. This report describes an adult patient diagnosed with nail patella syndrome presenting mainly with nail manifestations, seeking treatment options for her nail deformity akin to cases of nail lichen planus, and considering steroid injection to treat her nail deformity as in cases of nail lichen planus.

Materials and Methods

We present a case of a 21-year-old female patient, who presented to the dermatology clinic with Nail deformity since birth and history of Spine surgery done in 2017.

She had typical nail findings of NPS including a triangular lunula, a few nails separated into two halves by a longitudinal cleft or ridge of skin, Partial and complete thumb anonychia as appreciated in Figure 1, as well as loss of skin creases over the dorsal aspect of DIP joints Figure 2, Swan neck deformity of the left index finger Figure 3.

The patient was previously seen in our clinic in 2020, when a clinical diagnosis of nail-patella syndrome was made. She was referred to genetic evaluation and imaging, X-ray revealed the patella was smaller than expected for her age, but no iliac horns were observed. There was no evidence of proteinuria, and renal function tests returned to normal. She was subsequently referred to nephrology and ophthalmology for further evaluation and surveillance.

Genetic testing confirmed a denovo mutation in the LMX1B gene. The patient missed several follow-up appointments and returned seeking an intralesional steroid injection, as she thought it can be effective as in other cases of splitting nail-like lichen planus.

Results

N/A

Conclusions

Given the phenotypic variability associated with nail-patella syndrome, the clinical diagnosis can be easily overlooked, particularly in nail findings similar to inflammatory nail disease, and a lack of appropriate history and a lack of awareness. This underscores the necessity for a high index of suspicion and a thorough, systematic clinical evaluation, including detailed history and careful inspection of the nails looking for triangular lunula and assessment for subtle skeletal anomalies, especially in pediatric and adolescent patients presenting with unexplained joint or skeletal

abnormalities.

Furthermore, early recognition is crucial, as timely diagnosis enables appropriate surveillance for potential complications such as nephropathy, glaucoma, and neurological abnormalities, all of which significantly affect morbidity and mortality in affected individuals. Ultimately, this case reinforces the critical value of comprehensive physical examination in fostering early diagnosis and guiding multidisciplinary management, thereby improving long-term patient outcomes in those with nail-patella syndrome.

Abstract N°: ID-1098

Topic: Hair and nail disorders

Complete Scalp Hair Regrowth and Predictors of Response in Patients With Alopecia Areata Receiving Ritlecitinib 50 mg up to 3 Years in the ALLEGRO Clinical Trial Program

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Introduction

Alopecia areata (AA) is an autoimmune disease characterized by nonscarring hair loss on the scalp, with or without loss of facial and/or body hair. In clinical trials, achievement of Severity of Alopecia Tool (SALT) score ≤20 and ≤10 (≤20% and ≤10% scalp hair loss) are commonly reported, but achievement of SALT score 0 (complete scalp hair regrowth) is less commonly reported. Here, we report results through Month 36-38 on the achievement of SALT score 0 in patients with AA receiving ritlecitinib (an oral, selective JAK3/TEC family kinase inhibitor) in the ALLEGRO phase 2b/3 (NCT03732807) and ongoing, phase 3, open-label ALLEGRO-LT (NCT04006457) studies. Patient and disease characteristics associated with achievement of SALT score 0 response were also evaluated.

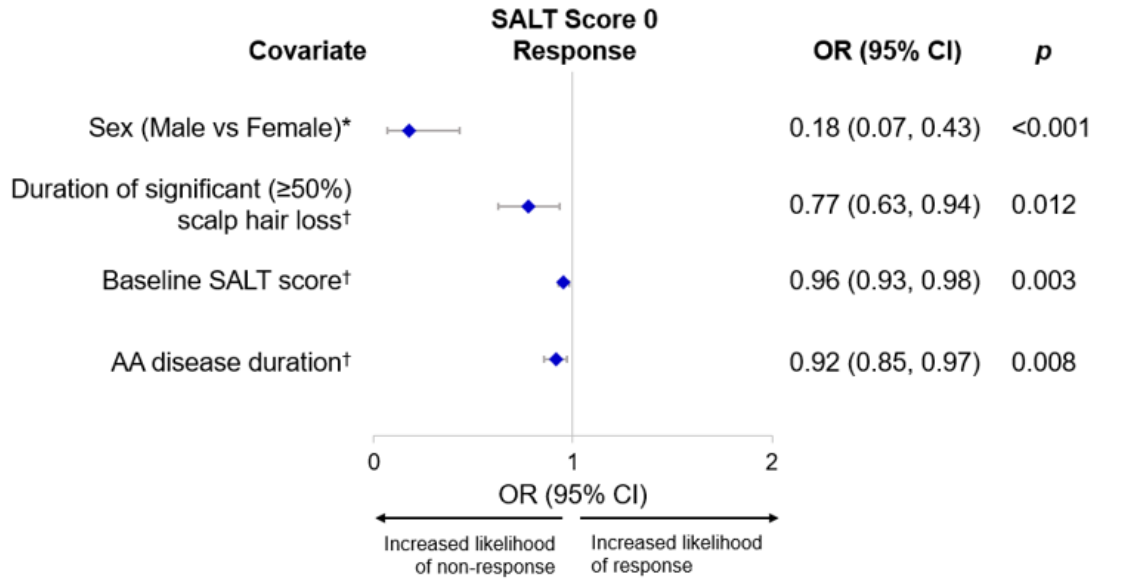
Materials and Methods

Patients aged ≥12 years with AA and ≥50% scalp hair loss who received daily ritlecitinib 50 mg in ALLEGRO-2b/3 and rolled over to ALLEGRO-LT (where they continued to receive 50 mg) were included. Data from patients who received placebo and switched to ritlecitinib 50 mg were re-baselined to align time points across groups. Data are reported based on the cutoff date of June 25, 2024, for the proportions of patients with SALT score 0 at Month 36-38 (observed and last observation carried forward [LOCF]); SALT score 0 during at least 1 visit through Month 36-38; and at least 1 visit with concurrent SALT score 0 and normal Eyebrow Assessment (EBA)/Eyelash Assessment (ELA), no body hair loss, or no fingernail involvement through Month 36-38. A multivariable logistic regression was used to assess the association of patient demographics, baseline disease characteristics, and the presence of comorbidities with the likelihood of achieving SALT score 0 during at least 1 visit up to Month 36-38.

Results

A total of 191 patients were included. At Month 36-38, the proportions of patients with SALT score 0 were 31.2% (34/109 observed) and 22.5% (43/191 LOCF). Through Month 36-38, 29.8% (57/191) of patients achieved SALT score 0 (complete scalp hair regrowth) during at least 1 visit. The majority of these patients (61.4%, 35/57) did not have a subsequent increase in SALT score at later visits, and most (84.2%, 48/57) remained at SALT score ≤5 at subsequent visits. Most cases of complete scalp hair regrowth also showed normal EBA and ELA scores (78.9%, 45/57), no body hair loss (71.9%, 41/57), or no fingernail involvement (89.5%, 51/57) at any occurrence when SALT score 0 was reached. Female sex, shorter duration of significant (≥50%) scalp hair loss, lower baseline SALT score, and shorter AA disease duration were significantly associated with increased likelihood of achieving complete scalp hair regrowth (**Figure 1**).

Figure 1. Association of baseline patient variables with SALT score 0 response during at least 1 visit up to Month 36-38 in patients receiving ritlecitinib 50 mg



AA, alopecia areata; CI, confidence interval; OR, odds ratio, SALT, Severity of Alopecia Tool.
Independent covariates of interest that were significant in the stepwise models are shown.
* The latter is the reference category.
† Continuous variable in which a change in the variable (1 year for duration of significant [≥50%] scalp hair loss; 1 unit for baseline SALT score; 1 year for AA disease duration) is associated with the likelihood of response.
Other covariates (not shown) which were selected by the stepwise model but were not significantly associated with SALT 0 response included age (adolescents vs adults; OR, 2.93; 95% CI, 0.97-9.29), number of episodes (OR, 1.17; 95% CI, 0.99-1.40), and body hair loss at baseline (yes vs no; OR, 0.41; 95% CI, 0.13-1.23). Variables used as covariates in the model included age, sex, body mass index, current AA episode duration (defined as the time since the onset of current hair loss), AA disease duration, prior use of treatment for AA, number of episodes of AA, duration of significant (≥50%) scalp hair loss (defined as the time that the patient has had ≥50% scalp hair loss), SALT score at baseline, ELA score at baseline, EBA score at baseline, presence of at least one fingernail affected at baseline, body hair loss at baseline, and combined type 2 comorbid conditions (asthma, atopic dermatitis, or allergic rhinitis).

Conclusions

Among patients aged ≥12 years with AA and ≥50% scalp hair loss receiving ritlecitinib 50 mg, almost one-third achieved complete scalp hair regrowth (SALT score of 0 during at least 1 visit) up to Month 36-38, with the majority sustaining that response at later visits or remaining at SALT score ≤5. Patients who were female, had shorter duration of significant (≥50%) scalp hair loss, shorter disease duration, or less extensive scalp hair loss at baseline were more likely to achieve complete scalp hair regrowth with ritlecitinib treatment.

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Abstract N°: ID-1100

Topic: Hair and nail disorders

Nail Psoriasis Aggravated by Associated Onychotillomania: When Inflammation Meets Psychobehavioral Disorder.

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Introduction

Nail psoriasis is a challenging inflammatory disorder with heterogeneous presentations and frequent diagnostic pitfalls. Mechanical trauma via the Koebner phenomenon can profoundly alter its expression. Onychotillomania, a compulsive nail manipulation disorder, acts as both comorbidity and aggravating factor. We report a case where onychotillomania masked nail psoriasis, delaying diagnosis and complicating management.

Materials and Methods

N/A

Results

A 67-year-old woman presented with a 20-year history of chronic, diffuse nail dystrophy affecting all fingernails and toenails, accompanied by intense pruritus and compulsive nail picking. Initial nail biopsy suggested chronic eczema, prompting ineffective trials of topical/systemic corticosteroids and antifungals.

Examination revealed severe dystrophy with onychia, paronychia, onychorrhexis, proximal periungual hemorrhagic crusts, partial-to-complete anonychia, and manipulation-related excoriations. Dermoscopy showed trachyonychia, longitudinal striations, whitish scaling, irregular wavy lines, splinter hemorrhages, salmon patches, crusts, and anonychia. Possible diagnoses considered were lichen planus, nail psoriasis, chronic eczema, and onychotillomania.

Repeat biopsy confirmed psoriatic nail disease. Psychiatric assessment verified onychotillomania. Intervention consisted of methotrexate 15 mg/week, topical corticosteroids, emollients, and cognitive-behavioral therapy leading to marked clinical improvement and reduced manipulation.

Conclusions

Onychotillomania exacerbates nail psoriasis through a self-reinforcing cycle: repeated micro-traumas trigger the Koebner phenomenon, worsening lesions, while the resulting functional and aesthetic impact increases anxiety and compulsive nail manipulation. This highlights the importance of an integrated approach combining dermatological care and psychological support to break the inflammation–self-injury loop.

Abstract N°: ID-1111

Topic: Hair and nail disorders

Traction Alopecia in three pediatric cases

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Introduction

Traction alopecia is a traumatic alopecia caused by excessive tension on the hair shaft. It is more frequently observed in women of African and African-American descent and is related to their hairstyling habits. We report three pediatric cases of traction alopecia and highlight the value of dermoscopy in the diagnosis of this condition.

Results

Case 1

A 6-year-old girl with no medical history presented with alopecic patches in the temporal areas. Scalp examination showed decreased hair density along the frontal hairline and temporoparietal areas. Dermoscopy revealed scalp erythema, perifollicular scales, and gray-white parakeratotic casts sheathing the hair shafts. No yellow dots, black dots, or exclamation mark hairs were noted. The patient wore her hair in a very tight ponytail.

Case 2

A 6-year-old girl with a family history of alopecia areata was referred for alopecic patches on the scalp. Examination revealed two alopecic patches measuring three and five centimeters in the temporal regions. The patient wore a very tight bun. Dermoscopic analysis of these plaques showed decreased hair density, hair thinning and hair casts sliding along the hair shafts. There was no yellow dots, black dots, or exclamation mark hairs.

Case 3

A 6-year-old girl with no history was referred for a scaly scalp condition. Examination noticed diffuse scaling. The patient wore a very tight bun. Trichoscopy showed scalp erythema. The clinically observed scales corresponded to parakeratotic casts sliding along the hair shafts.
In all three patients, the diagnosis of traction alopecia was established. Advice on modifying hairstyling was explained to the mothers.

Conclusions

Traction alopecia is relatively common in female children. It should be suspected in cases of alopecia particularly in the frontal or temporoparietal areas, in patients accustomed to tight hairstyles. The presence of peripilar hair casts is the most suggestive trichoscopic sign of the diagnosis. These casts appear in areas of maximal traction. Other dermoscopic signs include scalp erythema, perifollicular scales, and hair thinning. Trichoscopy also helps rule out differential diagnoses such as trichotillomania or diffuse alopecia areata. Early diagnosis is crucial for timely modification of hairstyling habits to prevent progression to scarring alopecia.

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Topic: Hair and nail disorders

Non-Scarring Alopecia in Children: A Clinical and Dermoscopic Study

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Introduction
Acquired alopecia in children predominantly consists of non-scarring forms, including tinea capitis, alopecia areata, trichotillomania, traction alopecia, and, more rarely, androgenetic alopecia. Trichoscopy is a valuable tool for determining the etiology of hair loss. Our objective was to evaluate the clinical and trichoscopic features of non-scarring alopecia in a pediatric population.

Materials and Methods
We conducted a retrospective, descriptive, single-center study including patients under 18 years of age diagnosed with tinea capitis, alopecia areata, trichotillomania, traction alopecia, or androgenetic alopecia. Dermoscopic examination was performed using a manual dermatoscope. Demographic, clinical, and dermoscopic data were analyzed using SPSS 26.

