Trichoscopic features for radiotherapy induced alopecia: Is it possible to predict the scarring?

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Introduction & Objectives:

Hair loss after radiotherapy is a stigma and emotionally stressful for patients under cancer treatment. Literature regarding the trichoscopic findings of radiotherapy-induced alopecia (RIA) is scarce. This study aims to determine the trichoscopic features of RIA. Also, we aim to discuss the possible prediction for permanent alopecia.

Materials & Methods:

Eight patients who were treated with cranial radiotherapy and presented with RIA were included in the study. Age, skin phototype, localization, severity, type of cancer, dosage of radiotherapy, and concomitant skin findings were noted. Clinical and trichoscopic photos were taken by videodermoscope and recorded. Trichoscopic findings were analyzed according to the checklist, which has been described in previous articles for scalp alopecia.

Results:

This study had two female and 6 male patients with RIA. 4 patients were admitted for 6-month follow-up. One of these patients completely recovered, while there were no changes in clinical and dermoscopic findings in the other three. This patient had no trichoscopic findings supporting scarring alopecia. He had a lower dosage of radiation compared to others and used topical minoxidil 5% two times a day for 6 months. The most determined features indicating scarring alopecia were the milky red areas and loss of follicular openings in this study. Fibrotic white dots, keratotic plugs, pili torti, and perifollicular scaling which are representative of cicatricial alopecia, were detected in RIA with decreasing frequency. Black dots and enlarged vessels that are prevalent in different types of non-cicatricial and cicatricial alopecia were noted in all subjects. Other follicular findings include broken hairs, empty follicles, pigment network, flame hairs and hair diameter diversity were also identified in patients with RIA. Pinpoint white dots, peripilar sign, red dots and upright vellus hairs were also recognized. We suggest that before waiting for 6 months to decide the diagnosis for persistence, treatments can be started earlier.

Conclusion:

According to our study, trichoscopy is a valuable tool in the clinical diagnosis of RIA. Trichoscopy of RIA showed both features representing cicatricial and non-cicatricial alopecia. This difference is probably due to the dosage diversity. Topical minoxidil and low-dosage oral minoxidil were used to treat patients with RIA. Alopecia due to radiotherapy can be devastating for the patient. There are newly developed technologies for patients with RIA to protect their hair or have less damage to the follicles. However, the literature is still limited, and there is scant evidence for them. In this study, we determined the trichoscopic features of RIA. RIA showed both characteristic findings of cicatricial and non-cicatricial alopecia. Our results were consistent with the literature. We hypothesized that according to the trichoscopy results of RIA, the persistence of the disease may be predicted.

Evaluation of Teledermoscopy for the Assessment of Cutaneous Tumors in Northern Sweden

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Introduction & Objectives:

Teledermoscopy (TD) allows primary care centers (PCC) to consult dermatologists regarding potentially malignant cutaneous lesions by transmitting high-quality images, thereby streamlining the referral process. With the rising incidence of cutaneous tumors, TD offers substantial potential to enhance efficiency and address the increasing demands in dermatology. In "name of ared", referral rates have increased markedly since TD was introduced in 2014. Despite over a decade of use, the system has not undergone formal evaluation. This study aims to assess whether TD facilitates equitable access to dermatological consultations for cutaneous tumors in "name of ared",

Materials & Methods:

This retrospective, descriptive study analyzed 67,137 TD referrals submitted from PCC to the Dermatology Department between 2014 and 2024, excluding 2,384 due to incomplete data. Diagnoses were made by a dermatologist trained in dermoscopy and were registered along with patient demographics and referring unit. Additionally, a survey completed by PCC explored TD routines, including organizational structure, pre-assessment procedures, and the roles of involved healthcare professionals.

Results:

Over the 11 years, the mean age of referred patients increased from 50 to 61 years (p < 0.001), while the proportion of benign lesions decreased from 79.5% to 68.2% (p < 0.001). Referrals from private PCC had a higher proportion of benign lesions than referrals from public PCC (78.4% vs. 74.6%, p < 0.001. Similarly, referrals from PCC located near the Dermatology Department had a higher proportion of benign lesions than referrals from remote PCC (77.4% vs. 72.9%, p < 0.001). PCC routines increasing benign referral rates included assessment by a nurse (OR 1.150, 95% CI 1.095-1.208) and referral of almost all cutaneous lesions assessed (OR 1.463, 95% CI 1.261-1.697). Routines decreasing benign referral rates included lack of dermoscopy training (OR 0.805, 95% CI 0.770-0.841) and internal discussion of TD (OR 0.822, 95% CI 0.787-0.858).

Conclusion:

TD has effectively supported tumor diagnosis and promoted more equitable access to dermatologic expertise in "name of area". The observed increase in patient age and tumor diagnoses suggests improved targeting of highrisk populations. However, our findings also underscore the need to further optimize TD use, as the proportion of benign lesions referred by PCC located near the Dermatology Department, as well as by private PCC, remains high.

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exploring dermoscopic features of pityriasis versicolor: A study on pigmented skin

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Introduction:

Pityriasis versicolor (PV), also called tinea versicolor, is a frequently occuring superficial fungal infection caused by Malassezia yeasts, which are dimorphic and lipophilic. PV presents as hyperpigmented or hypopigmented round to oval macules or patches, often with fine, furfuraceous scaling that may be clinically inconspicuous (1,2). These lesions typically occur on the face, trunk, arms, proximal upper limbs and are usually asymptomatic, although mild pruritus may be reported (2). Patients often seek medical attention for cosmetic concerns. PV is most prevalent in hot and humid climates, with triggering factors such as heat, humidity, occlusion, and poor hygiene. (2) Clinical diagnosis is commonly made using yellow fluorescence under Wood's lamp, and confirmation is achieved through potassium hydroxide (KOH) examination. Dermoscopy has emerged as a non-invasive diagnostic technique in dermatology. Still studies on PV remains limited, with only a few reports describing its features.

The aim of our study was to explore and describe the dermoscopic patterns of hypopigmented and hyperpigmented PV lesions in Indian patients, highlighting its potential as an auxiliary diagnostic tool. -A cross sectional study to analyse the dermoscopic features of hypopigmented and

hyperpigmented lesions in Pityriasis versicolor.-PV is casely diagnosed clinically by dermatologist it is on characterised by hypopigmentation or hyperpigmentation patches on the Skin. Hypopigmentation or hyperpigmentation patches. Dermoscopy will help us to diagnose & differentiate PV from other hypo and hyperpigmentation skin disorders. Very few studies are explored on Dermoscopic features of PV, particularly in the Indian population.

Objectives:

To describe the dermoscopic features of hypopigmented & hyperpigmented lesion of P.V.

Materials & Methods:

Dermoscopic images of PV. lesions located on different body parts or sites were evaluated by dermatologist for the presence of predefined criteria.

Results:

A total of 70 lesions from 50 patients were included in the study. Among which 50 lesions

were hypopigmented & 20 lesions were hyperpigmented.

Non uniform hypopigmentation was the most common Dermoscopic features seen in both

hypo & hyperpigmentation .Describe common finding of both hypo & hyperpigmentation.

Conclusion:

This study highlights the role of dermoscopy in diagnosing Pityriasis versicolor (PV) by identifying key features like non-uniform hypopigmentation and fine scaling, which may not always be clinically visible. Dermoscopy proves useful in distinguishing PV from conditions like vitiligo and seborrheic dermatitis, offering a rapid, non-invasive diagnostic alternative to KOH microscopy.

Limited number of studies that describers features of pityriasis versicolor in pigmented asian skin.

Unmasking Pigmented Eccrine Poroma: A Comprehensive Literature Review of Dermoscopic Features and Diagnostic Challenges

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Introduction & Objectives:

Eccrine poroma (EP) is a benign adnexal tumor with terminal ductal differentiation. Sweat gland tumors represent 1% of primary skin neoplasms, with EP comprising 10%. Pigmented eccrine poroma (PEP) is even rarer (14–17% of EPs) and poorly documented. Unlike classic EP, PEP is more often found in non-palmoplantar sites and in higher phototypes. Four histologic subtypes of EP are described: hydroacanthoma simplex, classic EP, dermal poroma, and poroid hidradenoma. Dermoscopy aids in identifying PEP, although diagnosis remains challenging due to its variability and mimicry. It may resemble benign lesions (angioma, seborrheic keratosis, dermatofibroma, dermal nevus) and malignancies (Bowen's disease, SCC, pigmented BCC, melanoma in situ). PEP may also show atypical features, complicating diagnosis. This review aims to highlight dermoscopic clues to improve PEP recognition and early diagnosis.

Materials & Methods:

We reviewed 15 studies (case reports and retrospective series) from PubMed, Medline, Web of Science, and UpToDate. A total of 115 PEP cases were analyzed.

Results:

Table 1 summarizes key dermoscopic findings. The most frequently reported were polymorphous vessels—particularly hairpin and glomerular—along with seborrheic keratosis-like features such as comedo-like openings and milia cysts. A multicenter IDS study evaluated 113 EPs, of which 16 were pigmented (14%). Four clinical-dermoscopic patterns were proposed, with pattern 4 most associated with pigmentation: large lesions, any location, and nonspecific features such as blood spots (63%), keratin/scales (54.6%), and atypical hairpin vessels (36.4%). This underscored the limited number of PEP cases and the lack of specific diagnostic criteria, highlighting the need for further characterization. In a subsequent Italian study by Chessa et al. 26 lesions were grouped by histologic subtype into pigmented and non-pigmented variants (62% were pigmented). Distinct dermoscopic profiles were found across subtypes, with consistent patterns within each group—demonstrating the impact of histopatological corrleation. The largest retrospective series to date, including 61 PEPs, reported dermoscopic findings aligned with the literature, reinforcing patterns like SK structures and vascular polymorphism.

Conclusion:

PEP poses a diagnostic challenge due to its wide clinical spectrum and mimicry. However, dermoscopic clues—SK-like structures (milia cysts, comedo-like openings) and variable vascular patterns (hairpin and glomerular vessels)—are increasingly recognized. In some cases, vessels may be absent, and pseudoglobules or dark dots within

brown networks or halos may form a net- or target-like pattern. Clinical-pathological correlation is essential, considering EP's histologic subtypes, which may explain dermoscopic variability. Larger case series and standardized IDS terminology are needed to improve diagnostic accuracy. While malignant transformation has been reported in up to 18% of cases, this may be an overestimation due to the underdiagnosis of PEP, often misdiagnosed as seborrheic keratosis (which is typically not biopsied). In line with this, it is possible that PEP is more frequent than classic eccrine poroma. Understanding the true prevalence of this condition is crucial. Although histopathology remains the diagnostic gold standard, dermoscopy and confocal microscopy may increase diagnostic suspicion in ambiguous cases.

Tabla N°1

Study	N° of Cases	Location	Dermatoscopic findings			
Kuo et al (2003) (12)	2	Thigh (1), Back (1)	Without pigment network, multiple blue-grey globules, blue-grey ovoid nests, arborizing vessels.			
Nicolino et al (2007) (13)	1 (N=2)	Pubis	Blue-white color, black spot, forked vessels, scale			
Avilés-Izquierd o et al (2009) (1)	2	Foot (1), Buttock (1)	Polymorphic vascular pattern, irregular linear vessels, red lacunae, glomerular and hairpin vessels			
Nishikawa et al (2009) (14)	1	Palm	Glomerular vessels, multiple structureless pink-white areas, lacunae			
Minagawa et al (2010) (7)	12	Torso (3), Inferior leg (2), Hand (2), Foot (2), CC (1), Ear (1), Shoulder (1)	Polymorphic, hairpin, arborizing, punctate and irregular linear vessels, "globule-like", ulcerations, bluish-red lacunae, comedo-like openings			
Oiso et al (2014) (15)	1	Thigh	Dark brown structures, black dots and lines, no vascular structure			
Almeida FC (2013) (16)	1	Palm	White-grey area, black dots, polymorphic vessels, bluish-red lagoons			
Bombonato C (2016) (17)	1	Thigh	Asymmetry, blue-white structures, erosions, polymorphic vessels			
M. Chessa et al (2019) (8)	16 (N=26)		Pseudored, comedo-like openings, milium cysts, blue-gray areas, polymorphic vessels.			
M. Lakhimiri et al (2019) (18)	1	Right scapula	Pseudocysts, <u>pseudoglobules</u> , ulcerations, polymorphic vascularization			
Shimano M et al (2021) (19)	1	Hand palm	Pinkish-red areas, dotted vesicles, whitish networks, brown globules			
Xu M (2021) (10)	1	Arm	Brown globules surrounded by a white-transparent halo			
Agharbi FZ, et al (2022) (20)	1	Left ankle	Blue-green color asymmetry in the periphery, multiple green-white ovoid nests, polymorphic vascular structures			
Damanielle Silva I, et al (2024) (21)	1	Right palm	Poorly defined pigment network, blue-gray veil, erythema			
Venturi F et al (2024) (9)	61	Torso (44%), Palms and sole (22%), CyC (4.9%)	Irregular borders (55.7%), milium cysts (50.8%), brown pseudonetwork (41%), cerebriform (34.4%), comedone like opening (29.5%), atypical vessels (26%), glomerular (18%), dotted vessels (4.9%)			

Dermoscopy guided laser treatment of nevi and tattoos

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Introduction & Objectives:

The use of lasers to treat melanocytic nevi has been subject to debate because of concerns about their possible malignant transformation (Stratigos et al. 2000; Sardana 2013).

To date, surgical excision is the standard approach in the removal of these lesions since it allows a histopathologic examination and then the exclusion of cellular atypia.

In the last few years, it has become relatively clear that laser irradiation is unlikely to increase malignant potential.

However, the presence of some melanocytic nevi in positions sensitive from the aesthetic or functional point of view, in which surgical removal is difficult to obtain, or which will probably leave a noticeable scar, may limit this procedure. Therefore, in these cases laser treatment is preferably applied.

Dermoscopy is essential for laser treatment management so, before any laser treatment (such as a CO2 laser excision), dermoscopy should be performed for both diagnostic and medical-legal purposes.

Materials & Methods: I will present many examples for the importance of using dermoscopy pre, during and after to guide dermatologist to the end of session based on appearance of subclinical end point for treatment of nevi and tattoos.

Results:

The acquired dermoscopic images before treatment can demonstrate the feasibility of the treatment itself.

Dermoscopy is also important for understanding the levels of ablation during treatment and thus preventing scarring, and the dermoscopic examination immediately after the treatment can be used to determine the absence or presence of nevus cell residues and/or thermal damage.

Furthermore, dermoscopy after some time (4-week average follow-up) is useful for early detection of nevus cell residues and eventually to decide to proceed with a new laser session.

Otherwise, dermoscopic examination of a lesion perfectly removed with the CO2 laser usually reveals the persistence of erythema and an increase in the vascular pattern that fade over time.

It is intelligent to highlight the differences in the color change of the tattoo not visible to the naked eye, thus demonstrating the effectiveness of the treatment, and in most cases, dermoscopic images are accepted by the military investigating commission as proof of the treatment in progress.

This is particularly important for colored tattoos, since black pigment is easier to treat, while red, yellow, and blue pigment are more resistant to QS treatment.

Conclusion:

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- Dermoscopy has proved to be accurate in predicting and determining any damage and adverse events, and the dermoscopic examination resulted in a mandatory follow-up clinical session 4–6 weeks after treatment for nevi and tattoos treated with lasers
- Moreover, thanks to this precise iconographic documentation, the patients were able to observe and appreciate the achieved results, also because in an interval of 4–6 months of treatment they often did not remember exactly w
- situation was and therefore they were really surprised seeing all the clinical and dermoscopic images of their treatment history.
- This obviously contributed to their satisfaction in both the economic and time investment they made to improve their condition.

Optimizing Human-AI Collaboration in Dermatoscopy: A Global Study

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Introduction & Objectives:

AI demonstrates the potential to surpass expert diagnostic accuracy in experimental settings. However, achieving reliable performance in routine clinical practice remains a key challenge for successful integration. Effective human-AI collaboration is considered essential for robust clinical use, but fundamental questions remain regarding its implementation. How do physician factors modulate the impact of AI assistance? How do different AI output modalities influence diagnostic performance and user interaction? Addressing these questions about human-AI interaction dynamics is crucial for optimizing AI design and implementation. This study explored these questions in a dermatoscopy setting.