Results
A total of 171 patients were included with a male-to-female ratio of 1.44 and a mean age of 8 years. Ninety-nine patients were diagnosed with tinea capitis; the most frequent trichoscopic findings were broken hairs (63%), black dots (62%), sheathed hairs (57%), and comma hairs (44%). Fifty-three patients had alopecia areata, characterized by black dots (91%), broken hairs (79%), and exclamation mark hairs (43%). Four patients presented with trichotillomania, where the most frequent features were black dots, broken hairs, and tulip hairs. Six patients were diagnosed with traction alopecia, with hair casts being the most common sign (n=6). Nine patients had androgenetic alopecia, showing anisotrichia in all cases.

Conclusions
While broken hairs and black dots are common in both alopecia areata and tinea capitis, other trichoscopic features are crucial for differential diagnosis. Specifically, exclamation mark hairs are indicative of alopecia areata, whereas comma hairs are specific to tinea capitis. Trichoscopy also aids in diagnosing trichotillomania by revealing broken hairs of varying lengths and shapes, and identifies androgenetic alopecia through characteristic anisotrichia.

Abstract N°: ID-1113

Topic: Hair and nail disorders

Tissue-Resident Memory T Cells in Alopecia Areata and Lichen Planopilaris: A Comparative Review

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Introduction

Tissue-resident memory T cells (TRM) represent a specialized subset of antigen-experienced lymphocytes that permanently reside within peripheral tissues and are increasingly recognized as central drivers of chronic autoimmune inflammation. In autoimmune alopecias, their persistence within the hair follicle microenvironment contributes to immune privilege collapse, disease chronicity, and relapse. This study aims to synthesize and compare the role of TRM and related memory T-cell subsets in alopecia areata (AA) and lichen planopilaris (LPP), two clinically distinct yet immunologically overlapping disorders.

Materials and Methods

A systematic review using PubMed, Embase, and the Cochrane Library was conducted including EMTREE and MESH approaches, according to the PRISMA guidelines. Searching was as broad as possible from the inception of the database until December 2025. Original studies investigating memory T-cell populations, with emphasis on TRM phenotypes, cytokine profiles, and spatial localization within the hair follicle, were included. Data were extracted and synthesized according to predefined eligibility criteria and assessed using the GRADE framework.

Results

Nine original studies met inclusion criteria. In AA, cytotoxic $CD8^+CD69^+CD103^+$ TRM and $V\delta1^+$ γδ T cells accumulated predominantly around the hair bulb, promoting reversible, relapsing hair loss through IFN-γ-, granzyme B-, and IL-15–dependent inflammatory circuits. Severe disease was associated with expansion of circulating effector memory T cells re-expressing CD45RA. In contrast, LPP and its variant frontal fibrosing alopecia demonstrated bulge-localized $CD8^+$ TRM and effector memory T cells that induced irreversible follicular stem cell damage, epithelial–mesenchymal transition, and fibrosis via STAT1 activation and macrophage-derived profibrotic mediators. Distinct spatial patterns of granzyme B expression further differentiated non-scarring from scarring disease phenotypes.

Conclusions

Despite sharing a cytotoxic TRM-driven immune axis, AA and LPP diverge in clinical outcome due to disease-specific anatomical targeting of memory T cells. These findings underscore TRM cells as key determinants of reversibility versus scarring and support therapeutic strategies aimed at modulating memory T-cell persistence, including JAK inhibition and IL-15–directed approaches, to achieve durable disease control.

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Abstract N°: ID-1116

Topic: Hair and nail disorders

Alopecia of the eyebrows and eyelashes: the importance of trichoscopy of the scalp

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Introduction

Isolated alopecia areata (AA) and trichotillomania (TTM) of the eyebrows and eyelashes are uncommon, and their clinical recognition is confusing and challenging for clinicians. We herein report twin clinical cases of AA and TTM of eyebrows and eyelashes in which trichoscopy of the scalp clarified the diagnosis.

Results

Case 1

A 40-year-old woman presented with a 3-year history of eyebrow and eyelash hair loss. She used eyeliner to cosmetically camouflage eyebrows hair loss. Dermatological examination revealed diffuse alopecia of eyebrows and upper and lower eyelashes associated with non-scarring patchy alopecia of the frontotemporal hairline. Trichoscopy of the eyebrows showed broken hairs and black dots. Trichoscopy of the scalp showed the presence of vellous hairs, regrowing white hairs, and bands of white and black hair in the same hair shaft: the “hair flag sign”. Hence the diagnosis of AA was made.

Case2

A healthy 52-year-old woman was referred with eyebrow and eyelash hair loss evolving for many years. On dermatological examination, there was diffuse alopecia of eyebrows and upper and lower eyelashes. The patient used eyeliner to camouflage the deficit. The examination of the scalp was unremarkable. Trichoscopy of the eyebrows showed broken hairs and black dots. A diagnosis of AA was made. The patient was treated with three intralesional triamcinolone injections. Four months later, the patient returned without any improvement of eyebrow and eyelash hair loss with an appearance of patchy alopecia of the scalp. Close-up examination revealed non-scarring patchy alopecia of the temporal areas, thin and broken hairs. The traction test was negative along the edges. Trichoscopy of this plaque revealed broken hairs of different lengths, black dots, V sign, and coiled hairs. There were no exclamation mark hairs. These findings were suggestive of TTM. The patient reported that she is nervous and pulling her hair. She also admitted feeling anxious before pulling out her hair from her scalp, eyebrow, and eyelashes and being relieved after doing it.

Thus, the diagnosis of eyebrow and eyelash TTM was assessed. The patient was referred for psychological evaluation.

Conclusions

AA and TTM may have similar clinical presentations. In our patients, trichoscopy of the eyebrows and the eyelashes showed black dots and broken hairs which are common trichoscopic signs to both AA and TTM. Interestingly, trichoscopy of the scalp enabled us to

retain the diagnoses by showing distinctive signs of AA and TTM. In fact, in the first patient, trichoscopy of the scalp revealed the presence of vellus hairs which allowed us to quickly rule out frontal fibrosing alopecia. In addition, trichoscopy showed white regrowing hairs and the “hair flag sign”, very suggestive of AA.
In the second patient, the appearance of the patchy alopecia of the scalp in the course of the disease allowed us to assess the diagnosis of TTM. Trichoscopy of the scalp showed broken hairs of different lengths and shapes resulting from the stretching and fracture of hair shafts.
In summary, our cases highlight the importance of repeated clinical and trichoscopic examinations of the scalp in any alopecia of eyebrows and/or eyelashes.

Abstract N°: ID-1120

Topic: Hair and nail disorders

Systemic comorbidities in frontal fibrosing alopecia and lichen planopilaris: a systematic review and meta-analysis

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Introduction
Frontal fibrosing alopecia (FFA) and lichen planopilaris (LPP) are primary lymphocytic cicatricial alopecias increasingly associated with systemic comorbidities. However, the prevalence, consistency, and comparative patterns of these associations have not been systematically quantified. Objetives: to estimate the prevalence of systemic comorbidities in FFA and LPP and to compare comorbidity profiles between both conditions.

Materials and Methods
We conducted a systematic review and random-effects prevalence meta-analysis, reported in accordance with PRISMA 2020 guidelines and the Joanna Briggs Institute (JBI) methodological guidance for systematic reviews of prevalence studies. The study protocol was prospectively registered in PROSPERO (CRD420250656067). MEDLINE and Embase were searched from inception to June 2025 for observational studies reporting prevalence data on systemic comorbidities in patients with frontal fibrosing alopecia (FFA) and/or lichen planopilaris (LPP). Methodological quality was assessed using the JBI Critical Appraisal Checklist for prevalence studies. Pooled prevalence estimates were calculated for comorbidities reported in multiple studies, 59 with systematic assessment of between-study heterogeneity.

Results
Sixty observational studies, predominantly cross-sectional studies and case series, were included in the quantitative synthesis. Patients with FFA were predominantly older and female, whereas patients with LPP showed greater sex heterogeneity. In FFA, the most prevalent comorbidities were thyroid disorders, cardiovascular risk factors, androgenetic alopecia, lichen spectrum disorders, and inflammatory dermatoses, particularly rosacea. In LPP, cardiovascular risk factors and thyroid disease were consistently reported, together with lichen planus variants, mood and anxiety disorders, and pulmonary conditions. Substantial between-study heterogeneity was observed across several comorbidity categories. Comparative analyses revealed partially overlapping but clearly distinct comorbidity profiles between FFA and LPP. Sensitivity analyses using generalized linear mixed-effects models yielded highly concordant prevalence estimates, supporting the robustness of the primary findings.

Conclusions
These conditions are associated with a broad but heterogeneous burden of systemic comorbidities, with distinct prevalence patterns between entities. The findings underscore the need to consider primary lymphocytic cicatricial alopecias within a broader systemic context and support a tailored, clinically informed approach to comorbidity assessment.

Abstract N°: ID-1142

Topic: Hair and nail disorders

Some aspects of the sudy of vitamin D deficiency and calcium-phosphate imbalance as factors influencing the severity of immunobiological disorders in the pathogenesis of alopecia areata.

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Introduction

Introduction: Alopecia areata is a chronic autoimmune disease with a severe relapsing course. Vitamin D deficiency and calcium-phosphate homeostasis disorders play a key role in determining the severity of alopecia. Studying these mechanisms allows us to identify predictors of severe course and develop pathogenetically based treatment strategies. The study objective is to assess the impact of vitamin D deficiency and calcium-phosphate homeostasis disorders on the severity of alopecia areata, as well as to determine their significance as predictors of the chronicity of the process and response to therapy.

Materials and Methods

Materials and methods: A systematic meta-analysis of 34 studies (n=17286) from PubMed, Scopus, Web of Science, and EMBASE was performed, and 20 patients (mean age 32.5 ± 7.8 years; 65% women) were prospectively followed up, divided into groups with 25(OH)D deficiency <20 ng/mL (n=12) and normal levels ≥20 ng/mL (n=8). The severity of the lesion was assessed using the SALT scale, 25(OH)D levels, total and ionized calcium, phosphate, PTH, albumin, total protein, and lipid profile over 6 months.

Results

Results: A meta-analysis of 34 studies with a total sample of 17,286 patients showed that the mean 25(OH)D level in patients with alopecia areata (AA) was 14.2 ± 5.3 ng/mL, while in controls it was 27.1 ± 6.8 ng/mL ($p < 0.001$). 25(OH)D deficiency (<20 ng/mL) was observed in 61.7–88.4% of patients with AA, while in controls this figure ranged from 26 to 29.5% (95% CI: 26.2–33.8). It was found that 25(OH)D deficiency increases the risk of severe forms of AA by 4.2 times (OR = 4.23; 95% CI: 2.91–6.15; $p < 0.0001$), and at a level <15 ng/ml, the risk of chronicity increases by 82%. Disturbance of calcium-phosphate homeostasis was noted in 58–68% of patients, manifested by a decrease in total calcium by 12–18%, ionized calcium by 9.7–14.5%, phosphate by 15–21%, and an increase in parathyroid hormone by 25.6–41.2% ($p < 0.01$). A prospective cohort study included 20 patients (mean age 32.5 ± 7.8 years, 65% female), divided into a 25(OH)D deficiency group <20 ng/mL (n = 12) and a normal level group ≥20 ng/mL (n = 8). In the deficiency group, severe AA occurred in 67%, moderate in 25%, mild in 8%, relapses within 6 months in 66.7%, C-reactive protein (CRP) >5 mg/L in 58%, total calcium decreased in 60%, ionized calcium in 65%, phosphate in 45%, and PTH increased in 41.7%. In the normal 25(OH)D group, severe AA was 12%, moderate was 37.5%, mild was 50%, relapses were 25%, CRP >5 mg/L was 12.5%, total and ionized calcium were reduced by 12.5%, phosphate and PTH were increased in 12.5%. Hair growth restoration after correction of 25(OH)D calcium-phosphate balance was observed in 68% of patients within 12–16 weeks, while in the group without correction it was only in 24%. The average SALT index in the deficiency group was 54.3 ±

18.7%, in the normal 25(OH)D group, it was 28.6 ± 14.2%.

Conclusions

Conclusion: Correlation analysis showed an inverse relationship between 25(OH)D levels and AA severity according to SALT (r = −0.61; p = 0.003), as well as a direct relationship between PTH and AA severity (r = +0.54; p = 0.004). Thus, the results of the meta-analysis and prospective study demonstrate that 25(OH)D deficiency and secondary hyperparathyroidism are key predictors of severe and chronic forms of AA, increase the risk of relapse by 41–44%, reduce the duration of remission by 40–41% and ensure the effectiveness of therapy with timely correction of metabolic imbalance.

Abstract N°: ID-1146

Topic: Hair and nail disorders

Clascoterone and androgenic alopecia: mechanistic rationale and therapeutic potential

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Introduction
Androgenetic alopecia (AGA), the most common form of non-scarring hair loss in both men and women, is characterized by progressive miniaturization of terminal hair follicles into vellus follicles. AGA is determined by genetic predisposition and increased follicle sensitivity to androgens, especially dihydrotestosterone (DHT). Despite being non-life-threatening condition, it can profoundly impact self-esteem and quality of life. Current treatment - minoxidil and 5α-reductase inhibitors - have limited efficacy. Clascoterone, a topical androgen receptor (AR) antagonist approved for the treatment of acne, may offer a novel therapeutic option for AGA based on its mechanism of action. This review evaluates the biological and mechanistic rationale for clascoterone as a potential AGA treatment, based on its pharmacology and current understanding of AGA pathophysiology.

Materials and Methods
A narrative review was performed, including previously published review articles on clascoterone and its potential application in AGA. Literature searches were conducted in PubMed, Embase, and Cochrane Library using relevant keywords related to clascoterone and AGA. A total of 8 articles met the inclusion criteria and were analyzed in this review. Two reviewers independently conducted the eligibility assessment and data extraction

Results
Clascoterone is a selective, locally active AR antagonist that competitively binds to cytoplasmic ARs in sebocytes and hair follicles, thereby reducing DHT-induced signaling. In vitro studies have shown that clascoterone competes with DHT for AR binding in sebocytes and exhibits a higher affinity for these receptors than DHT, leading to effective inhibition of androgen-regulated gene transcription. This results in decreased sebum production, lower levels of proinflammatory cytokines, and reduced dermal inflammation. This mechanism is biologically relevant to AGA, in which excessive AR activation contributes to progressive hair follicle miniaturization. Clascoterone is rapidly metabolized to an inactive form, limiting systemic exposure, and clinical data from acne studies indicate minimal systemic effects.

Conclusions
Based on its mechanism of action as a selective, locally active AR antagonist, clascoterone represents a new therapeutic approach for AGA. Its ability to competitively inhibit DHT-mediated AR signaling in hair follicles, combined with rapid local metabolism and minimal systemic exposure observed in acne studies, supports its potential suitability for a topical use in AGA. Although clinical trials on clascoterone for AGA have been conducted, results are not yet publicly available, preventing definitive conclusions on efficacy and safety. Nevertheless, there is a need for further studies to confirm its effectiveness and long-term safety in patients with AGA.

Abstract N°: ID-1152

Topic: Hair and nail disorders

Rare case of refractory, multiple KOH-negative tinea incognito masquerading as cicatricial alopecia and perifollicular dermatosis, rapidly transforming into giant kerion celsi

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Results

Tinea incognito is a modified dermatophyte infection resulting from prior inappropriate exposure to topical corticosteroids and/or immunosuppressants, often leading to atypical clinical manifestations and delayed diagnosis. It may clinically mimic inflammatory or autoimmune dermatoses, frequently resulting in inappropriate management. Standard screening and diagnostic methods, including potassium hydroxide (KOH) preparation and Wood's lamp examination, may yield false-negative results, particularly in steroid-altered or deeply localized infections.

We report a rare case of refractory, repeatedly KOH-negative tinea incognito/tinea capitis mimicking cicatricial alopecia and perifollicular dermatosis. An 8-year-old male patient presented with a well-demarcated, congregating erythematous plaque measuring 3 × 2 cm in the parieto-occipital region, accompanied by perifocal white scaling and occipital lymphadenopathy. Prior evaluation at another institution, both before treatment and following treatment with topical betamethasone dipropionate and topical chloramphenicol, included multiple negative KOH preparations and Wood's lamp examination results. Upon presentation to our clinic, repeated KOH preparations and Wood's lamp examinations (despite prior treatment) remained negative. Therapy was subsequently modified to topical gentamicin. One month later, the clinical condition rapidly deteriorated, with development of an infiltrated 12 × 8 cm suppurative plaque at the site of previous therapy. Mycological examinations and fungal cultures were repeated and again yielded negative results. An initial skin biopsy was performed. Despite persistently negative KOH preparations and Wood's lamp examinations (six times in total), systemic therapy with oral ketoconazole (100 mg twice daily), oral amoxicillin/clavulanic acid, topical miconazole nitrate, and an antifungal shampoo containing ketoconazole was initiated due to strong clinical suspicion of kerion celsi. The second fungal culture, which became available several weeks later, ultimately revealed growth of *Microsporum canis*. Initial histopathological examination demonstrated chronic folliculitis in an active phase with neutrophilic microabscess formation of unclear etiology; fungal infection could not be excluded due to the presence of eosinophils. A repeat biopsy revealed subacute suppurative inflammation, again unable to exclude fungal infection, with a recommendation for polymerase chain reaction analysis. The patient demonstrated marked clinical improvement following initiation of systemic antifungal therapy, which was continued for a total duration of 12 weeks. At one-year follow-up, almost complete hair regrowth and full clinical resolution were observed.

Tinea incognito may present with false-negative KOH examinations due to low fungal burden, often masked by prior corticosteroid use. Nevertheless, previous mycological studies report that the KOH test is a fast, reliable, easy-to-perform, and cost-effective diagnostic tool, with up to 91% of tinea incognito samples reported as positive for hyphae in either mycelial or hyphal forms. Although mycological culture remains useful for confirming the diagnosis and identifying the causative species, its utility is limited by prolonged incubation time. This case, characterized by six consecutive negative KOH examinations, highlights the diagnostic limitations of routine mycological testing and underscores the importance of maintaining a high index of suspicion for fungal infection in atypical, treatment-resistant dermatoses in the pediatric population, even in the presence of repeatedly negative initial investigations

Abstract N°: ID-1193

Topic: Hair and nail disorders

From Beehive to Scalp Health: The Dermatological Benefits of a Standardized Propolis Extract from Greece

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Introduction

Dandruff is closely associated with microbial dysbiosis involving overgrowth of *Malassezia spcs*. and shifts in the bacterial community. PropolisExtract (PE), a standardized bee-derived extract developed by our laboratories, was incorporated into an anti-dandruff hair line together with 0.75% piroctone olamine to enhance anti-dandruff efficacy. The intrinsic sebum-regulating capacity of PE, enhancing in parallel scalp microbiota balance in dandruff-prone scalp was assessed in a separate *in vivo* study of a shampoo formula with the latter as the sole active.

Materials and Methods

Materials

The tested formulations included:
- Shampoo containing 0.3%v/v PE as the sole active ingredient.
- *In vitro and ex vivo* test solutions: Piroctone olamine powder and PE aqueous solution (Athanasopoulou et al., 2025) , both diluted with TSB (Tryptone Salt Broth) before the addition of inoculum (common scalp commensals as ATCC derived strains and scalp microbiota sample from two healthy volunteers) to achieve final concentrations of:
0.75% w/v piroctone olamine
1% w/v piroctone olamine
0.3% v/v PE + 0.75w/v piroctone olamine (combination)

Methods

-Microbiota Study (n=10): Volunteers with dandruff applied the 0.3% PE shampoo for 7 days (2-3 applications). Scalp samples were analyzed by CFU quantification and 16S/ITS amplicon sequencing to determine bacterial/fungal ratios, alpha-beta diversity, and species-level changes.

-0.3% PE shampoo efficacy study (n=10): Volunteers used the PE-only shampoo for 1 week (2-3 uses) while scalp sebum levels were measured instrumentally.

-*Ex vivo Malassezia* study: Survival of *Malassezia spcs*. was measured across the following test solutions: 0.75% w/v piroctone olamine, 1% w/v piroctone olamine and 0.3% v/v PE + 0.75w/v piroctone olamine (combination).

-*In vitro* study*:* Survival rate of microbial flora commonly found in the scalp.

Results

Microbiota modulation: After 7 days of use of the shampoo, containing 0.3% PE as the sole active ingredient, the

Cutibacterium/Staphylococcus ratio increased from 4.47 to 10.27, reflecting reduced *Staphylococcus* abundance, including *S. capitis*, a species associated with dandruff severity. The *Malassezia restricta/M. globosa* ratio decreased by 38.3% (12.7:1 to 7.8:1), indicating a shift toward a healthier fungal balance. Alpha-diversity indices increased, showing improved microbial richness and evenness.

Intrinsic activity of PE: When tested as the only active ingredient, 0.3% PE shampoo produced a -11.6% reduction in scalp sebum after one week use.

Ex vivo Malassezia reduction: The 0.3% PE solution + 0.75% piroctone olamine after 10 minutes application significantly reduced Malassezia survival (-20%), outperforming 0.75% piroctone olamine (-12%) and approaching 1% piroctone olamine (-28%). While 1% piroctone olamine showed stronger inhibition, it was not scalp microbiota-friendly due to its broader suppressive action across diverse commensals. In contrast, 0.3% PE and 0.75% piroctone olamine were assessed as microbiota-friendly.

Conclusions

At its effective concentration of 0.3%, PE demonstrates both stand-alone and synergistic benefits in dandruff care. As a single active, it reduces scalp sebum and improves microbiota balance, by enhancing fungal and bacterial ratios associated with scalp health. *Ex vivo* results confirm that PE combined with 0.75% piroctone olamine is microbiota-friendly, while selectively inhibiting *Malassezia spcs*, supporting its role as a natural, effective booster for healthier dandruff-prone scalps.

Abstract N°: ID-1202

Topic: Hair and nail disorders

Tinea Pseudoimbricata Caused by Microsporum canis

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Introduction

Tinea capitis is common in preschool-aged children. It can be associated with tinea corporis (glabrous skin dermatophytosis). We report a case of microsporic tinea capitis associated with Microsporum canis tinea corporis presenting with atypical clinical and dermoscopic features.

Results

A 5-year-old child with no medical history presented with a pruritic scaly condition of the scalp, secondarily associated with pruritus of the back, evolving for one month. Clinical examination of the scalp revealed diffuse scaling ("scaly helmet") interspersed with centimetric, erythematous, alopecic, and crusted plaques in the frontal and parietal areas. Trichoscopy revealed broken hairs, sheathed hairs, and comma hairs. On the back, the patient presented with multiple rounded, targetoid plaques covered with scales. Dermoscopy of these plaques showed concentric rings surrounded by a scaly border and an erythematous halo. Mycological culture confirmed Microsporum canis infection on both the scalp and the back. The diagnosis of tinea capitis associated with Microsporum canis tinea corporis was established. Treatment with griseofulvin was initiated. The outcome was favorable, with complete regression of scalp and back plaques after six weeks of treatment.

Conclusions

During tinea capitis, the appearance of distant scaly lesions may be related to an "id reaction" (dermatophytid) or a dermatophytosis. Mycological sampling of these plaques allows for differentiation by identifying the fungal agent in cases of dermatophytosis.
In our patient, the clinical and dermoscopic appearance of the back plaques was atypical. Indeed, the annular and concentric appearance is typically reported in cases of Tinea imbricata caused by Trichophyton concentricum and manifesting as multiple concentric scaly rings. Tinea imbricata was reported in Oceania, Southeast Asia, Latin America, and some African foci. Other dermatophytes were also involved in atypical presentation, such as Trichophyton mentagrophytes (called Tinea pseudoimbricata). To our knowledge, no similar clinical presentation of Microsporum canis dermatophytosis has been reported in the literature.
We reported a case of Tinea pseudoimbricata caused by Microsporum canis.

Abstract N°: ID-1204

Topic: Hair and nail disorders

Impact of Eyebrow and Eyelash Regrowth on Patient-Reported Outcomes in Patients With Severe Alopecia Areata: Interim Results From the Phase 3 UP-AA Trial

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Introduction

Alopecia areata (AA) is a chronic, immune-mediated disease characterized by nonscarring hair loss that can substantially impair quality of life. Loss of eyebrows (EB) and eyelashes (EL) is particularly distressing due to their role in facial identity, emotional expression, and ocular protection (Starace M, et al. *Dermatol Ther*. 2023;13:1244). In a phase 3 trial, patients with severe AA who were treated with upadacitinib (UPA), an oral, selective Janus kinase (JAK) inhibitor, experienced improved EB and EL regrowth (Mostaghimi et al. *J Skin*. 2025;9:s664). Although improved hair coverage is a key treatment goal for patients with AA, the relationship between EB and EL regrowth and patient-reported outcomes (PROs) is not well characterized. Here, we evaluate the relationship between EB and EL regrowth and patient-reported quality of life (QoL) and symptom burden in UP-AA.

Materials and Methods

UP-AA (NCT06012240) is an ongoing, phase 3, randomized, placebo-controlled, double-blind study evaluating once-daily UPA in adults and adolescents with severe AA (Severity of Alopecia Tool [SALT] score ≥50). Patients (aged 12–64 years) were randomly assigned to receive UPA 15mg, UPA 30mg, or placebo for 24 weeks. We assessed the relationship between EB and EL regrowth and PROs at week 24, based on clinician-reported outcome (ClinRO) responder status. EB and EL regrowth were each evaluated using 4-point ClinRO scales with higher scores indicating greater hair loss (0=no hair loss; 1=minimal hair loss; 2=significant hair loss; 3=no noticeable hair). This post hoc, treatment-agnostic analysis included patients who had available EB/EL scores and PRO data, and baseline EB/EL scores ≥2. Patients were classified as ClinRO responders (achieving a score of 0/1) or nonresponders (score of 2/3) for each measure. PROs were assessed using the Skindex-16 for AA and the Alopecia Areata Symptom Impact Scale (AASIS). The Skindex-16 AA evaluates the impact of AA on health-related QoL across 3 domains—emotions, symptoms (not included in this analysis), and daily functioning—over the past week, with responses ranging from 0="never bothered" to 6 ="always bothered." The AASIS comprises 2 numerical rating subscales assessing AA-related symptom severity (7 items; 0="not present," 10="as bad as you can imagine") and functional interference (6 items; 0="did not interfere," 10="interfered completely"). PROs were analyzed at week 24 using ANCOVA, adjusting for corresponding baseline score and prespecified covariates (baseline disease severity [SALT score <95 vs SALT score ≥95], age (adults vs adolescents), sex, and AA episode duration at baseline [<3 years vs ≥3 years]). Comparisons were made between ClinRO-defined responders (score of 0/1) and nonresponders (score of 2/3) for EB and EL regrowth.

Results

The study enrolled 1381 patients with a mean (SD) age of 35.9 (13.3) and baseline SALT score of 84.0 (18.9); of these,

41.4% were male, 51.3% had very severe AA (SALT score ≥95), and 43.3% had a disease duration ≥3 years. At week 24, among patients with baseline EB/EL scores ≥2, those who met ClinRO responder criteria (score of 0/1) for EB or EL growth experienced significantly (*P*≤.001 for all comparisons) greater improvements from baseline in Skindex-16 AA emotions and functioning domains compared with nonresponders (score of 2/3) (**Figure**). Similarly, patients who met ClinRO responder criteria for EB or EL growth experienced significantly (*P*≤.001 for all comparisons) greater improvements from baseline at week 24 in AASIS interference and symptom scores compared with nonresponders.

Figure. Health-Related Quality-of-Life Improvements in Patients With Eyebrow and Eyelash ClinRO Scores of 0/1 and 2/3 at Week 24

AA, alopecia areata; AASIS, Alopecia Areata Symptom Impact Scale; ClinRO, clinician-reported outcome; EB, eyebrow; EL, eyelash.

[a]Skindex-16 AA domain-specific scores are calculated as the sum of all items in that domain and standardized to a 0-100 range, with higher scores indicating greater impact on health-related quality of life.

[b]AASIS subscale scores are calculated as the sum of all items, ranging from 0–10, with higher scores indicating greater symptom severity and functional interference.