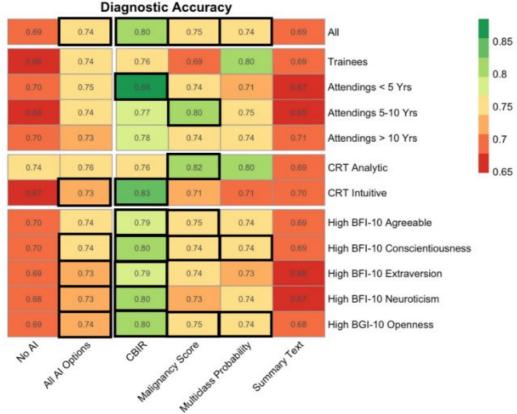
Materials & Methods:

An international survey study utilizing a within-subjects experimental design involved 219 dermatologists and trainees from 58 countries. Participants interpreted 10 dermatoscopic images, formulating diagnoses and management plans first without, and subsequently with AI assistance. In the AI-assisted condition, physicians could freely choose one of four AI output modalities: content-based image retrieval (CBIR), multiclass classification probabilities, a quantitative malignancy score, or narrative summary text. Physician characteristics, including demographics, professional experience, prior AI use, personality traits (BFI-10), and cognitive style (CRT), were systematically assessed. The primary endpoints were diagnostic and management accuracy.

Results:

AI assistance resulted in a statistically significant increase in mean diagnostic accuracy from 69.0% to 74.0% (estimated mean difference: 4.59%, 95% CI: 1.69% to 7.50%, p=0.002). Analysis based on the chosen modality revealed that CBIR was associated with the highest diagnostic accuracy at 80.0% (est: 10.35% vs. unaided, 95% CI: 5.48% to 15.22%, p<0.001). Compared to the unaided condition, choosing CBIR significantly increased the odds of achieving a correct diagnosis (OR 2.47, 95% CI: 1.73 to 3.54, p<0.001). Notably, AI support, particularly when CBIR was chosen, conferred substantial benefit to physicians exhibiting an intuitive cognitive style, increasing their diagnostic accuracy to 83.0% (est: 16.07%; 95% CI: (9.30%, 22.84%); p < 0.001). Furthermore, CBIR was the only AI output modality that was associated with significantly improved management decisions.

Conclusion:



AI support, particularly

via CBIR, significantly enhances dermatoscopic diagnostic accuracy, with pronounced benefits observed for physicians exhibiting intuitive cognitive styles. This highlights the potential for developing personalized, human-centered AI tools adapted to clinician traits. Further investigation into generalizability and optimal clinical integration strategies is warranted.

Figure 1. Overview of diagnostic accuracy for AI assisted vs. unassisted assessments according to AI output modality and participant characteristics. Black boxes indicate significant difference from unassisted assessments.

Dermoscopic features of cutaneous cryptococcosis: a case report and systematic review

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Introduction & Objectives:

Cryptococcosis is an invasive fungal infection caused by *Cryptococcus neoformans* and *C. gattii*. It is caused by an encapsulated hetero-basidiomycetous fungus, and it affects both immunocompromised and immunocompetent patients. Transmission occurs through inhalation of basidiospores, and/or dehydrated yeast found in soil contaminated by guano. Commonly, cryptococcus infects the lungs and central nervous system, still, skin can be affected and often serves as an early indicator of widespread, severe, and potentially deadly disease. Skin lesions present with various manifestations such as a papule, maculopapular lesion with an ulcerated center, or a violaceous nodular lesion. These lesions mimic many infections such as bacterial abscesses, herpes virus, and molluscum, which can delay diagnosis.

Objective: Dermoscopy may be a useful tool for early diagnosis and treatment, but data on dermoscopic features is very limited.

Case report

A 34-year-old HIV-positive man, presented to urgent care with a one-month history of a disseminated dermatosis. He had recently started treatment with antiretroviral therapy (ART) and had a severely decreased CD4 cell count (49.3 cells//uL), and a low viral load (55 cop/mL).

The patient referred an initial umbilicated papule on his right cheek with posterior dissemination. On examination, he had abundant erythematous, plaques with a central crust and, some umbilicated papules on his head, trunk, upper extremities, and thighs. Dermoscopy (DE) (DermLite DL3, San Juan Capistrano, Cal, USA, 910, polarized non-contact mode) revealed A targetoid-like image can be seen, showing a yellowish structureless central area, a whitish halo and surrounding milky red areas. Patchy infiltrates were recognized on chest radiography. Due to the suspicion of a fungal infection, amphotericin B deoxycholate and fluconazole were started. A skin biopsy was taken for histopathology, cultures, and PCR. *Cryptococcus neoformans/gattii* was detected by PCR of the skin biopsy and by culture of bronchoalveolar lavage confirming the diagnosis of disseminated cryptococcosis.

We performed a systematic review on the dermoscopy of cutaneous cryptococcosis on PubMed. We identified three cases. The mean age was 30 years (range 26 to 34), two were HIV-positive with a recent history of initiating ART, and the other one had ankylosing spondylitis treated with a TNF-alpha inhibitor. The two patients with HIV had a disseminated presentation of cryptococcosis. Dermoscopic findings included a central white structureless area surrounded by a pinkish background and linear irregular and branched vessels. The patient with ankylosing spondylitis had primary cutaneous cryptococcosis. Dermoscopy revealed white structures like white dots, lines, focal structureless areas, multiple follicular plugs, and polymorphic vessels over a background of generalized erythema. The most common structures identified in all the cases were white structureless areas and polymorphic

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vessels and a surrounding erythema described as (milky red areas, generalized erythema and pinkish background)

Conclusion: The most common features of cutaneous cryptococcosis dermoscopy are white structureless areas, polymorphic vessels, and milky red areas. Dermoscopy may help in the early recognition of disseminated and primary cutaneous cryptococcosis.



Trichoscopy of Scalp Psoriasis: A Study of 98 Cases

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Introduction & Objectives:

Scalp psoriasis is a common form of psoriasis, affecting approximately 50% to 80% of patients with this condition. Trichoscopy is a non-invasive technique used to examine the scalp and hair with a dermoscope. This tool allows the observation of specific features that can aid in the differential diagnosis between scalp psoriasis and other scalp dermatoses.

The objective of our study is to assess, through a series of 98 cases, the contribution of trichoscopy in diagnosing scalp psoriasis by describing the various trichoscopic signs observed.

Materials & Methods:

A retrospective and descriptive study was conducted over a period of six years in the dermatology department, involving patients diagnosed with psoriasis affecting the scalp.

Results:

We collected data from 98 cases of scalp psoriasis. The mean age of the patients was 32 ± 18.93 years. There was a male predominance, with a male-to-female ratio of 1.89. The mean duration of the disease was 4.16 years. The clinical forms of psoriasis were distributed as follows: 37% guttate psoriasis, 28.6% plaque psoriasis, and 41% erythrodermic psoriasis. In 38% of cases, scalp involvement was isolated. All regions of the scalp were affected, with a marked occipital predominance (42%).

The trichoscopic features observed included: Diffuse erythema (60%), Twisted loop vessels (19%), Red dots (38%), Red globules (37%), Glomerular vessels (14%), Thick white scales (90%), Yellow dots (18%), and Black dots (15%). These findings provide valuable insights into the diagnostic utility of trichoscopy in scalp psoriasis.

Conclusion:

Psoriasis is a chronic inflammatory dermatosis characterized by erythematous plaques covered with whitish scales. Scalp psoriasis, among the various forms of psoriasis, is particularly prevalent. The trichoscopic signs observed in our series were diverse and consistent with those described in the literature. A 2022 systematic review identified the most frequent vascular anomalies in scalp psoriasis as twisted red loops, glomerular vessels, red dots, and red globules. Literature also indicates that evenly distributed red dots and red patches, reflecting dermal inflammation, are the most commonly observed trichoscopic features in scalp psoriasis.

SCARRING AND NON SCARRING ALOPECIA: THROUGH MY LENS (A COMPLETE TRICHOSCOPIC HOLOGRAM) – a case series

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Introduction & Objectives: Trichoscopy, as a bedside tool, has emerged as an invaluable tool in the diagnosis and management of hair disorders. Objective: To study various trichoscopic patterns in various scarring and non scarring alopecia.

Materials & Methods: Cases with hair disorders were evaluated under trichoscope (ILLUCO-IDS1100) and images were studied. Systematic review of literature was done and correlated.

Results:

(a) Scarring Alopecia Trichoscopic Patterns:

Lichen planopilaris(LPP) of scalp in a middle aged male revealed the typical peripilar cast which is pathognomic for LPP scalp, reduced follicular ostia, white dots, blue grey dots. Pseudopalade of broq is a primary cicatricial alopecia with lymphocytic infiltrate predominance. Trichoscopy reveals loss of follicular ostia, interfollicular honeycomb pigment pattern, white porcelain areas or erythematous interfollicular areas. Discoid lupus erythematosus is characterized by prominent follicular plugging, branching capillaries, blue-gray dots, white structureless areas. En-coupe-de-sabre revealed white structureless patches with fibrotic beams, branching blood vessels, loss of follicular ostia.

(b) Non-Scarring Alopecia Trichoscopic Patterns:

Alopecia areata demonstrates exclamation mark hairs, black dots, and broken hairs within the affected areas. Trichoscopy aids in determining disease activity and predicting the response to treatment. Alopecia areata incognita had clinical features of diffuse hair thinning predominantly over frontal and vertex areas of scalp. Trichoscopy revealed empty yellow dots, pigtail hair loops, villus hair. Trichoscopy in androgenetic alopecia in males and females elicits hair diameter variability, miniaturised hair, yellow dots, perifollicular discoloration and follicular units with single emerging hair. Trichoscopy assists in differentiating female pattern hair loss, alopecia areata incognita and chronic telogen effluvium in females. A four quadrant trichoscopy is necessary to diagnose the above conditions. Trichotillomania demonstrates variable length hair shafts, black dots, coiled hair, frayed hair, hemorrhoges. Traction alopecia reveals similar findings as trichotillomania but there are peripilar casts, erythema.

Conclusion: This presentation is a comprehensive overview of patterns of alopecia. In future, combination of artificial intelligence and trichoscopy will be in use by clinicians worldwide. Trichoscopy aids in narrowing our differentials of diagnosis and serves as a good bedside tool for diagnosing hair and scalp disorders.

Dermoscopic evaluation of cutaneous adverse drug reactions (CADR).

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Introduction & Objectives:

CADRs represent a challenging spectrum of dermatological conditions with diverse clinical presentations. The integration of dermoscopy into the evaluation of CADRs has emerged as a valuable diagnostic tool, providing clinicians with enhanced insights into the microscopic features of these reactions. To evaluate the dermoscopic patterns of CADRs.

Materials & Methods:

Demographic, clinical profile and dermoscopic features of patients presenting with CADR from January 2023 to January 2024 were studied.

Results:

All of the cases (133 patients) were reported in adults with male to female ratio of 1:1.33 and mean age of 38 years.

Lichenoid drug rash was the most common type of CADR observed in 16% patients followed by DRESS and Maculopapular rash (MPR) (8.4%) each.

The major dermoscopic patterns were as follows:

Diffuse erythematous background with scattered erythematous or violaceous papules, fine scales seen in - MPR, DRESS, Pityriasis Rosea, SDRIFE (Symmetrical Drug Related Intertriginous & Flexural Exanthem).

Concentric rings, central area of hyperpigmentation surrounded by an erythematous halo, well-defined borders and peripheral scaling with targetoid patterns observed in – FDE (Fixed Drug Eruption), Erythema Multiforme.

Linear vessels, purpura with ill defined margins, hemorrhagic areas were seen in Vasculitis, SJS (Steven Johnson Syndrome), Toxic Epidermal Necrolysis (TEN).

Varying-sized pustules distributed over erythematous skin were seen in AGEP (Acute Generalised Exanthematous Pustulosis).

Atypical vascular patterns, irregular vessels, erosions, bullae, necrotic tissue and a mottled or purpuric background with epidermal detachment were seen in Stevens-Johnson Syndrome (SJS) and TEN.

The gradual fading in hyperpigmentation without erythema was observed in resolving lesions in all types of CADR.

Conclusion:

Our study highlights the role of dermoscopy in early diagnosis, appropriate selection of biopsy site and studying the various patterns of active and resolving CADRs.

Patient-Led Teledermatology for Skin Lesion assessment in Primary Care - A real world experience

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Introduction & Objectives:

Teledermatology is a promising solution for addressing the imbalance between high demand and limited supply in dermatological care. While traditionally placed between primary and secondary care, this approach does little to improve patient experiences early in their journey or GP workload. Patient-enabled teledermatology, leveraging smartphone-based tools, offers a streamlined alternative, enabling high-quality image capture at the outset. This study explores a real-world application of a patient-enabled pathway using the Dyplens™ in primary care.

Materials & Methods:

Patients seeking GP consultations for skin lesion checks were offered a 'home capture' option. The Dyplens™, sent by post with instructions via the Map-My-Mole app, allowed patients to submit high-quality images and lesion histories to their GP. Submissions of concern or undiagnosable by GPs were escalated to the Map-My-Mole service. Conducted in three GP practices from March to September 2024, outcomes—referrals saved, diagnostic timelines, and clinician workload—were compared to data from the same period in 2023. Patient feedback on usability and satisfaction was also collected.

Results:

The average time from image submission to clinical decision was 47 hours. Most data on cancer pathways only take into consideration time from referral to treatment forgetting the days, weeks, or months a patient may have been in a 'holding pattern' in primary care. Of 1158 submissions, consultant review reduced two-week-wait referrals from 317 to 117—a 63.1% decrease. GP time spent per patient dropped from 20 minutes to 3 minutes, saving 328 hours, equivalent to 82 clinical sessions, excluding additional administrative efficiencies. Combined savings from reduced workload and referrals totalled £66,578, with further implementation projected to enhance these benefits.

Patient feedback was overwhelmingly positive, with 96% rating the service as "very good" or "good" and 71.7% expressing willingness to use it again. The app and device were widely viewed as user-friendly, and patients appreciated the convenience of remote assessments, which eliminated the need for in-person visits. This reinforces the pathway's role in sustainable healthcare by reducing unnecessary travel and its associated burdens.

Conclusion:

This study demonstrates the effectiveness of patient-led teledermatology at the start of the care pathway, significantly reducing GP workload and referrals. Faster assessment and referral decisions are expected to improve early skin cancer diagnoses. These findings support the broader integration of this pathway into UK dermatology services to enhance patient outcomes and healthcare system efficiency.

Vulvar squamous cell carcinoma mimicking melanoma: a diagnostic pitfall

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Introduction & Objectives:

Squamous cell carcinoma (SCC) is the most common vulvar malignancy, accounting for approximately 90% of vulvar cancers. Vulvar SCC predominantly affects postmenopausal women and is associated with a wide range of risk factors, including smoking, immunosuppression, HPV infection, and lichen sclerosus, among others. Vulva is considered a high-risk SCC location due to its aggressive biological nature reflected in increased recurrence and metastatic potential. Herein, we report a case of a patient with a pigmented vulvar lesion, which had dermoscopic and reflectance confocal microscopy (RCM) features of melanoma and was ultimately diagnosed as SCC.

Case presentation:

A 70-year-old female presented to the outpatient clinic due to pigmented, ulcerated lesion on the left labia minora. The patient reported that a vulvar lesion had appeared several years ago, with associated pain that progressively increased in severity. Histopathological evaluation performed at another medical center indicated the diagnosis of lichen sclerosus. Despite the use of topical glucocorticosteroids, no satisfactory clinical improvement was achieved. Personal medical history revealed a marsupialization of a Bartholin gland cyst and the family history was positive for vulvar carcinoma in her mother and prostate carcinoma in her father. On dermoscopy irregular pigmented dots and globules, peppering overlying milky-red areas, polymorphic vessels and irregular pigmented blotches were identified. In RCM abundant pagetoid and dendritic cells were observed throughout the entire imaging depth range of the RCM probe. Histopathological examination subsequently confirmed an HPV-independent squamous cell carcinoma (SOX10-, p40+, p16-, EMA+/-). No evidence of local or distant metastases was found. The patient underwent radical vulvectomy and bilateral inguinal lymphadenectomy and remains under regular medical surveillance.