ClinRO scores for EB hair loss: 0 = the eyebrows have full coverage and no areas of hair loss; 1 = there are minimal gaps in eyebrow hair, and distribution is even; 2 = there are significant gaps in eyebrow hair or distribution is not even; 3 = no notable eyebrows. ClinRO scores for EL Loss: 0 = the eyelashes form a continuous line along the eyelids on both eyes; 1 = there are minimal gaps and the eyelashes are evenly spaced along the eyelids on both eyes; 2 = there are significant gaps along the eyelids or the eyelashes are not evenly spaced along the eyelids; 3 = no notable eyelashes.

Analysis included patients who had available EB/EL scores and PRO data, and baseline EB/EL scores ≥ 2. ***P ≤ .001 for ClinRO 0/1 compared with ClinRO 2/3 within each domain analyzed using ANCOVA, adjusting for the corresponding baseline score and prespecified covariates (baseline disease severity [SALT score < 95 vs SALT score ≥ 95], age (adults vs adolescents), sex, and AA episode duration at baseline [< 3 years vs ≥ 3 years]).

Conclusions

Patients with severe AA who achieved ClinRO-defined EB and EL responses also demonstrated greater health-related QoL improvements in symptoms and emotional and daily functioning. These results highlight the clinical relevance of EB and EL regrowth as criteria for treatment success in severe AA and further demonstrate that regrowth beyond the scalp

contributed to meaningful improvements in QoL for patients with AA.

Abstract N°: ID-1218

Topic: Hair and nail disorders

Facial Hair Regrowth and Health-Related Quality of Life in Males With Severe Alopecia Areata: First Report of Facial Hair Regrowth Outcomes Using Interim Results From the Phase 3 UP-AA Trial

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Introduction

Alopecia areata (AA) is a chronic autoimmune disease resulting in nonscarring hair loss on the scalp, face, and/or body. Unpredictable facial hair loss among males can have a profound impact on a patient's health-related quality of life (HRQoL), particularly in psychosocial domains, including social anxiety, self-consciousness, and depression. We investigated the relationship between facial hair regrowth and improvement in patient-reported outcomes (PROs) in males with severe AA who were enrolled in a phase 3 clinical trial.

Materials and Methods

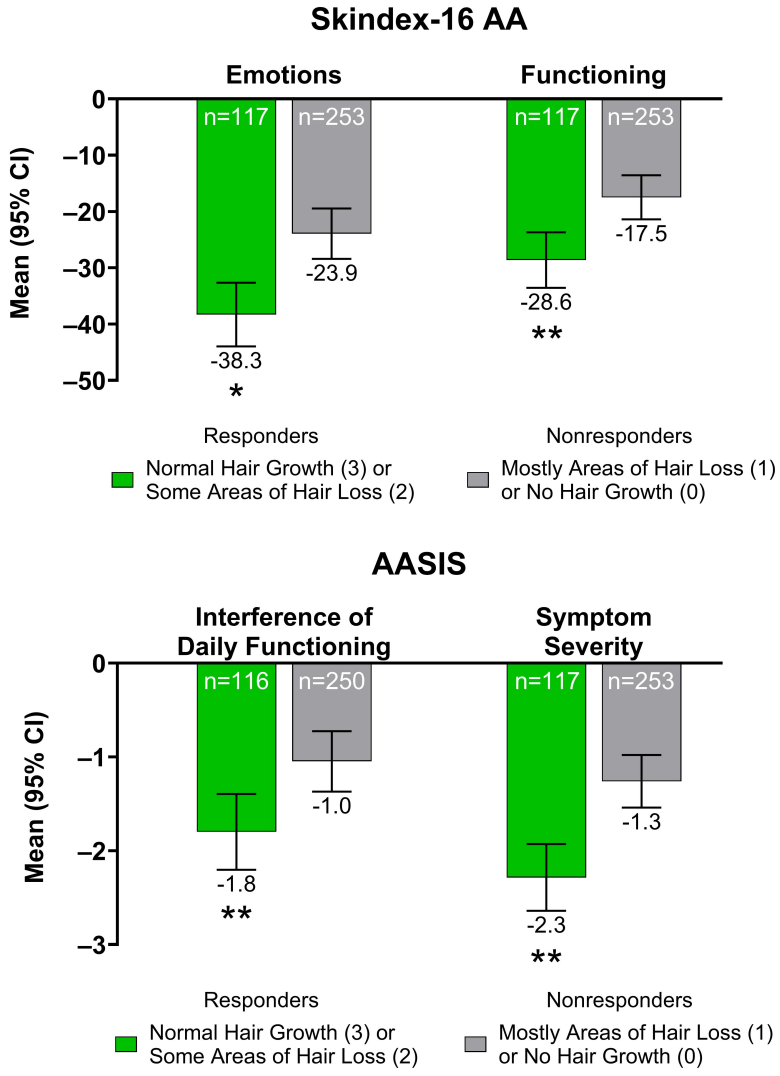
UP-AA (NCT06012240) is an ongoing, multicenter, phase 3, randomized, placebo-controlled, double-blind clinical trial evaluating the efficacy and safety of upadacitinib (UPA) in adults and adolescents (12–64 years) with severe AA (defined as a Severity of Alopecia Tool [SALT] score ≥50) who were randomized (2:2:1) to receive orally once-daily UPA 15 mg, UPA 30 mg, or placebo for 24 weeks in 2 replicate studies. This post hoc, treatment-agnostic analysis included males who had available beard scores and PRO data. Clinician-reported outcomes were evaluated using the Global Investigator Assessment for beard hair loss where 0 = no hair growth; 1 = mostly areas with hair loss, some areas of hair growth; 2 = mostly normal hair growth, some areas of hair loss; and 3 = normal hair growth. Patients were instructed to not shave their beard for ≥3 days before assessment. PROs included the Skindex-16 AA and the Alopecia Areata Symptom Impact Scale (AASIS). The Skindex-16 AA has 3 domains including emotions, functioning, and symptoms. Patients rated (range, 0 to 6) how much each impact or symptom bothered them during the past week, and the sum for each domain was standardized to a 0 to 100 scale with higher scores indicating greater impact on HRQoL. The 13-item AASIS has 2 subscales including symptom severity and interference of daily functioning; an average score of the items within each subscale was calculated, with higher scores indicating greater symptom severity and interference. To be included in the analysis patients had to have a beard hair loss score of 0 or 1. The mean change from baseline in Skindex-16 AA and AASIS scores at week 24 was assessed for responders (those who achieved a ≥2 point improvement from baseline in beard hair loss score) and compared with nonresponders (those failing to achieve a ≥2 point improvement from baseline in beard hair loss score). Continuous PROs were analyzed using ANCOVA, adjusting for corresponding baseline PRO score and prespecified covariates, including scalp hair loss as assessed by SALT. The effect of concurrent scalp, eyebrow, and eyelash hair regrowth at week 24 on PROs was not controlled for in this analysis.

Results

The study enrolled 561 males with a mean (SD) age of 33.5 (12.7) years and baseline SALT score of 84.8 (18.8); 53.7% had very severe AA (SALT score ≥95) and 41.0% had a disease duration of ≥3 years. Among those with a beard hair loss score of 0 or 1 at baseline, 370 patients had complete Skindex-16 AA and 366 had complete AASIS data and were included in

this analysis. At week 24, responders (117/370, 31.6%) who achieved a beard hair loss score of 2 (mostly normal growth) or 3 (normal growth) experienced significantly greater improvement in Skindex-16 AA emotions (*P*<.05) and functioning (*P*<.001) scores than nonresponders (253/370, 68.4%) with a beard hair loss score of 0 (no hair growth) or 1 (mostly hair loss; **Figure**). Similarly, at week 24, responders with a beard hair loss score of 2 or 3 experienced significantly greater improvement in AASIS interference (*P*<.001) and symptom severity (*P*<.001) scores than nonresponders.

Health-Related Quality-of-Life Improvements at Week 24 By Beard Loss Scores Among Males With a Baseline Beard Loss Score of 0 or 1



AA, alopecial areata; AASIS, Alopecial Areata Symptom Impact Scale. SALT, Severity of Alopecial Tool.

Clinician-reported beard hair loss was evaluated using the Global Investigator Assessment for beard hair loss where 0 = no hair growth; 1 = mostly areas with hair loss, some areas of hair growth; 2 = mostly normal hair growth, some areas of hair loss; and 3 = normal hair growth. Responders were those who achieved a ≥ 2 point improvement from baseline in beard hair loss score.

*$P \leq .05$; **$P \leq .001$ analyzed using ANCOVA, adjusting for the corresponding baseline score and prespecified covariates (baseline disease severity [SALT score < 95 vs SALT score ≥ 95], age (adults vs adolescents), and AA episode duration at baseline [< 3 years vs ≥ 3 years]). Completed cases and patients with baseline beard hair loss scores < 2 were included. Effects of concurrent scalp, eyebrow, and eyelash hair regrowth at week 24 on PROs was not controlled.

Conclusions

Males with severe AA who achieved clinician-assessed improvement in facial hair coverage experienced significant multidimensional HRQoL benefits including improvements in symptom severity, emotional well-being, and daily functioning.

Abstract N°: ID-1228

Topic: Hair and nail disorders

Impact of Scalp Hair Regrowth on Health-Related Quality of Life in Patients With Severe Alopecia Areata: Interim Results From the Phase 3 UP-AA Trial

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Introduction

Alopecia areata (AA) is a chronic, immune-mediated disease characterized by nonscarring hair loss and significant psychosocial burden. Scalp hair loss is assessed in clinical trials using the Severity of Alopecia Tool (SALT). In the phase 3 UP-AA trial, patients with severe AA who were treated with upadacitinib, an oral, selective Janus kinase (JAK) inhibitor, demonstrated clinically meaningful scalp hair regrowth at week 24. The impact of scalp hair regrowth on quality of life is yet to be fully characterized. Here, we evaluate the relationship between scalp hair regrowth as assessed by SALT and patient-reported quality of life and symptom burden in UP-AA.

Materials and Methods

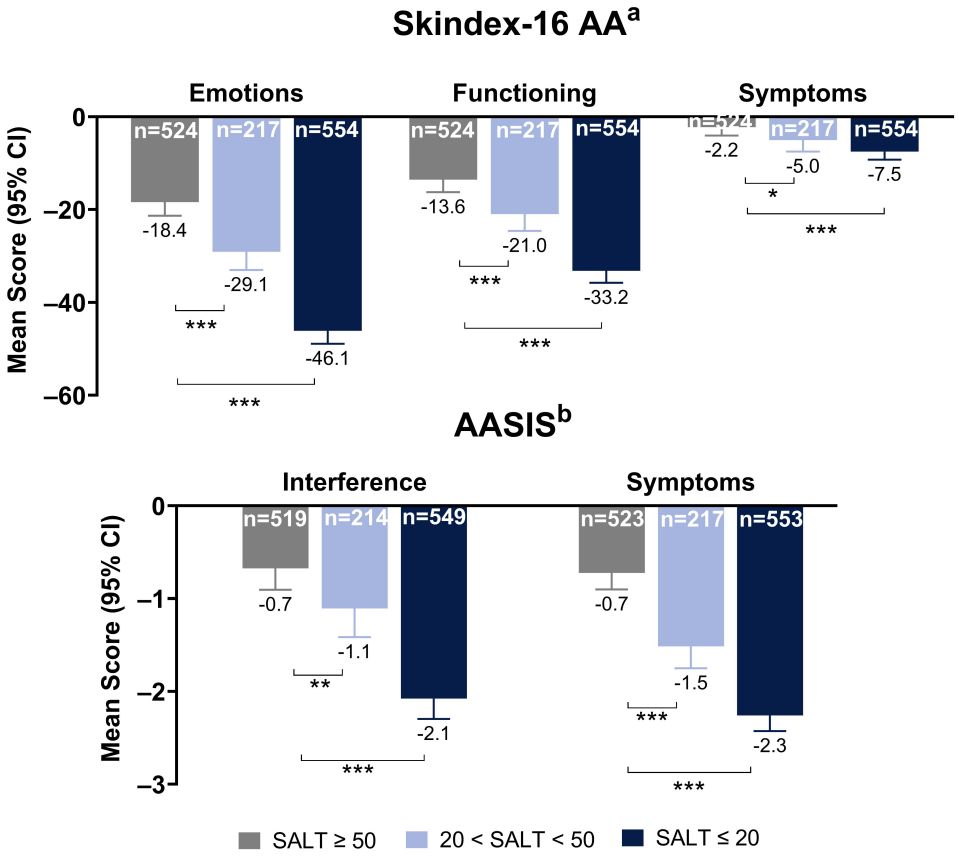
UP-AA (NCT06012240) is an ongoing, phase 3, randomized, placebo-controlled, double-blind study evaluating once-daily upadacitinib in adults and adolescents with severe AA (SALT score ≥ 50). Patients (aged 12–64 years) were randomly assigned to receive oral upadacitinib 15 mg, upadacitinib 30 mg, or placebo for 24 weeks (Period A). This post hoc, treatment-agnostic analysis pooled patients with available SALT scores and patient-reported outcomes (PRO) data according to SALT response categories derived from absolute SALT scores at week 24. The SALT score is a measure of scalp alopecia that integrates both the extent and density of hair loss across 4 scalp regions, with total scores ranging from 0 (no scalp alopecia) to 100 (complete scalp alopecia). Absolute SALT scores at week 24 were used to define clinically meaningful scalp hair regrowth categories, with lower scores indicating greater scalp hair coverage: SALT ≤ 20 (≥ 80% scalp hair coverage), 20 < SALT < 50 (partial scalp coverage), and SALT ≥ 50 (limited scalp coverage). PROs were assessed using the Skindex-16 for AA and The Alopecia Areata Symptom Impact Scale (AASIS). Skindex-16 AA evaluates 3 domains: emotions, symptoms, and functioning. AASIS uses 2 subscales to assess symptom severity and functional impairment. Changes from baseline in PRO scores were compared across SALT response categories through week 24 using ANCOVA, adjusting for baseline PRO score and prespecified covariates (baseline disease severity [SALT score < 95 vs SALT score ≥ 95], age (adults vs adolescents), sex, and AA episode duration at baseline [< 3 years vs ≥ 3 years]).