Conclusion:

Previous studies reporting dermoscopy of vulvar SCC and preinvasive vulvar intraepithelial neoplasia have described pigmented dots and globules, glomerular vessels, and milky-red areas. These observations fall within the spectrum of our case, which additionally demonstrated other dermoscopic features associated with melanoma, including polymorphous vessels and irregular pigmented blotches. Notably, prior studies have focused on HPV-related vulvar neoplasms, whereas our case represents an HPV-independent vulvar SCC, likely arising in the setting of long-standing, untreated lichen sclerosus. To date, no reports have described the RCM appearance of such lesions. In our case, RCM revealed features typical of melanoma, namely numerous pagetoid and dendritic cells, however, no RCM features typical of SCC, such as an atypical honeycomb pattern, were observed. Nevertheless, further large-scale studies are warranted to better define the dermoscopic and RCM findings of vulvar SCC.

gout mimicking squamous cell carcinoma

Dorina Hairo*1

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Introduction & Objectives:

Gout is a common inflammatory arthritis caused by deposition of monosodium urate. Tophaceous gout results from chronic accumulation of monosodium urate and most commonly presents clinically as an asymptomatic subcutaneous nodule. Rarely, the overlying skin can ulcerate or become hyperkeratotic due to the associated pseudoepitheliomatous hyperplasia and thus mimic a squamous cell carcinoma clinically and histopathologically.

Materials & Methods: case report

A 52 year old patient presented to the dermatology clinic for a seven month history of a painful growth on her left leg. There was no history of preceding trauma. The patient was being treated with allopurinol. Exam was notable for a firm, hyperkeratotic nodule. Initial differential diagnosis included keratoacanthoma, gout and squamous cell carcinoma. On dermoscopy examination there were no specific criteria of a squamous cell carcinoma.

Results:

A punch biopsy was performed and the pathology report was interpreted as a poor differentiated squamous cell carcinoma. An excisional biopsy was performed and a white chalky material was observed at the base of the lesion. Histopathology confirmed a gouty tophus.

The purpose of this case report is to emphasise the variable presentation of gout and the challenge that can be faced by clinicians in diagnosing it. **

Conclusion:

Gouty tophi have been reported to mimic cancerous conditions like squamous cell carcinoma in different parts of the body such as the hands and feet. This case illustrates the variable presentation of gout.

Dermoscopic examination and skin biopsy should be performed in order to achieve the exact diagnosis.

Lentigo maligna and lentigo maligna melanoma: does location change the game?

Marta Menéndez¹, Joseph Simon Griffiths Acha¹, Sara De Benito Mendieta¹, Alejandra Méndez Valdés¹, Diego De la Vega Ruiz¹, Elena Naz Villalba¹, Reyes Gamo Villegas¹, María Uxua Floristán Muruzabal¹, Jose Luis Lopez Estebaranz¹

¹Hospital Universitario Fundación Alcorcon, Alcorcón, Spain

Introduction & Objectives:

Lentigo maligna (LM) and lentigo maligna melanoma (LMM) are melanoma variants strongly linked to chronic sun exposure, primarily affecting the head and neck regions. Nonetheless, increasing attention is being given to extrafacial LM, which may show different dermoscopic patterns that support earlier detection in comparison to facial cases.** This study aims to characterize and contrast the clinical and dermoscopic features of LM and LMM arising in facial (head and neck) versus extrafacial locations, using data from a comprehensive retrospective series at a tertiary care institution.

Materials & Methods:

A retrospective, observational study was performed at a single center, including 225 histologically confirmed LM or LMM cases diagnosed from 2017 to 2024. Demographic profiles, clinical presentations, dermoscopic patterns, and histopathological findings were analyzed and compared based on anatomical distribution.

Results:

Patients with facial LM/LMM were typically older and had larger, more multicolored lesions, with blue-gray pigmentation being notably prevalent under dermoscopy. Pink coloration was significantly linked to more invasive forms of the disease, regardless of the site. Dermoscopic evaluation revealed that facial tumors more frequently demonstrated rhomboidal structures and erased pigment areas, whereas extrafacial lesions showed a predominance of an erased pigment network and irregular pigmented foci.

Conclusion:

The dermoscopic appearance of LM and LMM varies depending on the anatomical site of the lesion. Recognizing these site-specific differences can aid in earlier diagnosis and refine dermoscopic assessment across both facial and extrafacial areas.

Dermoscopic Evidence of Demodex in Rosacea: Prevalence and Associations

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¹Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

Introduction & Objectives:

Dermoscopy is an essential tool in dermatology, offering insights that are not visible to the naked eye. Rosacea is a chronic inflammatory skin disease that most commonly affects the face. The usefulness of dermoscopy in the diagnosis of rosacea has been the subject of studies.

Materials & Methods:

Cross-sectional study with 69 patients with rosacea. Clinical assessments and dermoscopic images of the lesions were obtained. Dermoscopic findings were analysed by two dermatologists, considering nine criteria: polygonal vessels, linear vessels with branches, dotted vessels, scales, red structureless areas, follicular pustules, follicular plugs, *Demodex* tails, and *Demodex* follicular openings.

Results:

The most common finding was linear vessels with branches, observed in 62 (89.9%) of the patients. Polygonal vessels, red structureless areas and dotted vessels were seen in 52 (75.4%), 51 (73.9%), and 46 (66.7%) of patients, respectively. *Demodex* tails and *Demodex* follicular openings were observed in 32 (46.4%) and 36 (52.2%), respectively.

An association was found between male gender and polygonal vessels (94.4% vs 68.6% p0.024) as well as follicular plugs (72.2% vs 37.3% p0.011). No significant associations were observed between dermoscopic findings and age, skin phototype, or overweight/obesity. Follicular plugs were more common in patients with mild to moderate rosacea (IGA-RSS 1 to 3) than in those with moderate to severe rosacea (51,7% vs 18.2%; p0.04).

Patients with papulopustular rosacea exhibited more frequently red structureless areas (47.4% vs 84.0%; p0.003), follicular plugs (26.3% vs 54.0%; p0.035), and follicular pustules (5.3% vs 36%; p0.008). Follicular plugs were also more common in patients with phymatous changes (34.7% vs 75%; p0.003). The other dermoscopic findings did not show differences between the subtypes.

Patients with moderate to severe eritematotelangiectatic rosacea presented more polygonal vessels when compared to mild cases (95.5% vs 65.9%; p0.014), and scales and follicular pustules were more common in patients with moderate to severe papulopustular rosacea than in mild ones (58.3% vs 27.0%; p0.032).

Conclusion:

Polygonal vessels are considered highly specific of erythematotelangiectatic rosacea. Follicular plugs and superficial scales are more common in the papulopustular subtype. Similar findings were noted in our study. Additionally, follicular pustules and structureless areas were also associated with papulopustular rosacea. Regarding phyma, follicle abnormalities and structureless reddish-yellowish masses have been described. It is similar to our study, with follicular plugs being more common in this group.

Patients with rosacea have a higher prevalence and density of Demodex folliculorum. Demodex is visualized as

Demodex tail and Demodex follicular openings at dermoscopy. Demodex tails and Demodex openings were observed in nearly half of our patients, highlighting the high prevalence of this mite in rosacea patients.



Trichoscopy in Alopecias: Diagnosis Simplified

Maryam Ghaleb¹, Ouiame El Jouari¹, Salim Gallouj¹

 1 CHU - Mohammed VI University Hospital Center, Dermatology and Venerology department, tanger

Introduction & Objectives:

Scalp alopecia encompasses various conditions, and its diagnosis requires multiple examinations, sometimes including skin biopsy. The objective of our study was to assess the contribution of trichoscopy as a non-invasive diagnostic tool for alopecia and to evaluate its usefulness in challenging cases of hair loss.

Materials & Methods:

A prospective, single-center study was conducted in the dermatology department of the University Hospital of Tangier over a four-year period. All patients followed for scalp disorders were included. Trichoscopic images were taken, a semiological interpretation of the different signs was performed, and a correlation study was carried out.

Results:

A total of 335 cases were studied. The average age was 22 years, with a sex ratio of 0.51. Non-scarring alopecia accounted for 95% of cases. The confirmed diagnoses included androgenetic alopecia (AGA) in 26% of cases, alopecia areata in 32%, tinea capitis in 33%, lichen planopilaris in 3%, and trichotillomania in 1.5%.

The most frequently observed trichoscopic signs were vellus hairs, anisotrichosis, and yellow dots. Correlation analysis showed that anisotrichosis, peripilar signs, and circle hairs were associated with AGA (p = 0.001), whereas yellow dots, folded hairs, and exclamation mark hairs were present in alopecia areata (p < 0.001). In trichotillomania, trichoptilosis, tulip hairs, and at-sign hairs were specific features.

In tinea capitis, comma hairs, corkscrew hairs, and barcode hairs were characteristic (p < 0.001). In lichen planopilaris, the slipping sign was observed (p = 0.0015). In discoid lupus erythematosus, corn plugs (p = 0.0018) and arborizing vessels (p < 0.001) were specific findings. Folliculitis decalvans was associated with tufted hairs and pustules (p < 0.001). Finally, dissecting cellulitis was characterized by tufted hairs and the soap bubble sign.

Conclusion:

In the absence of a definitive, non-invasive and reliable diagnostic method for hair and scalp disorders, trichoscopy is proving to be a practical and effective tool, particularly in difficult diagnostic cases or when multiple conditions coexist. Its ability to assess large areas in a short period of time makes it well suited for clinical practice. In addition, mastery of trichoscopy is relatively simple and accessible to anyone with a keen eye for detail. In addition, the ease of documentation and the ability to compare images with pre-treatment findings helps to monitor therapeutic response while providing reassurance to anxious patients.

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The Agreement between Dermoscopic and Histopathologic Diagnosis of Different Dermatological Diseases

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Introduction & Objectives:

Dermatoscopy or dermoscopy is a non-invasive in vivo technique, that allows visualization of morphological features that are not seen by the naked eye. It was initially used for the assessment of pigmented skin lesions. In recent decades, the use of dermatoscopy has been increased and expanded to be involved in the assessment of different dermatoses.

The aim of this study is to assess the degree of agreement between dermoscopic and histopathological diagnosis of different dermatoses

Materials & Methods:

This is a prospective cross-sectional reliability study. Inclusion criteria were patients attending the dermatology clinic in Sultan Qaboos University Hospital (SQUH); patients with different ranges of dermatological diseases including inflammatory, infectious, neoplastic, and connective tissue disease; and patients with mild, moderate, and severe forms of the same disease. Skin lesions were assessed using dermatoscope, and then a skin punch biopsy was taken from the same lesion for histopathological examination.

Results:

One hundred thirty-nine cases were included in the study. The overall agreement was 70%. The vasculitis and vascular disorders group showed the highest percentage of agreement (92.9%), while the infectious dermatoses group showed the lowest percentage of agreement (60%).

Conclusion:

Overall, this study showed a good agreement between dermoscopic and histopathological diagnosis.**

Dermoscopy provides an excellent communication bridge between clinician and pathologist as most dermatoscopic structures have direct histopathologic correlates. Gaining knowledge about dermoscopy will improve clinician's diagnostic accuracy and will reduce the number of performed biopsies

Table (1): Examples of included cases with positive agreement.

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²Sultan Qaboos University Hospital, Muscat, Oman

Diagnosis	Atopic dermatitis	Lichen simplex chronicus	Pigmented purpuric dermatosis	Vasculitis	Seborrheic keratosis	Pemphigus foliaceous
Dermoscopy	10 P	Ø.	A.K.			-
Histopathology	100%	The second			J. 11	

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Histopathology		No contra	-12-14	-	O P	

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Impact of Visual Context on Pigmented Network Classification: A Retrospective Observational Study

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Introduction & Objectives:

Classification of pigment network typicality varies widely among experts despite its importance. Interpreting pigmented network as typical or atypical is likely influenced by not only its objective morphology but also influenced by the subjective visual context based on the presence or absence of other structures and colors within the lesion.

The primary objective of this study is to investigate the effect of viewing the whole lesion as opposed to the localized feature in isolation on expert classification of pigment networks. The secondary objective is to determine whether expert reviewers' definitions of atypical pigment network align with the current definition outlined in the literature and to examine the inter-observer agreement regarding the classification of pigment network.

Materials & Methods:

Dermoscopic images of nevi and melanomas were annotated to highlight pigment network foci and cropped into circular snippets (Figure 1). Six dermoscopists classified both the snippets and corresponding whole lesion images as 'typical,' 'atypical,' or 'both' via a web-based platform. In each module, the cases were presented in a random order without diagnostic or demographic information.

Inclusion criteria: Melanocytic Lesions with a discernible and in-focus pigment network visible on the dermoscopic images. Exclusion criteria: Low-quality dermoscopic images and non-melanocytic lesions with a pigment network.

Statistical analysis involved evaluating network classification frequencies and inter-rater agreement using various metrics (Percent Agreement, Kappa, Gwet's AC), and pooling responses from snippet and whole-image modules to assess intra-rater consistency..

Results:

Six dermoscopy experts, blinded to the diagnosis, each evaluated a total of 92 images (80 nevi and 12 melanomas) for the presence of typical versus atypical pigment network.

While 57% of images had consistent classification of the network between whole lesion and snippets, 43% shifted the network classification between the snippet to the whole lesion view.

Melanomas were more prone than nevi to intra-rater discrepancy between whole lesion and snippets (54.2% vs. 41.7%; OR = 1.65, 95% CI: 1.11-2.47). The inter-observer agreement was higher for the snippet view (65.22%) than for the whole lesion view (55%).

Conclusion:

These findings suggest that both the objective morphology of the pigment network and the subjective interpretation of the network in context with other features within the lesion influence expert classification of pigment network. Factors such as the variability in the distribution, thickness, and color of network lines, overall pattern, and other dermoscopic structures likely contributed to the classification changes (Figure 2).

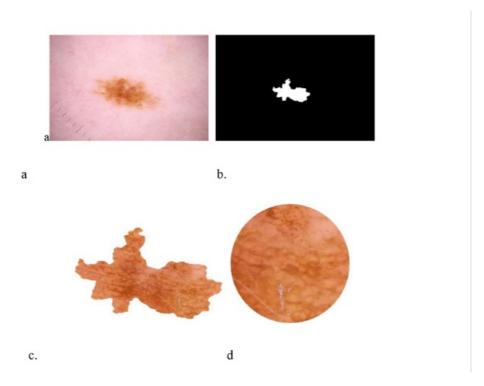


Figure 1. Creating Snippet. a. An expert dermoscopist annotated the images to identify the regions of predominant pigment network. b. From these annotations, binary masks were created. c. The area of pigmented network extracted from the original whole dimension dermoscopy image.. d. From the transformed images, circular areas were extracted.

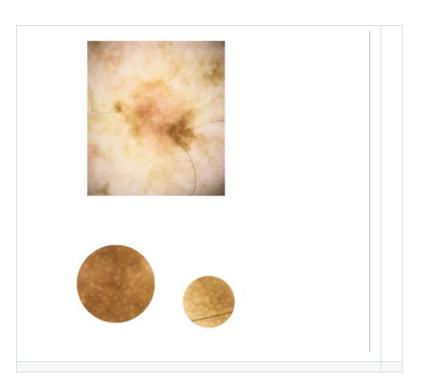


Figure 2. Lower snippet, upper whole image. Melanoma with disorganization in colors and structures, shiny white lines (chrysalis), pink structureless areas and red dots in addition to atypical network unevenly distributed. Classification changed from typical to atypical for 3 readers.

Young-onset lentigo maligna: clinical and dermoscopic clues in patients under 50

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Introduction & Objectives:

Lentigo maligna (LM) and its invasive form, lentigo maligna melanoma (LMM), typically arise as slowly growing pigmented macules on chronically sun-damaged skin in elderly patients. However, LM/LMM may also occur in individuals under 50, where diagnosis remains challenging due to lower clinical suspicion, often leading to delayed detection and treatment. This study aims to identify clinical and dermoscopic features that may facilitate earlier recognition of LM/LMM in younger patients—a population in which these lesions are uncommon and easily overlooked.

Materials & Methods:

We conducted a single-center, retrospective, observational study of 229 histopathologically confirmed LM/LMM lesions from 200 patients diagnosed between January 2018 and December 2023. Demographic and dermoscopic data were compared between patients under 50 years of age (33 lesions) and those aged 50 or older (196 lesions). The objective was to identify features that may raise diagnostic suspicion in younger individuals.

Results:

Among patients under 50, there was a predominance of female cases (59%) with a mean age of 43. While the trunk was the most common location in both cohorts, younger patients more frequently had lesions on the lower extremities (p < 0.05). They also had fewer personal or family history of skin cancer and less photodamage (p < 0.05). Clinically striking lesions—defined as visually large or isolated relative to surrounding pigmented macules—were identified in 81% of younger patients, a significantly higher proportion than in older patients (p < 0.05). All lesions in both age groups exhibited at least one atypical color suggestive of malignancy. However, lesion diameter did not differ significantly. Notably, younger patients displayed a significantly lower mean number of dermoscopic malignancy criteria (3.26 \pm 1.5) compared to older patients (6.92 \pm 2.2; p < 0.05), reflecting the subtler dermoscopic presentation in this group.

Conclusion:

In younger patients, clinical impression—particularly the presence of conspicuous or isolated pigmented lesions with atypical colors—plays a central role in raising suspicion, as dermoscopic clues may be minimal. Literature on LM in younger individuals is scarce. Longo et al. reported fewer dermoscopic criteria in facial LM in younger patients. Huang et al. found a female predominance in LM under 50, and Tiodorovic-Zivkovic et al. observed smaller and more frequently isolated lesions in this population—findings partially aligned with our series.

Diagnosing LM in younger patients is challenging due to its overlap with benign lesions and the often subtle dermoscopic findings. In these cases attention should be given to clinically striking lesions and atypical pigmentation. When suspicion persists, short-term follow-up or assessment with reflectance confocal microscopy should be considered to avoid diagnostic delay.

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Dermoscopic Changes in Nevi During Pregnancy: Insights from a Case-Control Study

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Introduction & Objectives: Pregnancy induces various physiological changes, and the influence of pregnancy on melanocytic lesions remains a topic of debate (1-10). This study aimed to investigate changes in nevi during pregnancy by comparing pregnant women with their non-pregnant siblings, using sequential dermoscopic imaging.

Materials & Methods: In this case-control analysis, 32 siblings pairs were involved, consisting of 32 pregnant and 30 control individuals, with additional triplet pairs consisting of one control matched with two pregnant sisters. Nevi were dermoscopically photographed at baseline and after a median of 14 weeks. A total of 1,962 nevi were analyzed for changes such as enlargement, alterations in dots and globules, and pigmentation modifications. (Figure 1)

Results: Overall, 26.3% of nevi in pregnant participants showed changes compared to only 4.8% in controls (p<0.0001), with an average of 7 changing nevi per pregnant woman versus 2 per control. Subgroup analysis (pregnant women) by phototype revealed no significant statistical difference in frequency or type of dermoscopic changes between phototypes I & II and phototypes III & IV. Notably, darker pigmentation was more prevalent in Brazil (16.6% of nevi per pregnant woman) compared to Australia (1.8%). Conversely, increased dots and globules, as well as lighter pigmentation, were more common in the Australian pregnant cohort (Table 1). The study found that dermoscopic changes included nevus enlargement (11.2% in pregnant women vs 0.8% in controls, p<0.0001), altered dots and globules (5% vs 2.3%, p=0.028), darker pigmentation (8.8% vs 0.6%, p=0.003), and lighter pigmentation (2.7% vs 0.2%, p=0.016). (Figures 2 and 3) There was no significant presence of melanoma-specific features in either group (p=0.98). Furthermore, no correlation was found between patient nevus count and any dermoscopic changes in pregnant women (p=0.7), suggesting these changes are independent of total nevus count. Additionally, no correlation was observed between the two most common types of changes: enlargement and increased dots & globules.

Conclusion: This study highlights significant dermoscopic changes in nevi during pregnancy compared to non-pregnant siblings, especially in enlargement and pigmentation alterations. These changes, however, are independent of total nevus count and do not align with melanoma-specific features. The results emphasize the importance of monitoring nevi during pregnancy for dermatological assessments and patient education. Future research should be directed towards understanding the underlying mechanisms and validating these findings.

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When Parasites Wiggle: Dermoscopy-Guided Diagnosis and Management of Tungiasis and Myiasis

miguel quetglas valenzuela¹, Júlia Mercader Salvans¹, Daniel Sánchez Suárez¹, Asier Viciana Tarife¹, Micheal Mosha², Maria Pestana Eliche¹, Daudi Mavura²

¹Hospital Universitario de Canarias, Dermatology , SAN CRISTOBAL DE LA LAGUNA ²Kilimanjaro Christian Medical Center, Regional Dermatology Training Center, Moshi, Tanzania

Introduction & Objectives:

Tungiasis is a highly prevalent ectoparasitosis caused by the sand flea Tunga penetrans, endemic and common in tropical regions such as South America, the Caribbean, and sub-Saharan Africa. The condition primarily affects low-income populations and is associated with walking barefoot, poor hygiene, and animal cohabitation. Lesions occur on the feet in 95–98% of cases, particularly in periungual and plantar areas. Clinically, it presents as a translucent nodule with a central black dot, evolving with pain, erythema, and potential secondary infection.

Cutaneous myiasis refers to dermal infestation by fly larvae, particularly Dermatobia hominis in Latin America and Cordylobia anthropophaga in Africa. The furuncular variant presents as painful nodules with central pores, often in covered areas like the trunk. Risk factors include exposure to infested clothes or travel to endemic areas.

Materials & Methods:

Results:

Case 1: A 33-year-old male from Moshi, Tanzania, with low socioeconomic status, presented with multiple black-brown nodules with central pores on both soles. In vivo dermoscopy revealed peripheral white oval structures, radial bluish-black blotches, and central dark pores. One lesion showed peristalsis with wriggling reddish tubules, confirming larval viability. A diagnosis of extensive tungiasis was made, and lesions were surgically extracted.

Case 2: A 26-year-old male from Tanga, Tanzania, reported six pruritic nodular lesions on the back for four days. Dermoscopy showed a dilated follicular pore with a protruding white structure—the "periscope sign." A differential diagnosis included tungiasis, folliculitis, and furuncular myiasis. After manipulation, a protruding larval body with surrounding black triangules became visible via dermoscopy, confirming furuncular myiasis. Treatment included occlusion of the pore with petroleum jelly and mupirocin for two days, followed by manual extraction.

Conclusion:

Tungiasis diagnosis is clinical, but dermoscopy can detect specific features: white oval structures (eggs), dark central pores (respiratory/excretory orifices), silver dendritic fibers, and wriggling reddish tubules (midgut activity). Treatment involves sterile removal of the fleas. Antibiotics and NSAIDs may be used in extensive cases, oral ivermectin is not effective. Prevention includes closed footwear, environmental sanitation, and tetanus prophylaxis can be considered. In furuncular myiasis, dermoscopy reveals a central pore, visible spiracles ("periscope" or "bird's feet" sign), and black spicules. Viability is confirmed by larval motility and air bubbles. Treatment involves occlusion to induce larval surfacing, followed by manual or surgical extraction. Preventive measures include clothing hygiene and repellents. Ivermectin may be used in refractory cases.

Pigmented epithelioid melanocytoma combined with lentiginous junctional nevus

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Introduction & Objectives:

Pigmented epithelioid melanocytoma (PEM) is a rare type of melanocytic tumor that can spread to regional lymph nodes but very rarely causes distant, fatal metastases. The somatic mutation, particularly the BRAF V600E, is generally absent in PEM but usually associated with banal nevus (e.g., junctional or intradermal nevus) existing alongside on sun-exposed skin, and this point is important both diagnostically and prognostically.

Materials & Methods:

We describe a case report of PEM combined with lentiginous junctional nevus in a patient treated at our hospital.

Results:

A 36-year-old male presented with a blue-black nodule 5 mm in diameter localized in the left scapular region. The time of its existence cannot be stated precisely by the patient. There is a history of multiple sunburns. Military by profession, the patient denied traumatic tattoos. Dermoscopic examination showed on the background of photodamaged skin a structureless blue-black area (blue-black rule), an atypical pigmented network, a veil, and shiny white structures. Subsequent histopathological analysis of post-surgical excision revealed a combined nevus (combination of PEM and lentiginous junctional nevus). Mitotic figures and necrosis, marked melanocytic atypia were not detected. The margins were clear.

Conclusion:

Combined nevi are melanocytic lesions with two or more morphologically distinct components (e.g., a banal nevus and a PEM). The banal nevus component often carries the BRAF V600E mutation, meanwhile, the PEM component typically does not. This supports the idea that not all PEMs are the same - some may arise in association with conventional nevi, potentially via different molecular pathways. The nevus component most probably developed first, potentially driven by UV-induced BRAF mutation. The PEM component may have arisen secondarily through additional mutations or events not necessarily UV-related.

Even when some structures are worrisome under the dermatoscope, PEMs that arise in combination with banal nevi and harbor BRAF mutations generally show benign clinical behavior (very low recurrence or progression risk, rarely, if ever, metastasize), unlike sporadic PEMs, which are not associated with Carney complex or other banal nevi.

The "Black-Red Dot Sign" on Dermoscopy: A Diagnostic Clue and Therapeutic Monitoring Marker in Subcutaneous Fungal Infections

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Introduction & Objectives:

Dermoscopy is increasingly used for diagnosing a variety of skin conditions, including pigmented, tumorous, vascular, inflammatory, and hair diseases, as well as superficial fungal infections such as tinea capitis, tinea corporis, tinea cruris, and onychomycosis. However, its role in subcutaneous fungal infections (SFI) remains underexplored.* This study investigates the diagnostic and therapeutic monitoring significance of the newly described "black-red dot sign" observed on dermoscopy in SFI.

Materials & Methods:

We enrolled 10 patients with chronic granulomatous lesions (> 6 weeks duration and granulomatous history) exhibiting the dermoscopic "black-red dot sign". Fungal cultures and metagenomic next-generation sequencing (mNGS) were performed for pathogen identification. Scanning and transmission electron microscopy (SEM/TEM) characterized the sign's components. Patients were monitored for ≥3 months post-treatment. Ten cases of *Mycobacterium* spp./*Nocardia* spp. infections served as control.

Results:

The pathogens included *Sporothrix globosa* (4 cases), *Cladophialophora carionii* (1 case), *Candida tropicalis* (1 case), *Candida parapsilosis*/*Candida guilliermondii* (1 case), and *Fonsecaea monophora* (3 cases). Lesions presented as fixed or lymphatically distributed nodules /ulcers. Post-antifungal therapy, the "black-red dot sign" resolved alongside clinical improvement. In contrast, *Mycobacterium/Nocardia* lesions lacked this sign. SEM revealed the sign comprised fungal yeast/thick-walled spores, extracellular matrix, host cells, and necrotic tissue. TEM showed revealed macrophages engulfing fungi in the dermis, with subsequent expulsion via epidermal keratinocytes. A patient with *Mycobacterium chelonae* infection (confirmed by mNGS) experienced recurrence after 3 months of rifampicin/moxifloxacin/clarithromycin. The emergence of the "black-red dot sign" prompted mNGS and fungal culture, revealing a secondary infection with *Sporothrix globosa* Itraconazole therapy for 4 months resolved both lesions and the sign. The sign demonstrated 100% sensitivity (10/10 SFI cases) and 100% specificity (10/10 *Mycobacterium* spp./*Nocardia* spp. controls) in this cohort (preliminary data due to small sample size).

Conclusion:

The "black-red dot sign" correlates with fungal expulsion mechanisms, serving as a rapid bedside diagnostic clue marker for SFI. Its absence in bacterial infections and resolution with antifungals support its specificity for subcutaneous mycoses. While culture/mNGS remains essential for species identification, this sign enables early empiric therapy. Limitations include the small cohort and retrospective design. Preliminary data warrant validation through multicenter prospective trials to confirm diagnostic accuracy and generalizability.

Efficacy and Safety of Combining Doxycycline With Pulsed Dye Laser VersusTopical Brimonidine 0.33% in the Treatment of ErythematotelangiectaticRosacea: a Comparative Clinical and Dermoscopic Study

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Efficacy and Safety of Combining Doxycycline With Pulsed Dye Laser Versus

Topical Brimonidine 0.33% in the Treatment of Erythematotelangiectatic Rosacea: a Comparative Clinical and Dermoscopic Study

Introduction & Objectives:

Rosacea is a chronic inflammatory disease, with frequent exacerbations and considerable negative impact on the affected individuals. Persistent erythema of the face is the hallmark of the disease. It is triggered mainly by sun and heat exposure. Its pathogenesis results from interplay of immune and neurovascular dysregulation along with other multiple factors. Multiple treatment options are available with variable responses. Pulsed dye laser is one of the best options with good results. Topical brimonidine and low dose oral doxycycline are considered one of the new treatment modalities.

The aim of the study is to compare low -dose oral doxycycline alone and in combination with pulsed dye laser or topical brimonidine gel 0.33% in treating erythematotelangiectatic rosacea regarding their efficacy, safety, adverse effects and rebound.

Materials & Methods:

Forty-five patients with erythematotelangiectatic rosacea (ETR) included in the study and were randomized into three groups, where fifteen patients received three sessions of pulsed dye laser in addition to low dose oral doxycycline, fifteen patients received topical brimonidine in addition to low dose oral doxycycline and the last fifteen patients received only low dose oral doxycycline. They were all assessed for erythema and telangiectasia by using dermacatch, clinical erythema assessment scale, five-point telangiectasia scale and dermoscopy at the beginning, and at the end of the study and after three months of follow up.

Results:

Marked reduction in most of the measured parameters [erythema index-clinical erythema assessment scale-five-point telangiectasia scale-mean thickness of blood vessels-number of blood vessels>30lm] in laser group than the other 2 groups was observed at both the end of treatment and after three months of follow up.

Conclusion:

Pulsed dye laser is the only treatment option achieved long term remission with good response and acceptable side effects. Topical brimonidine is associated with frequent side effects and oral doxycycline alone is not sufficient in treating ETR, and both were associated with relapse of the disease.

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Diagnostic utility of ultraviolet-induced fluorescence dermoscopy in the evaluation and differentiation of non-pigmented neoplasms on the face.

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Introduction & Objectives:

There is a growing number of evidence suggesting that ultraviolet-induced fluorescence dermoscopy (UVFD) may enhance the diagnostic accuracy of various skin tumors. The aim of this study was to evaluate the UVFD characteristics of the most common non-pigmented tumors on the face.

Materials & Methods:

Non-pigmented tumors, including basal cell carcinoma (BCC), seborrheic keratosis (SebK), dermal nevus (DN) and sebaceous hyperplasia (SebH), localized on the face, were examined using Dermlite DL5 dermatoscope under fluorescent mode. The findings were described using terminology in prior publications and authors' own observations.

Results:

In total, 62 BCCs, 33 DNs, 55 SebHs and 31 SebKs were analyzed.

In BCCs, the most prevalent features included: dark silhouettes (85.48%), arborizing vessels (54.83%), well-demarcated borders (41.93%), white-blue irregular confluent fluorescence (35.48 %), white clods (27.41%), blue-fluorescent fibers (25.8%), lack of pink-orange follicular fluorescence (17.74%) and white depigmentation (16.13%).

In DNs, the following characteristics were identified: dark silhouettes (72.72%), well-demarcated borders (54.54%), lack of pink-orange follicular fluorescence (45.5%), arborizing vessels (33.33%) and pink follicular fluorescence at the periphery (12.12%).

The most frequently observed features in SebHs were: punctate pink central fluorescence (44.44%), 2-3 central light blue-fluorescent plugs (37%), dark silhouettes (32.72%), lack of pink-orange follicular fluorescence (27.27%), 2-3 central pink-fluorescent plugs (16.36%), well-demarcated borders (16.36%) and arborizing vessels (14.81%).

In SebKs predominant findings included: dark silhouettes (87.09%), well-demarcated borders (70.96%), white-blue fluorescence at the edge of ridges (41.93%), lack of pink-orange follicular fluorescence (35.48%), white-blue irregular confluent fluorescence (32.25%), multiple white-blue fluorescent well-demarcated globules (29%) and warty surface (19.35%).