Results

The study enrolled 1381 patients with a mean (SD) age of 35.9 (13.3) and baseline SALT score of 84.0 (18.9); of these, 41.4% were male, 51.3% had very severe AA (SALT score ≥ 95), and 43.3% had a disease duration ≥ 3 years. At week 24, patients who achieved ≥ 80% scalp coverage (SALT ≤ 20) showed significantly greater improvements in Skindex-16 AA emotions, symptoms, functioning scores (all $P \leq .001$) compared with patients with limited scalp coverage (SALT ≥ 50; **Figure**). Patients who achieved partial scalp coverage (20 < SALT < 50) also showed significant but smaller improvements in Skindex-16 AA emotions ($P \leq .001$), symptoms ($P \leq .001$), and functioning ($P = .02$) scores. Similarly, patients who achieved ≥ 80% scalp coverage (SALT ≤ 20) at week 24 showed significantly greater improvements in AASIS symptom

severity ($P \leq .001$) and functional interference ($P \leq .001$) than patients with limited scalp coverage (SALT ≥ 50; **Figure**); patients achieving partial scalp coverage (20 < SALT < 50) also showed significant but smaller improvements in AASIS symptom severity ($P \leq .001$) and interference ($P = .006$; **Figure**).

Figure. Impact of SALT-Defined Scalp Hair Regrowth on Improvements in Patient-Reported Quality-of-Life Outcomes in Severe Alopecia Areata



AA, alopecia areata; AASIS, Alopecia Areata Symptom Impact Scale; SALT, Severity of Alopecia Tool.

[a]The Skindex-16 AA evaluates the impact of AA on health-related quality of life across 3 domains, including emotions, symptoms, and functioning, and asks patients to rate disease impact in the past week, with responses ranging from 0 = "never bothered" to 6 = "always bothered." Domain-specific scores are calculated as the sum of all items in that domain and standardized to a 0-100 range, with higher scores indicating greater impact on health-related quality of life.

[b]The AASIS comprises 2 numerical rating subscales, ranging from 0 = "not present" to 10 = "as bad as you can imagine," assessing AA-related symptom severity and functional interference. Subscale scores are calculated as the sum of all items, ranging from 0–10, with higher scores indicating greater symptom severity and interference.

SALT ≤ 20 is defined as ≥ 80% scalp hair coverage; 20 < SALT < 50 is defined as 80-50% hair coverage; SALT ≥ 50 is defined as ≤ 50% hair coverage.

Analysis included patients who had available SALT scores and PRO data.
*P ≤ 05, **P ≤ .01, ***P ≤ .001 for SALT ≤ 20 or 20 < SALT < 50 when compared with SALT ≥ 50 within each domain analyzed using ANCOVA, adjusting for the corresponding baseline score and prespecified covariates (baseline disease severity [SALT score < 95 vs SALT score ≥ 95], age (adults vs adolescents), sex, and AA episode duration at baseline [< 3 years vs ≥ 3 years]).

Conclusions

Scalp hair regrowth, as assessed by SALT, was associated with meaningful improvements in patient-reported health-related quality of life and symptom burden in patients with severe AA. These findings further support the clinical relevance of SALT-based endpoints and highlight the importance of incorporating PROs alongside clinician-assessed measures to more comprehensively evaluate treatment benefit in AA.

Abstract N°: ID-1232

Topic: Hair and nail disorders

Prevalence and Incidence of Alopecia Areata, Alopecia Totalis, and Alopecia Universalis in the United States: Contemporary Evidence From 2 Large Administrative Claims Databases

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Introduction

Alopecia areata (AA) is a chronic autoimmune disease characterized by nonscarring hair loss. Existing US estimates of diagnosed AA prevalence and incidence are largely outdated, often do not account for recurrent disease episodes, and may not reflect the current treatment landscape. Updated real-world data are needed to accurately characterize the diagnosed burden of AA. In this study, we estimated annual ever-diagnosed prevalence, current diagnosed prevalence, and diagnosed incidence of AA, alopecia totalis (AT), and alopecia universalis (AU) in a representative real-world US population to provide contemporary epidemiologic estimates.

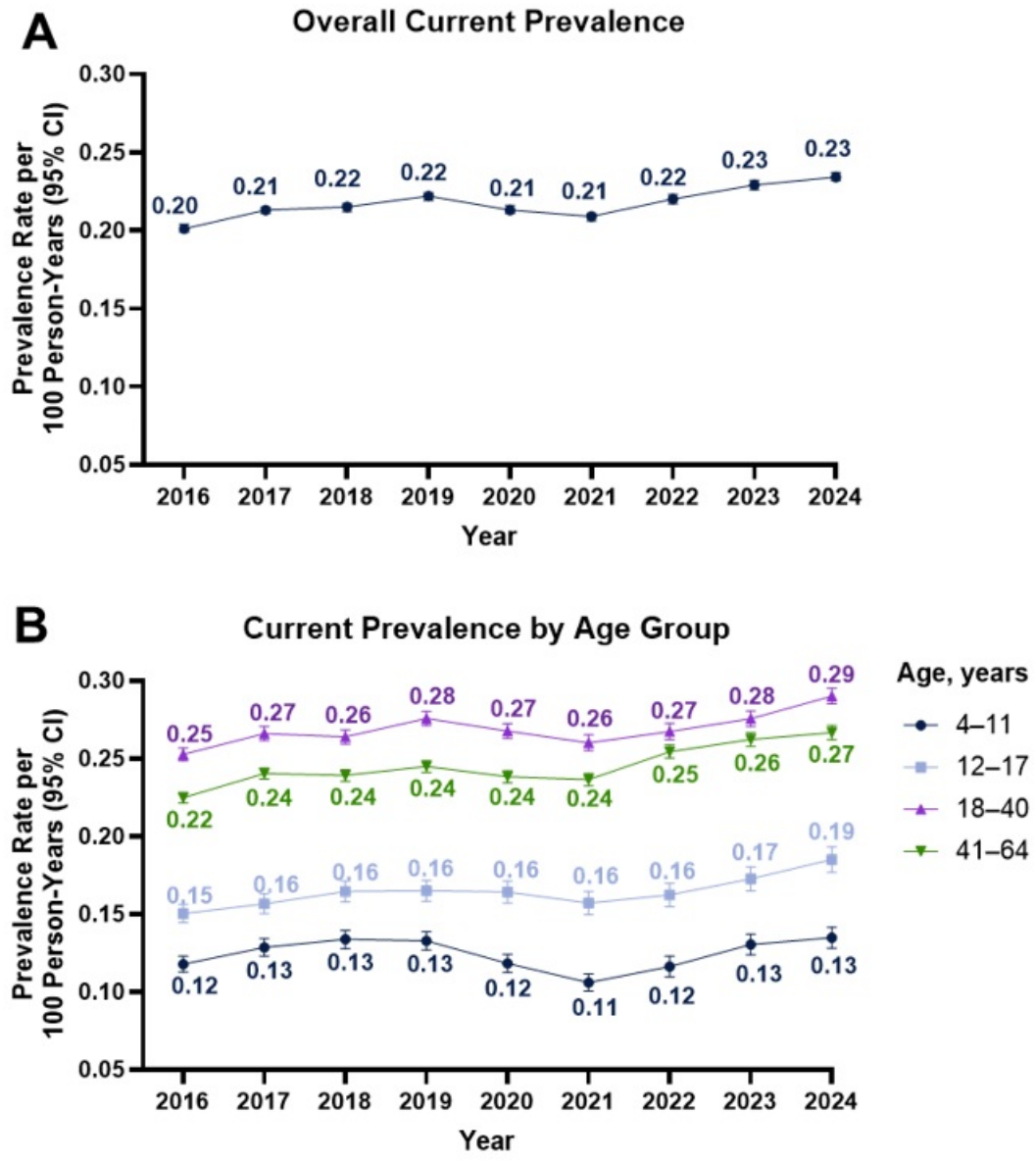
Materials and Methods

This population-based cohort study used data from 2 large US administrative claims databases (MarketScan Research Database and Optum® Clinformatics® Data Mart) from 2016–2024. Individuals aged 4–64 years with continuous plan enrollment during a given calendar year (coverage gaps ≤ 45 days allowed) were eligible for inclusion in that year's analysis. Individuals with missing age or sex were excluded. Cases of AA, AT, and AU were identified using International Classification of Diseases, Ninth and Tenth Revision, Clinical Modification (ICD-9-CM/ICD-10-CM) diagnosis codes (ICD-9-CM 704.01 used through October 2015; ICD-10-CM L63.x used from October 2015 onward). Ever-diagnosed prevalent cases were defined as individuals with ≥ 1 recorded diagnosis of AA, AT, or AU from database inception through the analysis year. Current prevalent cases were defined as individuals with ≥ 1 recorded diagnosis of AA, AT, or AU during the analysis year or the prior year. Incident cases were defined as individuals with a new AA, AT, or AU diagnosis in the analysis year with no prior recorded diagnosis in either database. Estimates were stratified by sex, age, and AA subtypes and standardized by age and sex using weights derived from the 2024 US Census population.

Results

Over the study period, approximately 66 million individuals were eligible for study inclusion across both databases. Of these individuals, 304,803 had ever received a diagnosis of AA, AT, or AU (19,331/304,803 [6.3%] specifically had a diagnosis of AT or AU); the mean age was 37.0 years, and 61.6% were female. The age- and sex-standardized ever-diagnosed prevalence of AA/AT/AU in 2024 was 0.46% (95% CI: 0.46, 0.48). AT or AU were ever-diagnosed in 0.04% of the eligible cohort in 2024. The age- and sex-standardized current prevalence estimate increased from 0.20% (95% CI: 0.20, 0.20) in 2016 to 0.23% (95% CI: 0.23, 0.24) in 2024 (**Figure 1A**); current prevalence estimates were highest in patients aged 18–40 years (**Figure 1B**). In 2024, the current prevalence estimate for a diagnosis of AT or AU was 0.02%. The age- and sex-standardized incidence rate of AA (new cases per 100,000 person-years) was 91.03 (95% CI: 89.69, 92.38) in 2016 and increased to 93.50 (95% CI: 91.99, 95.04) in 2024. The incidence rate of a diagnosis of AT or AU in 2024 was 7 per 100,000 person-years.

Figure 1. Current Prevalence of AA Over Time in the United States



AA, alopecia areata.

Conclusions

Using a large, population-based cohort, we generated updated and standardized prevalence and incidence estimates of AA, AT, and AU in the United States and identified temporal and demographic patterns. These comprehensive data provide both cumulative and recent disease burden and may inform clinical care, healthcare resource planning, and public health strategies. Our findings suggest that the prevalence and incidence of AA have increased modestly since 2016, a trend that may reflect improved diagnosis by healthcare providers or more individuals seeking care. These results likely underestimate the true population burden, as some individuals with AA may not seek medical care, remain undiagnosed, or lack insurance coverage. Accordingly, claims-based estimates may more directly capture the prevalence and incidence of treated disease or AA-related healthcare utilization. Additional complementary study approaches are needed to fully characterize the overall disease burden of AA.

Abstract N°: ID-1241

Topic: Hair and nail disorders

Terry's Nails and Absent Lunula: Two Nail Abnormalities Indicative of ChronicSystemic Diseases

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Introduction

Introduction: A thorough examination of the nails is an integral part of the physical examination, particularly in patients with chronic systemic diseases. We report a case of Terry's nails in a patient with autoimmune hepatitis at the stage of liver cirrhosis.

Results

A 45-year-old woman presented with an excoriated papulo-nodular rash consistent with adult prurigo. Examination of the skin appendages revealed apparent leukonychia on all fingernails, occupying 80% of the nail plate, making the lunula nearly or totally indistinguishable. This leukonychia stopped 1 mm proximal to the distal border of the nail bed. Upon further history taking, the patient reported asthenia, weight loss, jaundice, and abdominal pain lasting for several months. Liver cirrhosis had been diagnosed. Etiological investigation revealed autoimmune hepatitis with positive anti-smooth muscle antibodies, antinuclear antibodies (ANA), and anti-actin antibodies.

Conclusions

Conclusion: Terry's nails were initially described in patients with cirrhosis as a ground-glass opacity of the nail bed and an indistinguishable lunula with a 1-2 mm distal band of normal color. Terry's nails criteria were revised in 1984: the distal band width can range from 0.5 mm to 3 mm, and the proximal nail bed may be light pink, with the lunula remaining discernible. Terry's nails result from changes in nail bed vascularization. Other chronic conditions have been associated with Terry's nails, such as diabetes, pulmonary tuberculosis, and Reiter's syndrome. A knowledgeable and systematic examination of every patient's nails must be an integral part of any comprehensive physical examination. Identifying nail abnormalities may be the key to the early diagnosis of certain chronic systemic diseases.

Abstract N°: ID-1250

Topic: Hair and nail disorders

Trichoscopic Findings in Scalp Alopecia Areata: Insights from a Tunisian Cohort

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Introduction
Alopecia areata (AA) is a common cause of acquired non-scarring alopecia.
Trichoscopy is widely used to diagnose patients with hair and scalp disorders. The aim of this study was to describe the clinical and trichoscopic features of scalp AA in a Tunisian population.

Materials and Methods
We conducted a cross-sectional study in the Dermatology Department of La Rabta Hospital in Tunis, Tunisia. Patients presenting with scalp AA underwent clinical and trichoscopic examinations. Demographic, clinical, and dermoscopic data were analyzed using SPSS version 26.

Results
A total of 67 patients were included, with a male-to-female ratio of 0.49. The mean age at presentation was 27 ± 17.8 years, and the mean age of onset was 22.6 ± 17.7 years. Long-standing disease (>1 year) was present in 33% of patients. Severe AA (SALT score >50% or ophiasis) was observed in 36% of cases. The most frequent trichoscopic findings were black dots (88%), followed by short vellus hairs (64%) and broken hairs (58%). Yellow dots, exclamation mark hairs, and pigtail hairs were noted in 54%, 48%, and 39% of cases, respectively. Coudability and yellow dots containing blacks dots were less common (37% and 36%, respectively). Yellow dots showed a significant positive correlation with disease duration (r=0.330, p=0.006). Trichoscopic signs significantly correlated with disease severity included black dots (r=0.436, p<0.001), yellow dots containing black dots (r=0.351, p=0.004), and broken hairs (r=0.293, p=0.016).