Under UVFD, BCCs more frequently showed white clods (p <0.001), black globules (p < 0.01), white depigmentation (p=0.028) and blue-fluorescent fibers (p < 0.001) than other non-pigmented lesions, while DN showed a statistically significant higher prevalence of pink follicular fluorescence at the periphery (p < 0.005). 2-3 central light blue-fluorescent plugs (p < 0.001) and 2-3 pink-fluorescent central plugs (<0.001) were identified only in SebH. In addition, punctate pink central fluorescence was observed significantly more frequent in SebHs (p < 0.001) than in other entities.

Warty surface and white-blue fluorescence at the edge of ridges were observed exclusively in SebKs. SeBKs demonstrated also a higher incidence of multiple, white-blue fluorescent well-demarcated globules (p < 0.001) and well-demarcated borders (p< 0.005) than other entities.

Conclusion:

UVFD provides significant potential for improving the clinical evaluation of non-pigmented tumors of the face, facilitating accurate diagnosis and differentiation. The distinctive features identified in this study underscore the importance of UVFD in enhancing the diagnostic accuracy of skin lesions.



dermatoscopic findings of cutaneous chordomas mimicking cutaneous metastasis of melanoma

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Introduction & Objectives:

Chordoma is a low-grade, slow-growing, but locally invasive and aggressive tumor.

Diagnosis of chordoma cutis may be challenging because of the clinical similarities with other conditions.

Results:

An 88-year-old woman with a history of chordoma treated by wide local surgery and radiotherapy in 2014 presented to our department with painless nodules growing on her leg of 2 months duration. Physical examination showed 2 dome-shaped, firm, and bluish nodules located on her right leg. No lymph nodes were palpable.

Dermatoscopic examination revealed arborizing vessels and blue-gray structures.

The nodules were excised. Histologic examination revealed lobular proliferation of atypical cells with hyperchromatic cytoplasm and hypertrophic nuclei and the presence of physaliphorous cells in a myxoid stroma. Immunohistochemistry of tumor cells showed positivity for both S-100 protein and pancytokeratin.

The medical history, clinical presentation, histopathologic findings, and immunohistochemical profile were consistent with cutaneous metastasis from sacral chordoma.

Computed tomography of the whole body and brain was normal. The patient had no clinical or radiologic evidence of relapse or progression 3 months after resection.

Conclusion:

In our case, the presence of blue-gray structures observed on dermatoscopy were worrisome for melanoma. Histopathology demonstrating physaliphorous cells with vacuolated cytoplasm, however, confirmed the diagnosis of metastatic chordoma.

Despite its rarity, metastases should be considered in the differential diagnosis when a new cutaneous lesion appears in a patient with chordoma. Dermatoscopy can be a tool in the diagnosis.

Automated Detection of Morphological Changes in Skin Lesions for Longitudinal Monitoring

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Title: Automated Detection of Morphological Changes in Skin Lesions for Longitudinal Monitoring

Introduction & Objectives:

Early detection of malignant transformation in skin lesions is a cornerstone of dermatological oncology. This work is part of the iToBoS project and aims to support clinicians in tracking lesion evolution over time. The objective is to determine whether significant morphological changes—specifically in size, shape, or orientation—have occurred between two dermoscopic images of the same mole acquired at different time points. This assists in identifying lesions that may require closer monitoring or intervention.

Materials & Methods:

The proposed method automates the comparison of two dermoscopic images of the same mole taken at different time points to detect morphological changes. This helps improve visual interpretation and highlights clinically relevant variations. The system first detects any measurement ruler in the image. If present, it estimates lesion size using physical scale; otherwise, it relies on bounding boxes from segmentation masks. Images are rescaled beforehand to ensure consistent spatial representation.

To analyze shape, spatial alignment corrects for differences in lesion position and orientation using centroid alignment and principal axis normalization. Alignment quality is measured by Intersection over Union (IoU), which also guides optimization. Finally, color changes are assessed by calculating the percentage difference in each color channel of normalized images, minimizing the impact of lighting variations.

Results:

Lesion pairs were analyzed, four melanomas (MEL) and four nevi (NV) are shown in Table 1. Shape change, measured by IoU, was more pronounced in MEL cases, with a mean IoU of 0.71 (SD = 0.12) compared to 0.90 (SD = 0.04) for NV indicating greater stable morphology. Color variation was higher in MEL lesions. Dark brown intensity changed by an average of +27.9% and light brown by -28.1%, with one case exceeding 60% variation in both directions. In contrast, NV cases showed minimal changes: -2.1% in dark brown and +0.6% in light brown. Other color channels, such as red and white, showed only minor fluctuations in both groups. Symmetry remained stable in all NV lesions, while several MEL cases showed asymmetry at one or both time points.

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Туре	Symmetry (t1 / t2)	IoU (Shape)	Color Change Summary
MEL	No / No	0.57	Black +4.9%, Dark brown +0.8%, Light brown -5.1%, Red +0.5%
MEL	Yes / Yes	0.85	Dark brown +14.2%, Light brown -15.6%
MEL	Yes / No	0.79	Dark brown +31.1%, Light brown -33.1%
MEL	No / No	0.63	Dark brown +61.5%, Light brown -60.8%, Red +0.2%, White +0.6%
NV	Yes / Yes	0.90	Dark brown -0.2%, Light brown +0.2%
NV	Yes / Yes	0.94	Dark brown -1.1%, Light brown +0.0%, Red +1.0%
NV	Yes / Yes	0.93	Dark brown -4.1%, Light brown +1.0%, Red - 0.7%
NV	Yes / Yes	0.84	Dark brown -3.2%, Light brown +2.2%, White +0.8%

Table 1: Summary of morphological and chromatic changes between time points.

Conclusion:

This method provides a practical and efficient framework for automated visual comparison of skin lesions over time. Such tools can support dermatologists in follow-up protocols, especially in high-risk patients, by identifying evolving lesions that merit further investigation. Future work will aim to integrate network analysis, providing a more holistic view of lesion evolution.

Impact of YouDermoscopy and Certified Dermoscopy Course on Performance Scores

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Introduction & Objectives:

Dermoscopy is a widely used tool for skin tumor assessment, but its effectiveness varies based on experience and training. This study aims to compare the performance scores between individuals who have used YouDermoscopy and those who have not. Additionally, it compares participants who have completed the Certified Dermoscopy Course with those who have not, to evaluate the impact of these factors on diagnostic performance.

Materials & Methods:

A comparative cross-sectional study involving four groups was conducted using 130 dermoscopic images categorized as melanoma, seborrheic keratosis, or melanocytic nevi. The groups included YouDermoscopy users, non-users, and participants who completed the Certified Dermoscopy Course, as well as those who did not attend the course. Each participant was asked to evaluate these images and was given a score at the end. The Mann-Whitney U test was used to compare performance scores between the groups, focusing on score differences and statistical significance.

Results:

A total of 23 participants completed the questionnaire, with 7 participants in the YouDermoscopy group, 11 in the non-user group, and 5 in the Certified Dermoscopy Course group.

The YouDermoscopy users showed higher performance scores compared to non-users, but this difference was not statistically significant (p = 0.389).

In contrast, participants who completed the Certified Dermoscopy Course demonstrated significantly higher performance scores compared to those who did not, with a statistically significant difference (p = 0.012).

Conclusion:

The results of this study highlight the potential benefits of formal dermoscopy training, as evidenced by the significantly higher performance scores of participants who completed the Certified Dermoscopy Course compared to non-users.

However, the lack of statistical significance between YouDermoscopy users and non-users suggests that simply using the tool does not necessarily lead to improved diagnostic accuracy, possibly due to differences in experience or engagement.

While YouDermoscopy may offer a practical advantage, formal training through a Certified Dermoscopy Course seems to have a more substantial impact on performance. These findings underscore the importance of structured education in enhancing dermoscopic skills, especially in clinical settings where accurate skin tumor diagnosis is crucial. Future studies could explore the long-term benefits of YouDermoscopy usage and its combination with formal training.

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Utility of Onychoscopy in Revealing Subclinical Nail Changes in Diabetes Mellitus: A Prospective Study

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Introduction & Objectives:

Diabetes mellitus (DM) is a chronic metabolic disorder associated with a wide range of systemic complications, including microvascular, macrovascular and neuropathic changes. While much attention has been given to well-known diabetic complications such as retinopathy, nephropathy, and peripheral neuropathy, nail abnormalities are often overlooked despite their potential diagnostic and prognostic significance.

The aim of our study is to assess the prevalence of subclinical nail damage associated with diabetes mellitus, and to investigate correlations between nail damage and gender, HbA1c levels, type and duration of DM and DM's complications.

Materials & Methods:

This prospective descriptive and analytical study was conducted at the Endocrinology and Diabetology Department of the University Hospital Center in Marrakech over an 8-month period (September 2024 to April 2025), including diabetic patients while excluding children, gestational diabetes cases, patients with dermatological conditions, hypertension, or cardiac diseases .With mycological examinations performed for patients showing onychomycosis nail abnormalities to rule out fungal etiology . The onychoscopy examination was based on Dermlite 4 dermoscope .Interpretations were made by two different operators.

Results:

This study of 80 diabetic patients (mean age 47 ± 15 years, 65% female) showed type 2 diabetes prevalence of 70% versus 30% type 1. Glycemic control distribution revealed: 20 patients (25%) with HbA1c <8% (good control), 36 (45%) between 8-10%, and 24 (30%) >10% (poor control). Subclinical nail abnormalities were highly prevalent (68 patients, 85%), with the most frequent being splinter hemorrhages (36 patients, 45%), subungual hyperkeratosis (28 patients, 35%), trachyonychia (20 patients, 25%), and onychomycosis (16 patients, 20%). Statistical analysis demonstrated significant correlations between nail abnormalities and: female sex (p=0.03, OR=1.8), HbA1c >10% (p=0.008, OR=2.3), diabetes duration >10 years (p=0.01, OR=2.1), microangiopathy (retinopathy/neuropathy present in 70% of patients with nail changes vs 30% without, p=0.002), and macroangiopathy (present in 45% with nail changes vs 15% without, p=0.02). Type 2 diabetics showed higher rates of trachyonychia (35% vs 15% in type 1, p=0.04) and hyperkeratosis (40% vs 20%, p=0.03), while type 1 patients had more frequent splinter hemorrhages (55% vs 40%, p=0.04).

Conclusion:

Diabetic nail disorders are not merely cosmetic. This study highlights the significant prevalence of subclinical nail abnormalities in diabetic patients, particularly those with poorly controlled glycemic levels (HbA1c >10%) and long-standing disease. The most frequent findings "splinter hemorrhages, subungual hyperkeratosis, and trachyonychia" appear to correlate with both microvascular and macrovascular complications. These results suggest that nail examination could serve as a simple, non-invasive tool for early detection of diabetic

complications.

innovate Triple Co-Localization Using Super-Magnified Dermoscopy, LC-OCT and Dermoscopy

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Introduction & Objectives:

Super-magnified dermoscopy represents a promising advancement capable of significantly broadening dermoscopy's diagnostic potential by making in vivo microscopic imaging more widely accessible. Currently available technologies are constrained by the absence of precise spatial localization at microscopic scales. Here, we present a pioneering application integrating standard dermoscopy, super-magnified dermoscopy, and Linefield Confocal Optical Coherence Tomography (LC-OCT), aiming to enhance diagnostic accuracy through triple co-localization.

Materials & Methods:

We employed a novel imaging approach achieving triple co-localization for the first time, merging three imaging modalities. This innovative method precisely aligns a 3D confocal image from LC-OCT within the microscopic field observed through super-magnified x400 dermoscopy, contextualized by conventional x20 dermoscopy.

Results:

We evaluated eight skin lesions: two junctional nevi, one balloon cell nevus, one dermal nevus, two pigmented basal cell carcinomas (BCCs), one pigmented actinic keratosis (AK), and one seborrheic keratosis (SK). Precise alignment was consistently achieved with LC-OCT images across all cases. Melanocytes were identified in the epidermis, specifically above lobules in BCCs. At the dermo-epidermal junction, junctional nevi displayed a characteristic "ring pattern," whereas SK exhibited a "cobblestone pattern." Dendritic cells within the AK lesion were identifiable across all three imaging modalities. Dermal analysis revealed plump melanophages in BCC, SK, and balloon cell nevus, pigmented melanocytes in dermal nevus clusters, distinct palisading, and maple-leaf-like structures in BCC, balloon cells in the balloon cell nevus, and horizontalized vessels overlaying dermal tumor aggregates in BCC. This triple co-localization approach highlights super-magnified dermoscopy's capability to identify key microscopic imaging signs, thereby reinforcing their clinical significance (Figure 1).

Conclusion:

The innovative technique of triple co-localization represents a transformative development in dermoscopy, facilitating enhanced interpretation across standard dermoscopy, high-magnification colored reflectance dermoscopy, and 3D LC-OCT imaging. This advancement holds potential to fortify dermatological expertise, particularly as dermoscopy usage expands across other medical specialties.

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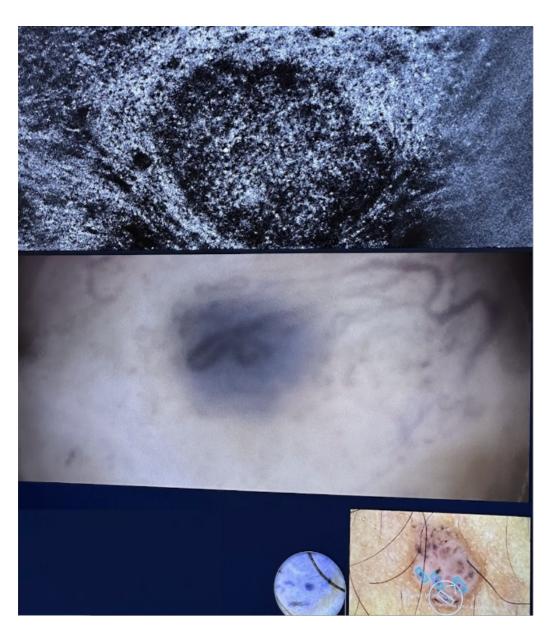


Figure 1; Triple co-localization imaging combining standard dermoscopy (bottom right), super-magnified dermoscopy x400 (center), and LC-OCT (top) demonstrating precise spatial alignment.

Dermoscopy of Annular Atrophic Lichen Planus in Fitzpatrick Skin Types II and V

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Introduction & Objectives:

Lichen planus is a chronic immune mediated disorder which affects the skin and mucus membranes. Annular Atrophic Lichen Planus (AALP) is a rare variant of lichen planus which has both features of annular and atrophic lichen planus. It is distinct clinical entity and histopathological examination shows a characteristic reduction of elastin fibres in the superficial dermis. AALP has a chronic course and is difficult to both diagnose, and to treat. Dermoscopy can be a useful tool in making this challenging diagnosis. However, identification of the common dermoscopic features of these lesions, in a range of different skin types, is required in order to support its diagnostic utility. Our objective was to define the key dermoscopic features seen in AALP lesions, in two patients with different skin types (Fitzpatrick II and V).

Materials & Methods:

Polarised light dermoscopy was used to image lesions in two patients with AALP. We imaged lesions in one patient with Fitzpatrick V skin and another with Fitzpatrick II skin. We analysed the images and broadly categorised dermoscopic features into morphology of the Wickham striae, pigmentation patterns, and vascular appearances.

Results:

All lesions studied showed white-grey annular Wickham striae. We also described a number of different pigmentation patterns. These looked different depending on skin type and were more prominent in darker skin types. In the patient with Fitzpatrick type V skin, we identified areas of fine peppering arranged in clusters and lines and diffuse areas of peppering towards the periphery of lesions. Another feature seen in several lesions in type V skin was a reticular pattern of pigmentation, as a result of perifollicular pigmentation, seen at both the centre and periphery of lesions. This was absent in type II skin. In Fitzpatrick II skin, very subtle areas of peppering were seen but were much less numerous. In both patients, a peripheral homogeneous vascular pattern was seen.

Conclusion:

Dermoscopy is a simple, non-invasive tool which can aid in differentiating AALP from other skin conditions. Increasing characterisation of the dermoscopic appearance of AALP may help avoid the need for invasive techniques like skin biopsy in order to clinch the diagnosis. Our two cases highlight key dermoscopic features of AALP in patients with different skin types. Dermoscopic features common to lesions in both patients were peppering, peripheral homogeneous vascular patterns, and white-grey annular Wickham striae. Additionally, in type V skin, perifollicular pigmentation was seen and prominent peppering was seen in clusters and lines. To our knowledge, our dermoscopic images are the first in the literature to demonstrate the organisation of peppering into distinct lines and clusters within AALP lesions.