Conclusions
In our cohort, yellow dots were less frequent than commonly reported in the literature (65–95%). They are significantly associated, as in our study, with chronic evolution of AA. Black dots were the most prevalent finding, exceeding rates in the literature (~60%) and reflecting severe disease. Exclamation mark hairs were also more frequent than previously reported (~35%), as were broken hairs (40% in literature).

Abstract N°: ID-1314

Topic: Hair and nail disorders

Prevention of Human Hair Follicle induced senescence by a Phytochemical Combination of Galega officinalis, Hippophae rhamnoides and Resveratrol.

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Introduction

Hair aging plays a significant role in our society because it is a visual change that influences our physical appearance and self-perception. Hair aging is not only about changes in colour, quantity, and quality, but cellular and molecular ones. The foregoing makes it necessary to discover new strategies that keep hair looking healthy over the years [1]. Hair is constantly exposed to environmental stressors, such as solar radiation or pollution, and intrinsic elements as genetics, which accelerate this aging process [2]. All these internal and external factors promote the generation of reactive oxygen species (ROS) in the hair follicle (HF), leading to subsequent cellular damage and senescence [3]. Senescence is a stable cell cycle arrest state, where cells remain metabolically active, unlike apoptotic cells. It is mediated via p53/p21$^{WAF1/CIP1}$ and p16 ^{INK4a}/pRB tumor suppressor pathways, and considered a hallmark of aging, as well as the accumulation of these [4]. Since the passage of time and exposure are inevitable, the focus for mitigating these effects lies in hair cosmetics. Hence, identifying novel ingredients capable of alleviating the accumulation of premature senescent effects on hair has become imperative.

Materials and Methods

In this context, the current research presents a phytochemical combination: *Galega officinalis, Hippophae rhamnoides,* and Resveratrol. The rationale for selecting these ingredients lies in their combined antioxidant, anti-inflammatory, and anti-radical properties [3,5,6]. This innovative technology was evaluated in a premature senescent hair follicle model, cultured as mini-organs to approach the effect that technology would have on human aged hair. During the assays, a minimum of 15 follicles were used per assay.

Results

Biochemical protein immunoassays (ELISA) reveal the restoration effects of the technology on cell proliferation (Ki-67), metabolic changes (LDH-activity), and apoptosis signalling (Annexin V) compared to non-induced, premature-senescent levels. On the other hand, transcriptomic assays (qRT-PCR) showed p21, p53, CCND1, and Lmnb1 were reverted to non-induced, premature-senescent levels when treated with the technology.

Conclusions

In conclusion, these findings constitute the first scientific evidence that the phytochemical combination promotes cell proliferation and increases apoptosis levels in premature senescent HF. Although further research is required, these results open the door to testing new molecules and combinations on the HF model focused on eliminating senescent cells in order to mitigate the effects of hair aging.

Abstract N°: ID-1328

Topic: Hair and nail disorders

Efficacy and Safety of Laser Therapy and Phototherapy in Cicatricial and Non-Cicatricial Alopecia: A Systematic Review

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Introduction
Alopecia, a common skin disorder that significantly impacts quality of life, is categorized into cicatricial (scarring) and non-cicatricial (non-scarring) types. Despite the availability of various treatment options, including autologous platelet-rich plasma (PRP) and hair transplantation, laser therapy and phototherapy have gained attention for their potential in treating alopecia. This systematic review aims to evaluate the efficacy and safety of these modalities in both cicatricial and non-cicatricial alopecia.

Materials and Methods
A comprehensive search was conducted in PubMed, Scopus, Science Direct, and Google Scholar for articles published from January 2010 to September 2024. Eligible studies included interventional, cohort, and case series research with a minimum score of 75% on the EBL checklist. Studies were grouped by alopecia type: alopecia areata, androgenic alopecia, telogen effluvium, and cicatricial alopecia.

Results
A total of 58 studies were included in the final analysis, with 26 studies on alopecia areata, 26 on androgenic alopecia, five on cicatricial alopecia, and one on telogen effluvium. Various laser treatments, including narrow-band ultraviolet B (NBUVB), 308-nm excimer laser, and erbium-glass lasers, demonstrated significant improvements in hair density and diameter, particularly for alopecia areata and androgenic alopecia. Low-level light therapy (LLLT) was found to enhance hair density in both male and female pattern alopecia but showed limited efficacy in treating telogen effluvium. In cicatricial alopecia, light/laser therapy, especially for lichen planopilaris and frontal fibrosing alopecia, led to improvements in disease severity scores and symptom reduction.

Conclusions
Laser and phototherapy treatments have shown significant positive effects on hair density and diameter, particularly in non-cicatricial alopecia types. They are particularly beneficial when used as adjunctive therapies in alopecia areata and androgenic alopecia. However, their effectiveness in cicatricial alopecia and telogen effluvium remains limited, warranting further research. These therapies present a promising option for patients with alopecia, with minimal side effects, and could be used to complement other treatments.

Abstract N°: ID-1344

Topic: Hair and nail disorders

Which Is More Accurate in Frequently Asked Questions About Nail Disorders: ChatGPT or Google Gemini?

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Introduction

Natural language processing (NLP)–based artificial intelligence models are increasingly used in medical patient education by improving access to health information, and studies assessing the appropriateness of AI-generated responses to common medical questions are growing across medical disciplines. In dermatology, patients frequently consult search engines and AI-based platforms for information about nail disorders prior to clinical evaluation. Although image-based AI applications in nail disorders have advanced substantially, research focusing on NLP-based AI models in this field remains limited. This study aimed to evaluate and compare the scientific accuracy of responses generated by the two most widely used NLP-based AI models, ChatGPT and Google Gemini, to frequently asked questions about nail disorders in both Turkish and English.

Materials and Methods

This prospective, observational, descriptive study evaluated responses generated by ChatGPT (version 5.2) and Google Gemini (version 3). Each model was separately prompted in Turkish and English to identify the 20 most frequently asked questions regarding nail disorders and to provide detailed answers to each question in separate sessions. Two board-certified dermatologists (GGD, GA) independently assessed the responses and classified them as *appropriate, incomplete,* or *inappropriate/misleading*. Discrepancies were resolved by consensus using standard dermatology textbooks and current literature. No patient data were included. Descriptive statistical analyses were performed, and ethical committee approval was obtained.

Results

ChatGPT generated appropriate responses to 85% of nail disorder–related questions in Turkish and 90% in English, whereas Google Gemini achieved appropriateness rates of 55% in Turkish and 75% in English. Incomplete responses were least frequent for ChatGPT-English (5%) and occurred in 10% of responses for ChatGPT-Turkish and Gemini-Turkish. Inappropriate or misleading responses were most common in Gemini-Turkish (35%), followed by Gemini-English (20%); this rate was 5% for both ChatGPT-English and ChatGPT-Turkish (Table 1). Across both models, English responses demonstrated higher appropriateness and lower misleading content than Turkish responses. Model-based comparisons showed that ChatGPT consistently outperformed Google Gemini in accuracy, irrespective of language.

Readability analysis indicated that ChatGPT's English responses had a Flesch Reading Ease score of 61.0 ("standard"), with Gunning Fog (9.0), Flesch–Kincaid Grade Level (7.11), and SMOG (7.18) indices reflecting mildly to moderately technical language. Google Gemini demonstrated higher readability (Flesch Reading Ease: 69.0), while other readability metrics (Gunning Fog: 8.5; Flesch–Kincaid: 6.65; SMOG: 7.20) were comparable between models.

Table-1: Appropriateness rates of the responses provided by the models to the 20 most frequently asked questions related to nail disorders

	Appropriate	Incomplete	Inappropriate/misleading
ChatGPT-Eng	%90	%5	%5
ChatGPT-Tr	%85	%10	%5
Gemini-Eng	%75	%5	%20
Gemini-Tr	%55	%10	%35

Conclusions

In conclusion, the performance of NLP-based AI models in addressing nail disorder–related questions varied significantly by language and model. ChatGPT demonstrated the highest accuracy in English, with a 90% appropriateness rate, consistent with prior evidence that dermatologic knowledge is more robustly represented in English-language training data. Readability analyses revealed modest differences between models: Google Gemini exhibited higher Flesch Reading Ease scores, indicating greater ease of comprehension, whereas comparable Gunning Fog, Flesch–Kincaid, and SMOG indices suggest that both models target an adolescent to young adult reading level. Notably, despite superior readability, Gemini—particularly in Turkish—produced higher rates of misleading responses, underscoring that readability alone does not ensure clinical reliability. These findings emphasize the need to jointly assess accuracy, completeness, and readability and confirm the critical role of expert supervision prior to clinical application.

Abstract N°: ID-1397

Topic: Hair and nail disorders

Nail Lichen Planus: From Basics to Breakthroughs

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Introduction

Nail lichen planus (NLP) is an inflammatory disorder characterized by lichenoid involvement of the nail matrix and/or nail bed, with a significant risk of permanent nail destruction. Matrix involvement occurs in the vast majority of patients, and delayed or insufficient treatment may lead to irreversible scarring and anonychia.

Recent therapeutic approaches emphasize early, often systemic, intervention to prevent progression and permanent nail loss.

Materials and Methods

We conducted a narrative synthesis of the clinical features and therapeutic approaches to nail lichen planus based on expert consensus recommendations and recent therapeutic developments. Disease severity was stratified into mild, moderate, and severe forms according to clinical features such as longitudinal ridging, nail plate thinning, onycholysis, fissuring, pterygium formation, and anonychia. Treatment strategies were analyzed according to the number of affected nails, presence of matrix and/or nail bed involvement, and signs of scarring.

Results

NLP predominantly affects the nail matrix, resulting in longitudinal ridging and grooves, thinning of the nail plate, fissuring, erythema of the lunula and onicolysis. Progressive cases may develop dorsal pterygium, severe atrophy, or complete nail loss. The distinction between active inflammatory disease and cicatricial, irreversible stages is essential, as only the active phase responds to therapy.

Traditional first-line therapy includes intralesional corticosteroids, particularly triamcinolone acetonide, administered every 4–6 weeks for several sessions.

In cases involving multiple nails or showing rapid progression, systemic therapy with corticosteroids, retinoids, or cyclosporine is recommended.

Severe or refractory disease may require additional immunosuppressants such as azathioprine or mycophenolate mofetil.

Recent years have introduced new therapeutic perspectives. Activation of the JAK-STAT pathway has been implicated in lichen planus pathogenesis, and emerging data suggest that JAK inhibitors, including tofacitinib, baricitinib, and abrocitinib, may represent effective options in refractory cases. There is also evidence of topical formulations of tofacitinib and ruxolitinib showing promising results.

Low-dose naltrexone has also shown positive outcomes, with clinical improvement or stabilization in a small patient series, and a favorable safety profile.

A key paradigm shift in current management is the recommendation for early systemic treatment in active matrix disease, even when only a few nails are affected, in order to prevent permanent scarring.

Conclusions

Nail lichen planus is a potentially destructive condition that requires early recognition and prompt treatment. Disease severity and the presence of matrix involvement or scarring determine the therapeutic approach. Intralesional corticosteroids remain the standard first-line therapy, while systemic agents are indicated in moderate to severe or progressive disease. Emerging therapies, particularly JAK inhibitors and low-dose naltrexone, represent promising options for refractory cases. Early, aggressive treatment is essential to prevent irreversible nail damage.

Abstract N°: ID-1405

Topic: Hair and nail disorders

Comprehensive post-FUE protocol with low-dose topical finasteride (0.05%), sex-specific minoxidil dosing, and nutritional optimization: 98% graft survival with zero sexual side effects

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Introduction

Optimal hair transplant outcomes require multimodal postoperative management addressing hormonal, vascular, and nutritional factors. Oral finasteride causes sexual side effects in 2-5% of patients, limiting compliance. Topical formulations offer theoretical advantages; however, propylene glycol (PG)-based vehicles in both minoxidil and finasteride may cause local irritation in a subset of patients. Additionally, micronutrient deficiencies are increasingly recognized as modifiable contributors to hair loss. We evaluated an 18-month comprehensive protocol combining low-dose topical finasteride (0.05%), sex-specific minoxidil dosing, PG-free alternatives for intolerant patients, and individualized nutritional correction following FUE transplantation.

Table 1. Patient Demographics (n=68)

Parameter	Value
Male / Female (postmenopausal)	63 (92.6%) / 5 (7.4%)
Age / Ethnicity / Technique	25–60 years / Caucasian / FUE
Mean grafts / Follow-up	2,500 FU / 18 months

Table 2. Postoperative Topical Protocol (initiated Day 30)

Group	Medication	Dose	Formulation	n
All patients	Topical finasteride	**0.05% BID**	Compounded/PG-free*	68
Men	Topical minoxidil	**6% BID**	Standard/PG-free*	63
Women (A)	Topical minoxidil	2% BID	Standard/PG-free*	3
Women (B)	Topical minoxidil	5% QD	Standard/PG-free*	2

Table 3. Topical Tolerability (Minoxidil and Finasteride)

Parameter	n (%)	Management
Standard formulation tolerated	**60 (89%)**	Continued
Intolerance to minoxidil/finasteride	8 (11%)	Switch to PG-free
Symptoms reported	Dryness, itching, irritation	—
Tolerated PG-free formulations	**8/8 (100%)**	Both meds continued
Treatment discontinuation	**0 (0%)**	—

Table 4. Preoperative Nutritional Screening

Parameter	Finding
Vitamin D / Ferritin / B12 / Zinc	Assessed in all patients
Overall deficiency rate	**34% (corrected with supplementation)**

Table 5. Clinical Outcomes at 18 Months

Outcome	This Study	Literature
Graft survival	**98%**	85–95%
Shock loss	**<2%**	20–40%
Complication rate	**<5%**	5–15%
Patient satisfaction	**95%**	80–90%
Sexual side effects	**0%**	2–5% (oral)
Serum DHT / Testosterone	**↓ / ↑+6%**	Local efficacy confirmed

**PG-free = propylene glycol-free formulations available for both minoxidil and finasteride*
BID = twice daily; QD = once daily; FU = follicular units

KEY: 11% intolerance to standard topicals → 100% resolved with PG-free minoxidil + finasteride → 0% discontinuation

Materials and Methods

A prospective cohort study enrolled 68 Caucasian patients (63 male, 5 postmenopausal female; age 25-60 years) undergoing FUE (mean 2,500 grafts). Preoperative assessment included serum vitamin D, ferritin, B12, and zinc; deficiencies were corrected with targeted supplementation. The postoperative protocol (day 30) comprised: compounded topical finasteride 0.05% twice daily and sex-specific topical minoxidil—men received 6% twice daily (n=63); women received either 2% twice daily (n=3) or 5% once daily (n=2). Patients reporting topical intolerance (dryness, itching, irritation) to either medication were switched to propylene glycol-free formulations of both minoxidil and finasteride. Outcomes: graft survival, shock loss, complications, tolerability, patient satisfaction, and sexual side effects at 18 months; serum DHT and testosterone at baseline and 12 months.