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Dermoscopic Features of Basal Cell Carcinomas in Africans with Oculocutaneous Albinism Resemble Those in Caucasians and Exhibit Minimal Pigment Features

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Introduction & Objectives:

Basal cell carcinoma (BCC) is the most prevalent skin cancer globally, yet its dermoscopic presentation oculocutaneous albinism (OCA), a demographic with high prevalence of BCCs among African populations—remains underexplored. OCA is an inherited disorder of pigmentation characterized by reduced or absent melanin synthesis, with resultant photosensitive skin and significantly increased susceptibility to ultraviolet (UV)-induced skin malignancies. Unlike pigmented individuals of African descent in whom classic pigmented BCC dermoscopic features like blue-gray ovoid nests, spoke wheel like structures or leaf-like structures are frequent, the hypopigmented phenotype in OCA renders such features rare, complicating clinical diagnosis.

In darker-skinned populations, BCCs typically display more pigmentation, which aids diagnosis. However, in OCA individuals, the absence of melanin makes the presence of pigment related dermoscopic findings unlikely to be present while vascular structures, ulceration, and shiny white lines may dominate, all of which are easily misinterpreted. Furthermore, the frequent occurrence of SCCs in this group adds another layer of diagnostic complexity.

This study seeks to characterize the dermoscopic features of BCCs in Africans with OCA and distinguish them from those of SCCs, aiming to improve diagnostic precision and inform targeted intervention strategies.

Materials & Methods:

A retrospective analysis (Dermoscopy and histopathology) of 176 suspicious cutaneous lesions from OCA patients in Nigeria. A significant proportion of these (166) were malignant, comprising 117 (70.5%) BCCs, 40 (24.1%) SCCs, and 9 (5.4%) basosquamous carcinomas (BSCs). Dermoscopic images were independently reviewed by two experienced dermoscopists. Features assessed included pigmentation (brown, blue-gray, black structures), vascular patterns (arborizing, dotted/glomerular, hairpin vessels), ulceration, keratin presence, and shiny white structures. The dermoscopic differences between lesion types (malignant vs non-malignant; BCC vs SCC) were analyzed using Chi-square and Fisher's exact tests with statistical significance set at p < 0.05.

Results:

Basal cell carcinomas exhibited significantly diminished pigment-related features. In contrast to typical BCC patterns observed in pigmented skin, brown structures (leaf-like, concentric, structureless areas) were absent in 95.7% and blue structures (dot/globules, ovoid nests, structureless areas) in 94.9% of BCC cases. Arborizing vessels were the most common vascular pattern, observed in 34.2% of BCCs. Dotted/glomerular and hairpin vessels were less frequent, seen in 12.8% and 6.0% of cases, respectively. Diffuse vascular distribution

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predominated (47%). Ulceration was a notable feature, present in 77.8% of BCCs. Keratin was absent in 81.2%, and when seen, had a central or diffuse distribution. Shiny white structures—possibly correlating with stromal fibrosis—were observed in 40.7%.

Comparative analysis with SCCs showed that BCCs had significantly less keratin (p < 0.01), fewer hairpin vessels (p = 0.03), and lower presence of perivascular halo (p = 0.03).

BCCs in Africans with OCA show absence of pigment-related features, minimal keratinization, and a predominance of vascular structures, particularly arborizing vessels, and ulceration. Heightened awareness and modified dermoscopic algorithms are essential for improving skin cancer diagnosis and outcomes in this vulnerable group.

Paralell atypical network a sign of lentigo maligna

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Introduction & Objectives: Lentigo maligna (LM) is a slowly progressing form of melanoma in situ, commonly seen in elderly individuals with chronic sun exposure. LM often mimics benign pigmented lesions leading to significant diagnostic delays that can span years. Extrafacial LM have described a stepwise dermoscopic evolution: early lesions show focal reticular network disruption and subtle "erased" zones. Radial perifollicular lines and focal erased zones areearly indicators of extrafacial LM.

Materials & Methods: Here, we present a series of biopsy-confirmed cases of LM, in which early dermoscopic findings included distortion of the reticular network—specifically in the form of a **parallel atypical network**. This feature appeared either in isolation or alongside other dermoscopic criteria of LM.

Results & Conclusion: The parallel atypical network represents a valuable diagnostic clue for early-stage LM, especially in extrafacial sites. It commonly coexists with erased areas, marking an early stage in the proposed LM progression model. Reflectance confocal microscopy (RCM) of these regions reveals a strong correlation with parallel-oriented junctional thickening and "mitochondria-like" structures. In more advanced lesions, these features may persist, particularly in the peripheral zones, where they are often accompanied by hallmark findings of late-stage LM, such as follicular obliteration and neovascularization. In these instances, the parallel atypical network may aid in the recognition of a melanocytic origin

Honeycomb Pigment Pattern in Trichoscopy Is Not Universal Among Individuals of African Descent and Does Not Correlate with Fitzpatrick Skin Phototype

Nkechi Enechukwu*^{1, 2}, ijeoma agbara³, echezona malachy¹, maimuna jahateh², yahiniya istifanus²

Introduction & Objectives: Trichoscopy, the dermoscopic examination of hair and scalp, is increasingly employed as a non-invasive diagnostic tool in dermatology. The honeycomb pigment pattern (HPP)—characterized by a reticulated network of brownish pigmentation—is frequently cited as a normal finding, particularly in individuals with darker skin tones. However, the assumption that this pattern universally appears in individuals of African descent, irrespective of clinical or phenotypic variation, has not been systematically validated. Additionally, the extent to which Fitzpatrick skin phototype and other variables like hair length and use of head coverings predicts the presence of HPP remains poorly understood. We therefore set out to investigate the prevalence of the honeycomb pigment pattern in individuals of African descent and assess its correlation with Fitzpatrick skin phototype, in order to evaluate the reliability of HPP as a baseline trichoscopic finding in this population.

Materials & Methods: A cross-sectional study involving 150 individuals of African descent, mostly medical students and others (aged 18–40), across three dermatology centers in Sub-Saharan Africa (Nnewi, Nigeria; Abakaliki, Nigeria; Banjul, The Gambia). Standardized dermoscopic images of the frontal and vertex scalp were obtained using polarized light dermoscopy (×10 magnification) with Dermlite DL4 and DL5. Images were independently reviewed by two expert dermoscopists blinded to patient characteristics. Fitzpatrick skin types were assessed clinically. The presence or absence of the HPP was documented, and statistical analysis was conducted to explore associations between HPP visibility and Fitzpatrick skin type, age, sex, and degree of scalp exposure to sun.

Results: Preliminary assessment of 80 participants showed that the HPP was not universally observed. In the frontal scalp, HPP was absent in 25%, present but faint in 35%, and distinct in 33.8% of participants. At the vertex, 15% had no HPP, 45% showed faint patterns, and 30% had distinct HPP. A combined assessment of both sites indicated that 25% of participants lacked any HPP. Statistical analysis revealed no significant association between HPP visibility and Fitzpatrick skin phototype (p = 0.92 frontal; p = 0.63 vertex). Notably, 46.2% of those with type V and 38.9% with type VI lacked HPP at the frontal scalp. Similarly, age, ethnicity, and hairstyle did not significantly affect HPP distribution. However, females had significantly higher prevalence in frontal regions (p=0.005), and persons that never wear hijab showed higher prevalence in the vertex (p=0.03). The higher prevalence with reported sun exposure (no hijab) and apositive trend toward higher prevalence in older individuals (r=0.20, p=0.08) suggested a possible role of cumulative sun exposure.

Conclusion: Our findings challenge the prevailing assumption that HPP is a universal or expected trichoscopic feature in individuals of African descent. The absence of a consistent relationship with Fitzpatrick skin type indicates that the pattern may depend more on extrinsic factors such as sun exposure and aging rather than intrinsic pigmentation. Clinicians should therefore exercise caution in interpreting the presence or absence of HPP as a normative reference during scalp evaluations. Further studies are needed to clarify the biological and environmental determinants of this dermoscopic finding.

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Comparing Dermoscopic Images of Facial Lentigo Maligna (LM)/Lentigo maligna melanoma (LMM) and Solar Lentigo (SL) Using an Eye Tracker Device

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Introduction & Objectives:

Detecting areas of interest (AOIs) involves visually assessing an image to identify relevant structures that inform the decision-making process. Eye tracking technology can help identify AOIs by quantifying the visual gaze patterns of the viewer.

Diagnosing facial lentigo maligna (LM)/lentigo maligna melanoma (LMM) can be dermoscopically challenging due to features overlapping with benign lesions, such as solar lentigo (SL). We compared the AOIs between dermoscopic images of facial LM/LMM and SL. We also explored differences in AOIs between correctly versus incorrectly diagnosed lesions.

Materials & Methods:

A single expert dermoscopist evaluated pathology-proven, dermoscopic images of facial LM/LMM and SL using an eye-tracking device (iMotions 120HZ). The lesion border and AOIs boundaries generated from the heat maps were manually annotated. The dermoscopic structures within the AOIs were also annotated manually. We compared eye tracking metrics between SL and LM/LMM, as well as between correct and incorrect diagnoses. Regression models used eye tracking metrics as the outcome and lesion diagnosis as the primary explanatory variable.

Results:

Forty lesions, 20 LM/LMM and 20 SL, were reviewed. Saccade duration and peak saccade velocity were significantly higher for SL compared to LM/LMM (p-values 0.005 and 0.028, respectively). The average proportion of the lesion surface area covered by AOIs was higher for SL compared to LM/LMM (0.43 versus 0.18, respectively, p<0.001). The saccade count, fixation count, fixation dwell time and dwell time within AOIs were significantly higher for incorrectly diagnosed SL lesions compared to correctly diagnosed SL (p < 0.001). The most common dermoscopic structures within the AOIs were hyperpigmented follicular openings (HFO) for LM/LMM and pseudonetwork for SL, with 35.5% of all lesion AOIs identified as the darkest areas.

Conclusion:

The higher saccade metrics in SL vs LM/LMM suggest more extensive visual search to insure the absence of malignant dermoscopic features. (Figure 1). The increased metrics in incorrectly diagnosed SL may reflect uncertainty in diagnosis or diagnostic difficulty.

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1c 1d

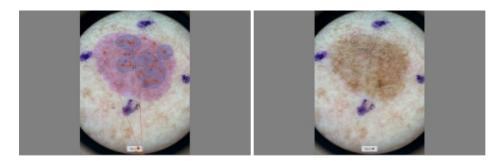


Figure 1. Examples of correctly diagnosed LM (1a-b) and SL (1c-d) lesions with differing gaze paths, showing a higher proportion of lesion surface area covered by AOIs in the SL case. Figures 1a and 1c show the expert's gaze path; Figures 1b and 1d display the corresponding dermoscopic image with the AOIs.

a. In LM, the expert's gaze path covers a smaller proportion of the lesion surface area, with fixation on the HFO.(c) In SL, the expert's gaze path spans a larger proportion of the lesion surface area, with higher saccade metrics, reflecting a more extensive visual search pattern.

Dermoscopy of Subungual Osteochondroma: Broadening the Diagnostic Spectrum

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Introduction & Objectives:

Subungual osteochondroma is a rare benign osteocartilaginous tumour, typically arising from the phalanges of the digits, with a predilection for the distal phalanx of the hallux. Clinically, it appears as an asymptomatic or painful nodule that lifts the nail plate, causing nail dystrophy and onycholysis. If left untreated, it can lead to pain, nail plate distortion, and functional impairment. To our knowledge, there are only a few articles describing dermoscopic features of subungual exostosis, which is by some authors considered a variant of subungual osteochondroma. The dermoscopic features of subungual exostosis include vascular ectasia, hyperkeratosis, onycholysis, and ulceration. This case aims to highlight the clinical and surgical approach to subungual osteochondroma and to contribute to the limited published data on its dermoscopic features, which remain poorly described in the current literature.

Materials & Methods:

A 35-year-old female presented to our dermatology clinic with a five-month history of a painful, progressively enlarging nodule located beneath the nail plate of the left hallux. She reported frequent hiking and running, with the possibility of repeated minor trauma to her toes. On clinical examination, a subungual, skin-coloured lesion was observed, with no overt signs of infection or ulceration (Figure 1). Dermoscopic examination of the subungual mass revealed tortuous looped blood vessels, a solitary bluish globule (blood spot), and yellow keratin deposits at the distal end (Figure 2). The radiographic imaging of her left foot was unremarkable. The patient underwent surgical excision of the lesion under digital block anaesthesia. The lateral portion of the nail bed was carefully elevated, and the lesion was excised and submitted for histopathological analysis.

Results:

Intraoperative dermoscopic examination revealed an erythematous tumour with whitish areas intermingled with multiple irregular looped blood vessels (Figure 3). Histology confirmed the diagnosis of subungual osteochondroma. During the one-year postsurgical follow-up, our patient showed no signs of recurrence.

Conclusion:

This case highlights the diagnostic value of dermoscopy in evaluating subungual lesions, including rare entities such as osteochondroma. Although clinical evaluation serves as the first step in assessment, dermoscopic features —such as looped blood vessels, yellow keratin deposits and occasionally blood spots (bluish globules)— may provide supplementary diagnostic insights in relation to this rare tumour type. By documenting these dermoscopic features, we contribute to the limited existing data and propose dermoscopy as a useful, non-invasive adjunct in the early recognition of subungual osteochondroma. Surgical excision remains essential for definitive diagnosis and symptom resolution, but preoperative dermoscopic assessment may improve clinical suspicion and decision-making.

When Dermatoscopy and Clinical Findings Overlap: A Case of Melanoma Mimicking Pigmented Basal Cell Carcinoma

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Introduction & Objectives:

Dermatoscopy has become an indispensable tool in modern dermatology for the early detection and diagnosis of skin malignancies. It allows a non-invasive evaluation of skin lesions, providing valuable insights into their structure and vascular patterns. Early and accurate recognition of suspicious lesions can significantly improve patient outcomes, particularly in melanoma, which is known for its aggressive behavior. The aim of this case presentation is to underline the importance of dermatoscopic examination in distinguishing between different skin conditions and to emphasize the need for prompt intervention when melanoma is suspected.

Materials & Methods:

An 84-year-old female patient presented to our clinic with a lesion on her left upper arm, which she had noticed approximately one year prior. On clinical examination, the lesion was characterized by a sharply demarcated, round, pinkish area with hemorrhagic crusts. Dermatoscopic examination revealed a bluish homogeneous area with brown pigmentation along the edges. The central part of the lesion appeared homogeneous and pink, with a white veil and polymorphous blood vessels.

Results:

Although the dermatoscopic and clinical features initially raised suspicion of a pigmented basal cell carcinoma, melanoma was our primary concern, and we therefore recommended urgent excision. The lesion was excised, and histopathological analysis confirmed the diagnosis of melanoma, pT3b, Clark IV, with a Breslow thickness of 2.1 mm. The lesion showed ulceration, with up to 5 mitoses per mm², but there was no lymphovascular invasion, microsatellite spread, or regression. The patient subsequently underwent wide local excision and sentinel lymph node biopsy (SLNB), with both procedures revealing no evidence of residual disease or metastasis.

Conclusion:

This case highlights the critical importance of dermatoscopy in the evaluation of pigmented skin lesions, as melanoma can sometimes present with dermatoscopic features that closely resemble those of a pigmented basal cell carcinoma. Therefore, it is essential for clinicians to be vigilant and consider a differential diagnosis when assessing suspicious lesions. Given the potential overlap in appearances, it is crucial to perform thorough clinical and dermatoscopic assessments and to act promptly when suspicious lesions are identified. Early detection and timely surgical intervention remain crucial in achieving favorable outcomes in melanoma patients.

Dermoscopic signatures of comedonic lupus in dark phototypes

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Introduction & Objectives:

Comedonic lupus is a rare form of chronic lupus erythematosus often confused with other dermatological conditions, particulary acne vulgaris.

Dermoscopic analysis is the simplest approach to differentiating comedonic lupus from other conditions by revealing certain characteristic signs.