Results

Nutritional deficiencies were identified in 34% of patients. Topical intolerance to minoxidil and/or finasteride (dryness,

itching, scalp irritation) occurred in 11% of patients with standard PG-based formulations; all tolerated PG-free versions of both medications without further issues. At 18-month follow-up, graft survival was 98% with shock loss <2% (versus 20-40% in literature). Complication rate was <5%: periorbital edema (n=8), prolonged erythema (n=4), seborrheic dermatitis flare (n=3). No infections or permanent complications occurred. Patient satisfaction reached 95%. Zero patients (0%) reported sexual side effects. Hormonal analysis demonstrated serum DHT reduction with testosterone increase of 6%, confirming local efficacy without systemic 5-alpha-reductase inhibition.

Conclusions

A comprehensive protocol combining low-dose topical finasteride (0.05%), sex-specific minoxidil (6% men, 2-5% women), and nutritional optimization achieved excellent post-FUE outcomes: 98% graft survival, <2% shock loss, 95% satisfaction, and zero sexual side effects. Topical intolerance to standard PG-based formulations affected 11% of patients but was successfully managed with PG-free versions of both minoxidil and finasteride, maintaining 100% treatment adherence. Routine nutritional screening identified modifiable deficiencies in one-third of patients. This multimodal, individualized approach maximizes long-term transplant success while eliminating systemic side effects.

Abstract N°: ID-1415

Topic: Hair and nail disorders

Investigating the Relationship Between Androgenetic Alopecia and Hair Shape, Color, and Thickness: A Case-Control Study

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Introduction
Androgenetic alopecia (AGA) is the most prevalent cause of hair loss, affecting both men and women, and is driven by genetic factors and androgenic hormones, particularly dihydrotestosterone (DHT). This case-control study aimed to investigate the role of hair phenotype (shape, thickness, and color) and demographic characteristics such as smoking history in the development of AGA.

Materials and Methods
A case-control study was conducted with 100 participants, including 50 individuals diagnosed with AGA and 50 control participants without hair loss. Data on demographic characteristics (age, gender), hair phenotype (shape, thickness, and color), and smoking history were collected. Hair shape was categorized as straight, wavy, or curly, and hair thickness was classified into thin, medium, and thick categories. Data were analyzed using SPSS software.

Results
The study found significant associations between smoking and AGA (OR = 2.34, p = 0.02), with smokers being more than twice as likely to develop AGA. Additionally, lighter hair colors (spectrum 1 and 3) were significantly associated with a higher risk of AGA (OR = 1.85, p = 0.04). No significant relationship was found between hair thickness or shape and the development of AGA. Women were found to have a significantly higher prevalence of AGA than men (OR = 1.91, p = 0.03), and age was also identified as a significant factor, with a higher frequency of AGA observed in individuals over the age of 25 (p = 0.002).

Conclusions
This study identified significant factors, such as age, smoking, hair color, and gender, that influence the development of androgenetic alopecia. Smoking was found to be a modifiable risk factor for AGA, and lighter hair colors may increase susceptibility to this condition. These findings suggest the importance of considering demographic and phenotypic factors in understanding the pathogenesis of AGA and highlight potential intervention points for preventing or managing hair loss.

Abstract N°: ID-1451

Topic: Hair and nail disorders

Trichoscopy-guided diagnosis of common alopecias: a structured review

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Introduction
Hair loss is a common reason for dermatologic consultation and includes a broad range of conditions with variable prognosis. Clinical examination alone often fails to reliably distinguish between different types of alopecia, particularly in early or overlapping presentations. Trichoscopy has become an essential non-invasive diagnostic tool, enabling detailed in vivo assessment of hair and scalp structures and improving diagnostic accuracy. The objectve of this review is to evaluate trichoscopic patterns in common alopecias and to propose a structured diagnostic reasoning framework for clinical practice.

Materials and Methods
A mini-systematic narrative review was conducted using PubMed databases. Articles published between January 2005 and December 2024 were included. Search terms combined “trichoscopy,” “dermoscopy of hair,” “alopecia,” “androgenetic alopecia,” “alopecia areata,” “telogen effluvium,” and “cicatricial alopecia.” Eligible publications included original studies, large case series, and review articles describing trichoscopic findings. Data extraction focused on follicular density, hair shaft diameter variability, perifollicular changes, scalp background, and vascular patterns. Findings were synthesized qualitatively to establish diagnostic correlations.

Results
The literature consistently demonstrates that androgenetic alopecia is characterized by significant hair shaft diameter diversity, miniaturized hairs, increased proportion of vellus hairs, and perifollicular hyperpigmentation. Alopecia areata exhibits distinctive trichoscopic signs including yellow dots representing dilated follicular infundibula filled with keratin and sebum, black dots corresponding to cadaverized hairs, exclamation mark hairs, and broken hairs. Telogen effluvium typically shows preserved follicular openings with reduced hair density, increased proportion of empty follicles, and uniform hair shaft diameter without miniaturization. Cicatricial alopecias are defined by loss of follicular openings, perifollicular erythema, scaling, and white shiny areas corresponding to fibrosis, allowing early identification of irreversible hair loss. This review highlights the pivotal role of trichoscopy in the diagnostic work-up of alopecia. Rather than relying on isolated signs, trichoscopic interpretation should follow a structured reasoning process integrating follicular density, hair shaft morphology, and perifollicular changes. Early differentiation between scarring and non-scarring alopecia is particularly critical, as delayed diagnosis of cicatricial alopecia may result in permanent hair loss. Trichoscopy reduces the need for scalp biopsy in many cases and allows targeted biopsy when necessary.

Conclusions
Trichoscopy significantly enhances diagnostic precision in alopecia and supports early, evidence-based management decisions. Dermatologists should systematically apply trichoscopy in patients presenting with hair loss, using structured diagnostic reasoning to guide investigation and treatment.

Abstract N°: ID-1453

Topic: Hair and nail disorders

Chemical Peeling for Nail disorders : A Novel Approach

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Introduction

Superficial nail plate abnormalities—including roughness, dullness, pitting, and longitudinal ridging—often arise from cosmetic abuse, aging, or inflammatory diseases like psoriasis and lichen planus . Traditional treatments target the underlying systemic cause but often result in a significant time lag before visible improvement due to the slow growth rate of the nail. Chemical peeling, a staple in facial rejuvenation, is emerging as a **novel approach** to provide rapid cosmetic enhancement for these conditions.

Materials and Methods

Literature reviews and prospective studies have utilized different protocols, most commonly involving 30% salicylic acid or 50% glycolic acid . Procedures typically involve protecting the periungual soft tissue with petroleum jelly followed by applying 1–4 coats of the peeling agent. Sessions are repeated at fortnightly intervals for 3–12 weeks depending on the severity and thickness of the nail plate.

Results

Studies indicate that chemical peels are highly effective for **cosmetic-induced abnormalities**, with some reports showing in nail luster and smoothness. While less effective alone at curing underlying pathologies like onychomycosis, they serve as excellent adjunct therapies by increasing the permeability of the nail plate for topical antifungals. Reported side effects are minimal, including mild burning, dryness, and rare instances of transient leukonychia.

Conclusions

Peels for nails offer an easy, quick and inexpensive therapeutic modality for superficial nail abnormalities and nail pathological disorders. How much effect it can have on the pigmentary changes is an open question, as the origin of pigment in the nails is generally deeper matrix. Chemical peel should be tailored to the individual patient and their specific nail conditions. Many factors still need to be clarified including which peels are more effective, the number of sessions required and contraindications. Future research is needed to establish standardized protocols and objective scoring systems for this burgeoning technique

Abstract N°: ID-1493

Topic: Hair and nail disorders

Chemotherapy-Induced Melanonychia Under AML-500 Protocol: A Diagnostic Pitfall With Nail Melanoma

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Introduction
Melanonychia is a frequent diagnostic challenge in dermatology, as it may reflect benign, drug-induced changes or serious conditions such as nail melanoma. Several chemotherapeutic agents, including anthracyclines and cytarabine, are known to activate nail matrix melanocytes. The AML-500 protocol, used in acute myeloid leukemia (AML), contains these agents. Awareness of chemotherapy-induced melanonychia is essential to avoid misdiagnosis and unnecessary investigations.

Materials and Methods
We report a clinical observation of a patient treated for acute myeloid leukemia with the AML-500 chemotherapy protocol. A detailed dermatological nail examination was performed, focusing on pigmentation pattern, number of affected nails, color homogeneity, and the presence of periungual extension or clinical signs suggestive of nail melanoma. Clinical history and treatment chronology were analyzed.

Results
A 70-year-old patient developed diffuse melanonychia involving fingernails and toenails a few weeks after initiation of AML-500 chemotherapy. Nail pigmentation was homogeneous brown-to-black, sometimes arranged in longitudinal bands. No Hutchinson sign, periungual pigmentation, nail dystrophy, or color irregularity was observed. The condition was asymptomatic and did not require treatment interruption. Based on clinical features and temporal relationship with chemotherapy, a diagnosis of AML-500–induced melanonychia was retained

Conclusions
Chemotherapy-induced melanonychia is a benign and reversible nail toxicity that may mimic nail melanoma. In patients receiving AML-500, recognition of this adverse effect is crucial to prevent unnecessary diagnostic procedures and reassure both clinicians and patients.

Abstract N°: ID-1497

Topic: Hair and nail disorders

When Androgenetic Alopecia Masks Fibrosing Alopecia in a Pattern Distribution

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Introduction
Fibrosing alopecia in a pattern distribution (FAPD) is a recently recognized entity related to lichen planopilaris (LPP). It is characterized by an inflammatory process targeting miniaturized follicles in androgen-dependent areas, clinically mimicking androgenetic alopecia (AGA). While well documented in women, FAPD remains exceptional in men.

Materials and Methods
A 46-year-old man with no significant past medical history presented with progressive hair loss evolving over six months. Clinical examination revealed hair thinning of the vertex associated with perifollicular erythema, contrasting with the typically non-inflammatory appearance of early AGA. Dermoscopy showed anisotrichosis, decreased follicular openings, perifollicular erythema, and scaling. Histopathological examination demonstrated a perifollicular lymphocytic infiltrate with destruction of the follicular epithelium, consistent with LPP, thus confirming the diagnosis of FAPD.

Results
FAPD represents an overlap between AGA and LPP. Clinically, it follows the distribution pattern of AGA; however, the presence of erythema and scaling should raise suspicion. Dermoscopy is a key diagnostic tool, revealing anisotrichosis, reduced follicular openings, and signs of inflammation. Reported male cases in the literature are rare; some have been described following cosmetic procedures such as hair transplantation or facelift surgery, while others occurred spontaneously. Overall, published series remain limited. In men, FAPD may be misdiagnosed as simple AGA or associated seborrheic dermatitis, leading to delayed diagnosis. Treatment is not standardized; topical or intralesional corticosteroids, systemic immunomodulators, antiandrogens, and hair regrowth stimulators have been proposed with variable outcomes. Recognition of male cases is essential to improve knowledge and management of this entity.

Conclusions
FAPD is a rare but significant cause of cicatricial alopecia in men. The association of an AGA-like pattern with clinical and dermoscopic inflammatory signs should prompt consideration of this diagnosis.

Abstract N°: ID-1508

Topic: Hair and nail disorders

Trichotillomania Revealed by a Post–Cosmetic Hair Dye Cutaneous Reaction: A Diagnostic Challenge

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Introduction

Cutaneous reactions related to cosmetic hair dyes are most often interpreted as simple contact dermatitis. However, in some patients, underlying factors such as trichotillomania may alter the clinical presentation and promote infectious complications, thereby revealing a concealed condition behind an apparently common clinical picture.

Materials and Methods

A 21-year-old woman with no significant medical history presented with edema, pain, and purulent crusting of both eyebrows occurring 48 hours after the application of a coloring product in a beauty salon. Clinical examination revealed diffuse inflammation of the superciliary arches with erythema, vesiculo-squamous lesions, and yellowish crusts suggestive of impetiginized contact dermatitis. Dermoscopic examination showed scaling, honey-colored and hemorrhagic crusts, as well as empty hair follicles.

A detailed medical interview revealed a long-standing history of trichotillomania responsible for chronic eyebrow hair loss, which had led the patient to seek cosmetic camouflage. Ophthalmologic examination showed no orbital involvement. The patient was treated with appropriate oral antibiotic therapy and local care, with favorable clinical evolution within one week. She was also referred for specialized psychological follow-up as part of the management of her trichotillomania.

Results

Hypersensitivity reactions to cosmetic hair dyes, most commonly related to para-phenylenediamine (PPD), typically present as contact dermatitis. In our case, the severity of the lesions and secondary impetiginization prompted further evaluation.

Dermoscopy revealed features suggestive of trichotillomania, including hemorrhagic crusts and empty hair follicles, findings well described in the literature. This compulsive disorder, still frequently underdiagnosed, may compromise the cutaneous barrier and favor complications, particularly following chemical aggression.

Identification of long-standing trichotillomania allowed the aesthetic context to be linked to an underlying psychodermatological condition. This case highlights the importance of targeted history-taking and the use of dermoscopy in the assessment of inflammatory disorders affecting hair-bearing areas.

Conclusions

This case underscores the need for a comprehensive approach in dermatology, integrating aesthetic, infectious, and psychological dimensions. Behind an apparently banal allergic reaction may lie a behavioral disorder such as trichotillomania, whose recognition is essential for complete and preventive patient management.

Abstract N°: ID-1518

Topic: Hair and nail disorders

Desmoplakin: a pathogenic variant related to woolly hair

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Introduction
Pathogenic variants of desmoplakin have been described in association with striate palmoplantar keratoderma, Carvajal syndrome (dilated cardiomyopathy with woolly hair and keratoderma), severe dermatitis, multiple allergies, and metabolic wasting (SAM) syndrome, skin fragility–woolly hair syndrome, acantholytic erosive disorder, and arrhythmogenic right ventricular cardiomyopathy.
We describe a desmoplakin variant pathogen related to woolly hair without skin and heart manifestations.

Materials and Methods
Case report.

Results
Female patient, 6 years-old, phototype 3, daughter of a phototype 2 mother and a phototype 5 father. According to her mother, since neonatal age, a lack of hair growth in length, even without cutting it; reduced hair volume and curlier hair when compared to peers and siblings. On physical examination, the hair shafts presented with tortuosity, without fracture areas; follicular openings, and an interfollicular region without signs of inflammation, 2-3 hairs per follicle (Figure 1). Trichoscopy shows a “crawling snake” appearance, trichoptilosis, and variation in shaft diameter (Figure 2). No alterations were observed in the skin, glands, or teeth. Growth and neurodevelopment were normal.
In order to analyze pathogenic variants related to woolly hair, we performed a multigene panel. Genomic DNA obtained from the submitted sample was enriched for targeted regions using a hybridization-based protocol and sequenced using Illumina technology. All targeted regions were sequenced with ≥50x depth or supplemented with additional analysis. Reads were aligned to a reference sequence (GRCh37), and sequence changes were identified and interpreted in the context of a single clinically relevant transcript. Enrichment and analysis focus on the coding sequence of the indicated transcripts, 20 bp of flanking intronic sequence, and other specific genomic regions demonstrated to be causative of disease at the time of assay design. Variants are reported according to the Human Genome Variation Society (HGVS) guidelines. Confirmation of the presence and location of reportable variants is performed as needed based on stringent criteria using one of several validated orthogonal approaches (PubMed ID 30610921).
A pathogenic variant was found in DSPc.7127_7128del(p.Gly2376Aspfs*3). We also evaluated the parents who did not present pathogenic variants in DSP.
Due to associations with cardiomyopathies, echocardiography and Holter monitoring were performed, which were normal.

Conclusions
Cutaneous adhesion proteins and structural proteins of phanera are related to systemic alterations, especially cardiac ones. Better genetic knowledge allows us to diagnose alterations that have a very relevant systemic relationship early on, reducing morbidity and mortality.

Abstract N°: ID-1543

Topic: Hair and nail disorders

From Scalp to Nail Bed: A New Therapeutic Role for Minoxidil in Retronychia

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Introduction

Retronychia is a rare nail disorder resulting from repeated microtrauma, characterized by backward growth of the nail plate toward the matrix. Clinically, it presents as chronic proximal paronychia, pain on pressure, and partial or complete arrest of nail growth. Surgical avulsion of the nail remains the standard treatment. However, conservative therapeutic approaches are increasingly being considered, particularly in mild or early-stage forms. We report a case of retronychia successfully managed with a non-invasive medical treatment based on topical minoxidil and corticosteroids.

Materials and Methods

A 75-year-old male patient with a history of diabetes mellitus consulted for persistent pain of the right great toe following minor trauma. Clinical examination revealed proximal inflammatory paronychia, xanthonychia, and cessation of nail growth compared with the contralateral toe. Based on these findings, a diagnosis of retronychia was made. A conservative treatment regimen was initiated, consisting of topical corticosteroids combined with topical minoxidil 5% applied once daily in the evening. Clinical follow-up was performed to assess therapeutic response.

Results

Treatment led to marked clinical improvement. Progressive resumption of nail growth was observed, accompanied by resolution of pain and local inflammation. The beneficial effect of minoxidil is thought to be related to its vasodilatory properties, which enhance microcirculation at the level of the nail matrix. Previous studies have demonstrated increased nail growth velocity under topical minoxidil in healthy subjects. In this case, the combination with topical corticosteroids likely potentiated the local anti-inflammatory effect, contributing to clinical recovery. To our knowledge, this represents the first reported case of retronychia effectively treated with this conservative approach without the need for surgical intervention.

Conclusions

The association of topical minoxidil 5% with topical corticosteroids appears to be a promising, well-tolerated, and non-invasive therapeutic alternative for early-stage retronychia, particularly in patients reluctant to undergo nail avulsion. Further studies are needed to better define its efficacy and to establish standardized treatment protocols.

Abstract N°: ID-1552

Topic: Hair and nail disorders

Pilary Dysplasia in Childhood: A Series of 18 Pediatric Cases of Isolated and Syndromic Genotrichoses

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Introduction

Genotrichoses are congenital structural abnormalities of the hair shaft that may occur as isolated disorders or as manifestations of broader genetic syndromes, particularly ectodermal dysplasias. These conditions encompass a wide range of anomalies affecting hair density, shape, texture, and growth. Accurate diagnosis relies mainly on clinical evaluation and microscopic examination of the hair shaft. Early recognition is essential, as some forms may signal underlying systemic involvement. The aim of this study is to describe the clinical and microscopic characteristics of pediatric genotrichoses and to highlight the role of dermatologists in their diagnosis and management.

Materials and Methods

We conducted a retrospective descriptive study including 18 children aged 2 to 11 years who presented with suspected pilary dysplasia. All patients underwent detailed dermatological examination and trichoscopic analysis using light and polarized microscopy. Data collected included age, sex, clinical presentation, family history, associated anomalies, and microscopic findings. Cases were classified as isolated or syndromic according to clinical and paraclinical features.

Results

The series included 18 patients (mean age: 6.1 years; F/M ratio: 9:8). Isolated genotrichoses were identified in 8 cases: three children with trichorrhexis nodosa, three with non-syndromic trichorrhexis invaginata, and one with uncombable hair syndrome. These patients presented mainly with fragile, brittle, or unmanageable hair without extracutaneous involvement. Microscopy confirmed characteristic shaft abnormalities such as brush-like fractures and “bamboo hair” appearance.

Ten children presented syndromic forms. Two siblings were diagnosed with Clouston syndrome, displaying hypotrichosis, nail dystrophy, palmoplantar keratoderma, and flexural poikiloderma. Eight patients were diagnosed with hypohidrotic ectodermal dysplasia, characterized by hypotrichosis, dental anomalies, hypohidrosis, and typical facial features. Three of these patients had associated primary immunodeficiency. Consanguinity was noted in several cases.

Conclusions

Genotrichoses represent an important and heterogeneous group of pediatric hair disorders. Their early identification through careful clinical and microscopic examination is crucial for distinguishing isolated benign anomalies from syndromic conditions requiring multidisciplinary care. Dermatologists play a key role in diagnosis, genetic orientation, and family counseling. Increased awareness of these disorders allows timely management and improved long-term outcomes for affected children.

Abstract N°: ID-1564

Topic: Hair and nail disorders

Trichoscopy of Alopecia Areata in Children: A Comparative Study of 61 Children and 61 Adults

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Introduction
Trichoscopy is a rapid, non-invasive diagnostic tool valuable for the assessment and monitoring of alopecia areata (AA). The aim of this study was to compare the trichoscopic patterns of AA between pediatric and adult populations.

Materials and Methods
We conducted a retrospective analysis of trichoscopic findings in patients with scalp alopecia areata at the Dermatology Department of La Rabta Hospital (Tunis). Patients were categorized into two age groups: children (≤12 years) and adults (>18 years).

Results
A total of 122 patients were included (61 per group). Black dots were the most frequent finding in both groups, with no significant difference observed (95.1% in children vs. 85.2% in adults; p=0.068). However, yellow dots were significantly less frequent in children compared to adults (26.2% vs. 65.6%; p<0.001), as were yellow dots containing black dots (13.1% vs. 47.5%; p=0.001). Regarding hair shaft abnormalities, broken hairs were significantly more common in children (80.3% vs. 60.7%; p=0.017). Conversely, tapered hairs were more frequent in adults (37.7% vs. 18.0%; p=0.015). No significant differences were found regarding exclamation mark hairs, pigtail hairs, Pohl-Pinkus constrictions and vellus hairs.

Conclusions
Our study highlights distinct trichoscopic patterns based on age. Yellow dots and tapered hairs are significantly less frequent in children compared to adults, whereas broken hairs are more frequent in the pediatric population.

Abstract N°: ID-1576

Topic: Hair and nail disorders

Safety and Tolerability of 1340 nm Nd:YAG Laser Compared to Conventional Photobiomodulation in Androgenetic Alopecia

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Introduction

Androgenetic alopecia (AGA) is the most common cause of chronic, progressive scalp hair loss in adults and is associated with a measurable reduction in quality of life. Photobiomodulation is increasingly used as a non-pharmacological treatment modality in AGA and is generally characterized by a favourable tolerability profile. Conventional red and near-infrared protocols can induce mild, controlled scalp warming without epidermal disruption, which may enhance microcirculation and support hair follicle growth processes. While conventional photobiomodulation has an established tolerability profile, the evidence base remains uneven across wavelengths, particularly for newer Nd:YAG-based protocols. For Nd:YAG-based photobiomodulation at 1340 nm, the current evidence base is insufficient to support routine clinical adoption, despite its potential to broaden therapeutic options in AGA. In the context of developing a novel light-based intervention, establishing a reproducible safety profile is a prerequisite for subsequent efficacy trials, dose optimization, and long-term protocol validation. Therefore, the present study aimed to evaluate the safety and tolerability of a 1340 nm Nd:YAG protocol compared with conventional photobiomodulation in adults with clinically and trichoscopically confirmed AGA.

Materials and Methods

Twenty adults with clinically and trichoscopically confirmed AGA (Hamilton–Norwood II–V; Ludwig I–II) were included and assigned to two groups of 10 patients each. The experimental group received 1340 nm Nd:YAG laser therapy, and the control group underwent conventional photobiomodulation. Treatments were performed once weekly for 12 weeks. Safety was assessed at every visit using three predefined instruments. Patient-reported discomfort, including pain and burning, was recorded on a 0–10 Visual Analog Scale. Local adverse events were graded by the investigator according to CTCAE v5.0 criteria and included erythema, pruritus, oedema, and pain, recorded as Grade 0–3. Standardized clinical photo-documentation was obtained at baseline and at each session using fixed camera settings, distance, lighting, and scalp parting marks. Serious adverse events, including blistering, erosions or ulceration, infection, pigmentary change, scarring, and treatment discontinuation, were actively monitored.

Results

Safety outcomes were evaluated across all sessions over the 12-week course. All 20 participants completed the protocol with no discontinuations. In the experimental group, one participant developed mild transient erythema immediately after the procedure. No blistering, erosions, infection, pigmentary change, or scarring was observed. Symptoms resolved spontaneously within 24–48 hours and were associated with minimal discomfort, with a VAS score of 2–3 and CTCAE Grade 1. No further adverse events were recorded.

In the control group, no adverse events occurred. Discomfort remained minimal throughout the course, with VAS scores consistently not exceeding 1 and CTCAE Grade 0 at all visits. Standardized photographs showed no visible post-procedural reactions. No systemic complaints or serious adverse events were reported in either group.

Conclusions

In this prospective cohort of adults with AGA, the 1340 nm Nd:YAG protocol demonstrated an excellent tolerability profile and a favourable safety outcome. Only one mild, transient erythematous reaction was observed, with no clinically significant adverse events or treatment discontinuations. Safety findings were comparable to those obtained with conventional photobiomodulation. These preliminary results support the clinical feasibility of 1340 nm Nd:YAG therapy in AGA and provide a rationale for larger controlled studies to optimize treatment parameters and confirm long-term safety.

Abstract N°: ID-1608

Topic: Hair and nail disorders

Extensive Onychomycosis Caused by Trichophyton violaceum: A Rare Dermatophyte Nail Infection in a Non-Endemic Region

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Introduction
Onychomycosis is the most common infectious disease of the nails and is predominantly caused by dermatophytes, most commonly *Trichophyton rubrum* and *Trichophyton mentagrophytes*. In contrast, *Trichophyton violaceum* is an anthropophilic dermatophyte typically associated with tinea capitis and is only rarely implicated in nail infections. In non-endemic regions *Trichophyton violaceum* may be overlooked as a potential etiological agent, especially when it is not clinically suspected. We report a rare case of extensive onychomycosis caused by *Trichophyton violaceum* in an immunocompetent adult patient from a non-endemic region.

Materials and Methods
A 28-year-old male patient presented to the dermatology outpatient clinic with long-standing nail changes that had been present since the age of 17. The patient also had concomitant seborrheic dermatitis with no medical history of immunodeficiency, systemic disease, or previous systemic antifungal treatment. Nail specimens were collected from the affected nails for mycological analysis.

Results
Clinical examination demonstrated nail plate dystrophy, discoloration and thickening, as well as subungual hyperkeratosis affecting all toenails and the fingernails of the right hand. Complete sparing of the left-hand fingernails was a notable finding. Mycological analysis confirmed a dermatophyte infection and fungal culture identified *Trichophyton violaceum* as the causative organism based on macroscopic colony morphology and microscopic characteristics. The patient was treated with oral itraconazole pulse therapy, according to standard protocols for onychomycosis, in combination with topical amorolfine. After four months of treatment, significant clinical improvement was observed, with reduced nail dystrophy and visible healthy nail regrowth.

Conclusions
This case underscores *Trichophyton violaceum* as a rare but clinically relevant cause of extensive onychomycosis in non-endemic regions. Although it is primarily associated with scalp hair infections, this dermatophyte should be considered in the differential diagnosis of nail disorders, particularly in long-standing, extensive, or atypical presentations. Accurate mycological identification is essential for the recognition of uncommon dermatophytes and for guiding appropriate systemic antifungal therapy. Reporting such cases contributes to increased awareness and improved diagnostic accuracy in regions where *Trichophyton violaceum* infections are infrequently encountered.