We report a serie of 9 cases of comednal lupus in order to** compare the clinical and dermoscopic signs found in 9 patients with comedonic lupus according to their phototype and lesion location.

Materials & Methods:

This is a retrospective study conducted between 2017 and 2025 in patients with comedonic lupus.

Results:

9 patients (5 women and 4 men) were diagnosed with comedonic lupus during the period described, with a mean age of 51 years. Smoking and pruritus were observed in 5 cases. The most affected area was the face, followed by the scalp in 2 cases. Dermoscopic signs observed in the facial lesions of dark phototype patients were horny plugs, whitish scales, perifollicular hyperpigmentation, peppering, rosettes and chrysalis on an erythematous background. Light phototype patients showed horny plugs, whitish scales, hyperpigmentation with peppering and telangiectasias. And for patients with scalp involvement, dermoscopic examination revealed scarred areas with absent follicular openings, large yellow dots, comedones, erythema, whitish scales and hyperpigmentation.

The first-line treatment was hydroxychloroquine, however, other drugs were used, such as oral corticosteroid therapy, topical tacrolimus and dermocorticoids with partial improvement of the lesions.

Discussion:

Less than 30 cases of comedonal lupus have been reported in the literature, with a female predominance, average age between 30 and 40, smoking as a frequent risk factor and pruritus as an important functional sign. Dermoscopically, the most common signs reported in the literature are comedones, telangiectasias, rosettes, whitish scales and erythema. On the scalp, according to the literature, we note the presence of scarred areas, mega yellow dots, white areas without structure, brownish pigmentation, horny plugs, rosettes and erythema, signs which we found in our 2 patients with scalp involvement.

Treatment of this form of lupus can be difficult, and photoprotection is essential. Local treatment with retinoids, topical and/or intralesional corticosteroids may bring improvement. However, the majority of cases require systemic management. Hydroxychloroquine is the first-line therapy, however, other treatment options have been suggested, such as methotrexate in combination with hydroxychloroquine or dapsone.

Conclusion:

Knowledge of the clinical and dermoscopic aspects of this dermatosis and early management could reduce morbidity and minimize scar risk.

Dermoscopy of targetoid lesions - a report of three cases

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Introduction & Objectives:

A target lesion is a round skin lesion comprised of minimum two distinctive components: a central, mostly melanocytic component and a peripheral, mostly hemorrhagic component. 'Targetoid' nevi (i.e. halo, cockade nevus, Meyerson nevus and irritated targetoid haemosiderotic) fall into the group of nevi with special features. Targetoid lesions are rare and may onset at any age.

Benign targetoid lesions may mimic other skin tumors including melanoma, blue nevi, atypical dermal nevus, Kaposi sarcoma and angiosarcoma. The precise definition of the dermoscopic findings and patterns for this lesion is of major interest.

Materials & Methods:

We describe 3 cases of a targetoid lesions.

Results:

A 55-year-old woman presented with a button-like nodule on her left lateral thigh. The lesion had three sharply demarcated circular zones resembling a cockade: a central hyperpigmented plaque, an elevated scaly erythematous ring. Dermoscopically the central area was composed of blue-whitish structures and hyperpigmentation surrounded by a wide, erythematous and scaly rim with several dotted vessels at the edge. Histopathological examination evealed a compound naevus.

The lesions presented in the second case is from the lower abdomen of a 43-year-old woman. It is a round shaped nevi of brown colour, surrounded by a purple halo. Dermoscopically, we can see a mixed pattern lesion with scale, with light and dark brown colour surrounded by an inner depigmented and scaly rim. Histopathological examination showed Mayerson nevus.

In our third case, a 44-year-old male patient is presented with a targetoid lesion located on the abdomen, consisting of a papular center surrounded by a paler, intermediate area, and a purple ring. Dermoscopically, we observed central dark lacunae with white structures, an intermediate yellowish circular homogeneous area, and a peripheral reddish-violaceous homogeneous area. Histopathologic analysis showed: lymphangioma cavernosum.

Conclusion:

Targetoid hemosiderotic nevus, also known as traumatized nevus shows the typical pattern of a melanocytic nevus, (usually globular or structureless brown pattern) which is intermingled with purple and black structureless areas (jet-black areas) and a reddish to purple targetoid halo. Because of this morphology compound melanocytic naevus, is known as naevus en cocarde or hoop-loop naevus.

The clinical aspects of the Meyerson nevus are of a pruriginous, symmetric and eczematous halo that appears around a pigmented lesion. The present report suggests that the phenomenon of Meyerson does not modify the

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dermatoscopic characteristics of the nevi.

The aim of this report is to demonstrate the importance of dermoscopy in targetoid skin lesions within the spectrum of benign and malignant lesions. What makes this report unique is that by reading the available literature, a descripion of a tartetoidnog limphangioma cavernosum has not been found.



A Case of Widespread Cutaneous Metastasis of Prostate Cancer with Dermoscopic Features

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Introduction & Objectives:Prostate cancer represents the second most common cancer in males. When metastasis occurs, the most common sites involved are regional lymph nodes and bones. Cutaneous metastasis of prostate adenocarcinoma presents with a relatively low incidence, occurring in only 0.09% of cases. In conjunction with the patient's medical history and the morphological characteristics of the cutaneous lesions, the dermoscopic features of the lesions may provide additional clues to the preliminary diagnoses. To date, detailed descriptions of the dermoscopic features of prostate cancer skin metastasis are not well established. Herein, the presented patient is one of the rare cases with cutaneous metastasis of prostate adenocarcinoma and its dermoscopic features.

Materials & Methods:A hand-held dermoscopy device was used for the dermoscopic examination. The pictures were taken with a photo-dermoscopy device.

Results:An 83-year-old male patient was referred to the dermatology department regarding multiple cutaneous lesions that had been present for three months. The patient was diagnosed with papillary thyroid carcinoma with supraclavicular lymph node metastasis three years ago. Two years later, he was admitted to the oncology department with bilateral palpable inguinal lymph nodes. The biopsy of an enlarged inguinal lymph node revealed metastatic adenocarcinoma of the prostate. Due to the intolerance of surgery, chemotherapy, and radiotherapy, the patient did not undergo any treatment for prostate and thyroid cancer. The physical examination revealed multiple firm, pink-violaceous nodules on the right groin and pubic area with apparent edema of the right extremity, scrotum, and penis. Two additional cutaneous pink nodules were noted on the forehead. The dermoscopic examination of the nodules showed diffuse reddish-pink homogeneous areas with some white streaks. The serum prostate-specific antigen (PSA) level was 5000 ng/mL.

A 4-mm punch biopsy was obtained from a nodule on the groin. A diagnosis of prostatic adenocarcinoma was made histopathologically. The patient was lost to follow-up.

Conclusion: Although metastatic lesions are usually confined to the pubis, abdomen, and thighs, cutaneous metastasis of prostate cancer may be widespread, as in our case. Metastatic lesions often appear as skin-colored or violaceous nodules in groups or individually distributed. Dermoscopically, the lesions may show white streaks on the orange background, dotted vessels surrounded by a whitish halo (showing coiled or comma-shaped appearance at higher magnification) in the center, and linear curved and branching vessels at the lesion's periphery, as reported by Golinska. Unlike that, the lesions in the current case show diffuse homogenous reddishpink areas without vasculature on dermoscopy. The cutaneous non-pigmented metastasis of the primary tumors from different origins is represented mainly by discrete vessels such as serpentine and arborizing vessels. The discrete vessels cannot be seen in the current case, consistent with two non-pigmented cases (12%) with cutaneous metastasis reported by Chernoff. However, this may be due to the vascular pattern being too small to see on some dermoscopy devices.

To conclude, the dermoscopic features do not seem to be specific to the cutaneous metastasis of prostate adenocarcinoma, but comparative studies, including cutaneous metastasis of the other carcinomas, may help to make a more accurate statement.

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Dermoscopic and Reflectance Confocal Features of Pinkus Fibroepithelioma

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Introduction & Objectives:

Pinkus fibroepithelioma (PFe) is an uncommon variant of basal cell carcinoma (BCC), with distinctive histopathological traits. Clinically, it may resemble benign entities such as intradermal nevi, skin tags, or neurofibromas, which can delay diagnosis. The use of non-invasive diagnostic tools - namely dermoscopy and reflectance confocal microscopy (RCM) - has greatly improved early skin cancer detection. Our objective is to describe the clinical, dermoscopic, RCM, and histological findings in a small series of PFe cases.

Materials & Methods:

We report on four PFe cases: three male and one female patient aged 54, 66, 70, and 80. All lesions presented as pink, sessile papules or plaques located on the trunk (pectoral or lumbar area). Dermoscopic evaluation revealed a polymorphous vascular pattern with focused, fine vessels, white streaks, and brown-gray dots. RCM imaging showed fenestrated architecture: hyperreflective basaloid cords arranged in palisading patterns, surrounding hyporeflective fibrous stromal spaces. Histopathological analysis confirmed the diagnosis, showing lobulated tumors with interconnected strands of basaloid cells embedded in a fibrovacular stroma.

Results:

The clinical presentation in our series aligns with existing literature: middle-aged adults, trunk involvement, and morphologically benign appearance. A consistent dermoscopic feature was the presence of white fibrotic streaks, likely correlating with a dense stromal component. Some lesions also showed intersecting hypopigmented or pink lines forming acute angles, recently described as a possible dermoscopic clue for PFe. Vascular patterns were polymorphic, but typically composed of fine, less-branched focused vessels compared to nodular BCC. RCM proved particularly valuable, displaying a characteristic fenestrated pattern, with excellent correlation to histological architecture.

Conclusion:

PFe may clinically masquerade as benign lesions, reinforcing the need for systematic dermoscopic evaluation of all skin tumors. RCM serves as an important second-level diagnostic tool when dermoscopic findings are ambiguous. Recognition of its specific confocal signature, palisading cords and fibrous stromal clefts, can support early diagnosis and guide appropriate management of this rare BCC subtype.

Diagnostic challenges in case presenting with coexisting symptoms of Darier's disease and Hailey-Hailey disease

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Introduction & Objectives:

Darier-White disease (DD) and Hailey-Hailey disease (HHD) are rare autosomal dominant genodermatoses. These two conditions are often discussed together because of some similarities in their etiopathology. Classic form of DD typically presents with greasy, keratotic papules on seborrheic areas, while HHD manifests as painful erosions in flexures.

Materials & Methods:

We present a case of a 62-year-old woman with 25-year history of skin eruption on the forearms, flexor surfaces, abdomen, and pelvic regions typical to classic DD, which was confirmed by biopsy. Ten years later she developed skin lesions, superficial erosions, and fissures predominantly affecting underbreast and groin area, which were described in provided documentation. Based on a cytological examination revealing acantholytic cells, she was misdiagnosed with pemphigus vulgaris. The patient received intermittent, treatment with oral corticosteroids, methotrexate injections, and various topical steroidal, antibacterial, and antifungal ointments, leading to occasional improvement of inverse manifestation but without complete recovery over 15 years.

She presented during an exacerbation, which she reported typically occurred during the summer months. Physical examination of skin showed hyperkeratotic follicular papules on the forearms, flexor surfaces, abdomen, and pelvic regions, consistent with Darier disease. Additionally, reddish fissures covered with infiltrative conjoined giant plaques under the breasts and in the groin area, along with erythema, scaling, and oozing, were observed features atypical for classic DD but seen in HHD. Fingernails revealed fragility, splitting, thinning of the distal parts, and subungual hyperkeratotic fragments. Upon her presentation to our clinic, we decided to reevaluate the diagnosis of pemphigus vulgaris and initiated laboratory tests and dermoscopic examination. The patient refused a biopsy.

Results:

Laboratory tests for anti-desmoglein 1 and 3 antibodies were negative. Dermoscopy of the breast and groin area revealed signs, such as white clouds isolated by pink furrows, crumbled fabric pattern and white dots surrounded by dotted blood vessels which are characteristic of HHD. Skin manifestation found on the forearms, flexor surfaces, abdomen, and pelvic regions showed star-like or oval-shaped yellow areas enclosed by a whitish halo, pinkish homogeneous structureless background and white dots not surrounded by dotted blood vessels were indicative of DD, as well as Onychoscopy showed white and red longitudinal lines resembling "candy canes" as well as V-shaped nicking of distal, fragile nail edges.

Conclusion:

Based on the patient's history, clinical appearance, age of onset, and dermoscopy findings, this case represents a rare case of coexistence of Hailey-Hailey and Darier disease, not many cases of which are reported in the literature.

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Beyond Black Box AI: Comparing ChatGPT-4's Interpretability and Accuracy with CNN Models in Dermoscopic Diagnosis of Melanocytic Lesions

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Introduction & Objectives: Artificial intelligence (AI) algorithms have shown high accuracy in diagnosing skin cancer from dermoscopic images. This study compared the diagnostic performance of the large language model ChatGPT-4 to specialized convolutional neural network (CNN)-based models in analyzing melanocytic lesions.

Materials & Methods: A cross-sectional comparative study was conducted using 117 dermoscopic images. ChatGPT-4's performance was assessed under two conditions: diagnosing lesions directly without annotations and diagnosing after annotating dermoscopic features. Results were compared with CNN-based models (YPSONO and ResNet) and human expert evaluations. Diagnostic accuracy, sensitivity, specificity, and interobserver agreement (Cohen's Kappa) were calculated.

Results: ChatGPT-4 achieved 92% sensitivity, 89% specificity, and 89.7% overall accuracy when diagnosing directly. When annotations were required, sensitivity and specificity dropped to 68% and 64%, respectively. Agreement with experts on dermoscopic patterns was minimal (Cohen's Kappa = 0.13). ChatGPT-4 outperformed CNN models in direct diagnosis but showed notable limitations in dermoscopic feature description.

Conclusion: ChatGPT-4 demonstrated promising potential for accurate melanoma versus nevus classification without annotations, surpassing CNN-based models. However, its limited ability to describe dermoscopic features accurately highlights the need for further training. Future research using high-quality annotated datasets is essential to improve its clinical, educational, and research applications.

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Linear Basal Cell Carcinoma: Dermoscopic Recognition of a Rare Morphologic Variant

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Introduction & Objectives:

Basal cell carcinoma (BCC) is the most prevalent non-melanocytic skin cancer, with nodular and superficial types being the most commonly reported variants. Among these, linear BCC (LBCC) represents a rare morphologic subtype characterized by a lesion length at least three times its width. Clinically, LBCC can resemble scars, excoriations, or striae, leading to underdiagnosis. Dermoscopy may help distinguish LBCC from such mimickers by revealing specific diagnostic features. Here, we present a rare case of histopathologically confirmed superficial and nodular BCC with a subtle linear morphology and classical dermoscopic features, aiming to highlight the diagnostic value of dermoscopy in recognizing LBCC.

Materials & Methods:

A 78-year-old male underwent a routine full-body skin examination, during which a 3×1 cm erythematous thin plaque with occasional scaling was identified in the right axilla. The lesion's elongated morphology followed a linear axis. Dermoscopic examination revealed hallmark features of basal cell carcinoma, such as arborizing vessels, spoke-wheel areas, leaf-like structures, and blue-gray ovoid nests, notably without any pigment network. The lesion was surgically excised, and histopathology confirmed mixed mixed superficial and nodular BCC.

Results:

This case meets the proposed criteria for LBCC, including a ≥3:1 length-to-width ratio and confirmed BCC histology. Histological subtypes of LBCC most commonly reported in the literature include nodular and superficial variants, consistent with our findings. Dermoscopic evaluation in our case demonstrated multiple BCC-specific structures consistent with previous studies, the most frequent being blue-gray globules and leaf-like areas. The lesion also exhibited arborizing telangiectasias and spoke-wheel areas—both rare but documented features in LBCC. Importantly, over 80% of LBCCs follow skin tension lines, possibly contributing to their linear morphology. Our lesion also aligned with these lines, further supporting this pattern.

Conclusion:

LBCC remains a rare and potentially under-recognized variant of BCC due to its atypical morphology and resemblance to benign linear skin changes. This case reinforces the utility of dermoscopy in the early recognition of LBCC by identifying specific diagnostic patterns, even in subtle presentations. Awareness of LBCC's potential for linear growth, especially along skin tension lines, can prevent misdiagnosis and facilitate timely management.

Dermatoscopic Clues of Breast Angiosarcoma

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Introduction & Objectives: Breast angiosarcoma (AS) is rare, accounting for only 1% of all soft tissue tumors of the breast. It may present as a primary tumor or as a secondary lesion, most commonly associated with prior radiotherapy. The dermoscopic features of angiosarcoma arising in irradiated skin remain under investigation.

Materials & Methods: We present the case of a 68-year-old woman with a history of right breast cancer, previously treated with chemotherapy and radiotherapy five years earlier. The patient developed clearly and poorly demarcated, non-ulcerated, erythematous to dark bluish nodular lesions on the right breast, as well as a pink lesion with eccentric pigmentation on the ipsilateral back.

Results: Diagnosis of angiosarcoma is typically based on a combination of clinical examination, histopathological analysis, and dermoscopy. Dermoscopic evaluation revealed one well-defined and one ill-defined violaceous lesion, both non-ulcerated, with mild peripheral scaling. Using polarized light dermoscopy, a complex pattern emerged, consisting of violaceous and rainbow-colored areas, with dark red, blue, and purple dots and plaques separated by thick, vertical white lines, along with white and yellow circles corresponding to follicular plugs or openings.

Histopathological analysis confirmed angiosarcoma, presenting as a poorly circumscribed, infiltrative vascular tumor occupying the dermis and subcutaneous tissue. In contrast to benign vascular neoplasms, the vascular channels in angiosarcoma tend to expand and dissect through the dermal layers.

Conclusion: In summary, dermoscopy can serve as a valuable tool in evaluating new skin lesions in patients with a history of radiotherapy, aiding in the early detection of malignancies such as breast angiosarcoma and therefore timely management.

Dermoscopic features of Merkel cell carcinoma: a retrospective case series of 20 histologically confirmed cases

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Introduction & Objectives:

Merkel cell carcinoma (MCC) is a rare, aggressive neuroendocrine skin tumour, often presenting as a rapidly growing, asymptomatic nodule. Due to its non-specific clinical appearance, early recognition is challenging. Dermoscopy has emerged as a helpful tool to support clinical suspicion, although evidence remains limited. The aim of this study was to describe the dermoscopic features of histologically confirmed MCC in a retrospective case series.

Materials & Methods:

Dermoscopic images of 20 biopsy-proven MCC lesions were retrospectively selected from the clinical database of a dermatologic oncology unit. Cases were collected between 2018 and 2024. Two independent dermoscopists evaluated the images for the presence and type of vascular structures, background colouration, and other predefined dermoscopic features.

Results:

The most common dermoscopic features observed were polymorphous vascular patterns in 75% of lesions, including linear irregular (50%), glomerular (40%), and dotted vessels (25%). Milky-pink or white structureless areas were seen in 70% of cases. Shiny white structures (lines and areas) were observed in 40%, ulceration in 20%, and a peripheral collarette in 10%. No pigment network, globules or other melanocytic criteria were observed. The absence of pigment combined with non-specific structureless zones and atypical vessels represented a recurring dermoscopic profile.

Conclusion:

MCC presents with characteristic but non-specific dermoscopic features. Polymorphous vascular structures and milky-pink background areas are frequent findings. Although not diagnostic on their own, their presence in a non-pigmented, rapidly growing nodule in elderly or immunocompromised patients should raise suspicion and prompt histopathological confirmation. Dermoscopy may contribute to earlier recognition of MCC, improving patient management.

Basal cell carcinoma after HDR brachytherapy, changes in clinical and dermoscopic patterns in long term observation

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Introduction & Objectives:

Basal cell carcinoma (BCC)** is the most common malignancy among Caucasian population. Patients with high risk lesions of head and neck region disqualified from surgery can be treated with HDR (high dose rate) brachytherapy. Dermoscopy is a widely used diagnostic tool that allows quick and simple verification of skin lesions, before, during and after treatment. For now literature lacks data concerning dermoscopic image of tumor beds years after radical radiotherapy.

Materials & Methods:

Non randomized prospective clinical trial was designed. Twenty eight patients with basal cell carcinoma of head and neck region disqualified from surgery underwent radical HDR brachytherapy between September 2020 and February 2021. Four of the treated patients suffered relapses after previous surgical treatment, 24 had primary lesions. Custom made mold applicators were used to deliver total dose of 45Gy in 9 fractions to the tumor. Every patient was observed clinically and dermoscopically before treatment (t1 – day 1), at the end of treatment (t2 – day 19), six months after treatment (t3), one year after treatment (t4), and two years after brachytherapy (t5). Observations were stored digitally. Every clinical observation was performed in search for presence (1) or absence (0) of 12 clinical features typical for basal cell carcinomas according to Tognetti and Lallas et al. classification (in authors' modification). Each dermoscopic observation was performed in search for presence (1) or absence (0) of 61 dermoscopic features typical for basal cell carcinoma according to the third consensus of the International Dermoscopic Society. Database of 10209 clinical and dermoscopic observations was analyzed.

Results:

No relapses were reported. In two year observation HDR brachytherapy reduces number of most clinical and dermoscopic patterns typical for basal cell carcinoma. Exceptions were: clinically observed telangiectasia and pigmented structures and dermoscopically observed white structureless areas and monomorphous thin linear vessels (Figure 1). Observed image corresponds with typical clinical presentation of late skin radiation toxicity.

Conclusion:

In 24 months observation HDR brachytherapy reduces number of clinical and dermoscopic patterns typical for basal cell carcinoma. Tumor bed after radiation treatment presents as clinically observed depigmented area with pigmented structures and teleangiectasia. Dermoscopically presents as large white structureless area with thin linear, monomorphous vessels.

Midline Neck Mass in a Child: Diagnostic Contribution of Dermoscopy in a Case of Thyroglossal Duct Cyst"

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Introduction & Objectives:

Thyroglossal duct cyst (TGDC) is the most common congenital cervical anomaly in children. It typically presents as a midline neck mass that moves with swallowing and tongue protrusion. However, its clinical presentation may sometimes mimic other benign or vascular lesions.

Materials & Methods:

A 6-year-old girl with no past medical history presented to our dermatology department for evaluation of a slowly growing anterior neck lesion. The nodule had been present for several months, was painless, and had not changed significantly in size or appearance recently.

Clinical examination revealed a midline cervical nodule, firm in consistency, measuring approximately 1.5 cm in diameter, and covered by slightly erythematous skin. The lesion was mobile with swallowing and tongue protrusion, without signs of local inflammation or discharge. There were no cervical lymphadenopathies.

A thyroid ultrasound confirmed the presence of a normal thyroid gland in its usual location, with no ectopic tissue or associated anomalies.

Dermoscopy of the lesion revealed a homogeneous orange background and arborizing telangiectatic vessels, suggesting a cystic or vascular lesion with a benign nature.

Surgical excision of the mass was performed, and histopathological examination confirmed the diagnosis of a thyroglossal duct cyst, lined by pseudostratified columnar epithelium with surrounding fibrous tissue and no signs of malignancy.

The postoperative course was uneventful, with complete healing and no recurrence during follow-up.

Results:

Thyroglossal duct cysts (TGDCs) represent the most common congenital cervical anomalies in children, arising from incomplete involution of the thyroglossal tract during embryogenesis. They are typically located in the midline, most often below the hyoid bone, and present as mobile, painless masses.

In our case, the clinical presentation was slightly misleading due to cutaneous erythema, which could raise suspicion of an infected cyst, vascular lesion, or even a superficial tumor.

The differential diagnosis of midline neck masses in children includes:

- Dermoid or epidermoid cysts
- Lymphangiomas
- Hemangiomas

- Ectopic thyroid tissue
- Granulomatous lesions (e.g., pyogenic granuloma)

Dermoscopy, although not commonly used for cervical masses, provided useful non-invasive information. The orange hue may reflect underlying keratinous or cystic content, while arborizing telangiectasias can be found in various benign lesions. While these findings are not pathognomonic, they helped rule out more aggressive or suspicious vascular lesions.

Conclusion:

This case highlights the potential role of dermoscopy in pediatric dermatology beyond pigmented lesions, especially when assessing nodules with vascular or cystic appearance. Early identification of TGDC is essential, as surgical excision (Sistrunk procedure) remains the treatment of choice to avoid recurrence or infection.

Multiclass Dermoscopic Image Segmentation with Human-in-the-loop Training and Synthetic Lens Data Augmentation

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Introduction & Objectives: Artificial Intelligence (AI) has shown proficiency in dermoscopy in identifying various types of skin lesions. The segmentation process is crucial for classifying skin lesions, as it enables the model to focus on relevant areas of the image. However, due to the time-consuming nature of manual annotation, the lack of labeled data can significantly impact the performance of segmentation models in real-world applications. Additionally, the presence of black-rimmed lenses in real-life dermoscopic images complicates segmentation, as lenses are weakly represented in labeled data and often lead to mis-segmentation in state-of-the-art models.

We propose a segmentation model that employs a human-in-the-loop strategy and synthetic data to quickly segment new images and enhance performance in multiclass segmentation. The new trained model identifies both the lesion and the lens.

Materials & Methods: The datasets used included ISIC, Derm7PT, and PH2, totaling over 100,000 images, with only 2,594 images annotated for lesion segmentation from the ISIC 2018 dataset. We employed a human-in-the-loop strategy to quickly segment new images and enhanced performance in multiclass segmentation. This strategy involved multiple stages, where each stage trained a new model with an expanding dataset.

Initially, the model was trained on the labeled data. The remaining unlabeled data was then segmented using this model. The segmentation results were sorted based on the model's confidence in its predictions. New masks were human-approved and injected into the training set for the next stage. This iterative process continued until all images were segmented.

Inspired by the ABCD rule, the model's confidence was defined by the shape of the segmented lesion, with the expectation that the lesion found in the image was unique. Additionally, the model included synthetic data to identify lenses. These data were generated from manually extracted lenses from various dermoscopic images and synthetic lenses. The synthetic data were randomly augmented with translation, rotation, color jittering, and affine transformations to enhance the model's robustness. These augmentations were then randomly applied to the images.

The segmentation models utilized a U-Net++ architecture with an EfficientNet-B0 backbone and were evaluated based on Recall, Precision, and DICE score.

Results: On lesion detection, the model achieves a DICE score of 95.9%, Recall of 95.9%, and Precision of 95.8% on real images. The model trained on the entire dataset outperforms the model trained solely on public labeled data, which achieved a DICE score of 81.1%. For lens segmentation, the model achieves a DICE score of 99.6%, Recall of 99.2%, and Precision of 99.8% on synthetic images.

Conclusion: The segmentation of dermoscopic images is a critical step in the classification of skin lesions. Our results show significant improvement in segmentation performance with minimal time investment, thanks to AI-guided human-in-the-loop strategies. Additionally, our findings highlight the feasibility of using synthetic data to

develop segmentation models from scratch, offering possibilities for creating effective synthetic datasets to enhance performance of segmentation models for features like hairs without exhaustive labelling. Furthermore, multiclass segmentation models can provide additional valuable information to lesion classification models, such as the type of lens and dermoscop used.

Dermoscopy of Mycosis Fungoides

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Introduction & Objectives:

Primary cutaneous lymphomas (PCLs) are defined by the presence of a malignant proliferation of lymphocytes originating in the skin, without lymph node, bone marrow, or visceral involvement at the time of diagnosis and six months later. They represent, in order of frequency, the second most common site of extranodal lymphomas after gastrointestinal lymphomas. The aim of our study is to describe the various dermoscopic features of Mycosis fungoides (MF)

Materials & Methods:

This is a retrospective, descriptive, monocentric study, conducted at the Dermatology Department over a period of 10 years including all patients hospitalized for the management of histologically confirmed MF

Results:

In our study, we collected 11 cases of mycosis fungoides (MF). Nine patients were in early stages (patch or plaque stage), while two patients were in the tumor stage of MF. The most common vascular pattern observed was short linear vessels, present in 7 cases (63.63%), all of which were early-stage MF. Other vascular patterns included curved linear vessels in 2 patients (18.18%), corresponding to 22.22% of early-stage MF cases. This pattern was absent in tumor-stage patients. Dotted vessels were seen in 4 cases (36.36%), including 2 cases each of early and tumor-stage MF. Spermatozoid-like vessels were observed in 2 cases (18.18%), one in early-stage MF and one in tumor-stage. Purpuric dots were noted in one case of tumor-stage MF, and glomerular vessels were seen in one case of early-stage MF.The vascular distribution was regular in 8 cases (72.72%), irregular in 1 case (9%), and perifollicular in 4 cases (36.36%). The background coloration of the lesions appeared yellow-orange in 5 cases (45.45%) and light red in 6 cases (54.54%). White scaling was observed in 5 cases (45.45%). Polygonal pigmented structures with pigmented dots and septa were found in 7 cases (63.63%)

Conclusion:

The results revealed that fine linear vessels and yellow-orange areas are predominant in the early stages of MF, while spermatozoid-like vessels and white dots appear to be more specific and aid in the differential diagnosis. Dermoscopy proves to be a valuable tool for early diagnosis and for selecting optimal biopsy sites.

Diagnostic accuracy of green fluorescence under UV dermoscopy in pustular psoriasis: A case-control study

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Introduction & Objectives:

Pustular psoriasis (PP) is a rare neutrophilic autoinflammatory dermatosis characterized by sterile pustules, which can be localized or widespread. Its most severe form, generalized pustular psoriasis (GPP), presents a diagnostic challenge due to clinical and histopathologic overlap with other aseptic pustular eruptions, particularly acute generalized exanthematous pustulosis (AGEP). Dermoscopy typically shows milky-white globules and dotted vessels in PP. UV dermoscopy, a recent technique, reveals pink-red fluorescence in plaque psoriasis, but data on pustular variants are scarce. Green fluorescence of pustules under UV light has been reported only once. This study aims to assess the diagnostic value of UV dermoscopy in PP—especially GPP—and its utility in differentiating PP from other pustular dermatoses.

Materials & Methods:

We conducted a prospective, analytical, case-control study involving 30 patients. Group 1 (n=15) included patients with clinically and histologically confirmed PP; Group 2 (n=15) included patients with other confirmed causes of generalized pustulosis (AGEP, DRESS syndrome, Sneddon Wilkinson disease, amicrobial intertriginous pustulosis, microbial folliculitis, drug-induced acneiform eruptions, and pyodermatitis-pyostomatitis vegetans). Patients using topical treatments that could interfere with UV imaging were excluded. UV dermoscopic images were independently reviewed by two experienced dermatologists. Main outcomes included the presence, intensity, and distribution of green fluorescence within pustules, and diagnostic performance (sensitivity, specificity) of this feature.

Results:

Of the 30 patients, 15 had histologically confirmed PP, 11 of whom had GPP. Green fluorescence under UV dermoscopy was observed in 14/30 patients (46.7%): 13/15 (92.9%) in the PP group and 1/15 (6.7%) in the control group—a DRESS syndrome case showing faint fluorescence. Among PP patients, fluorescence intensity was high in 38.5%, moderate in 46.1%, and low in 15.4%. A diffuse distribution of green fluorescence was noted in 84.6% of PP cases, with multiple pustules fluorescing in a single field in 69.2%. Sensitivity and specificity of green fluorescence for PP diagnosis were 86.7% and 93.3%, respectively. No correlation was found between fluorescence intensity and disease severity. Two patients with coexisting plaque psoriasis also showed peripheral pink-red fluorescence. Histopathology of fluorescent pustules consistently showed subcorneal, multilocular, spongiform pustules with dense neutrophilic infiltrates—features also found in two non-fluorescent PP cases.

Conclusion:

This is the first study to systematically evaluate green fluorescence under UV dermoscopy in PP. The high specificity (93.3%) and sensitivity (86.7%) suggest it could be a valuable, non-invasive diagnostic tool, especially in

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urgent or ambiguous cases where biopsy is not immediately feasible. It may help reduce unnecessary skin biopsies and expedite diagnosis. Identifying the responsible endogenous fluorophore warrants further investigation via spectroscopic and biochemical methods. Larger, multicenter studies are needed to confirm reproducibility, validate diagnostic criteria, and assess applicability across imaging systems. Future research should also explore its potential as a biomarker for disease activity, treatment response, or integration into AI-assisted diagnostic tools.

Pink-red fluorescence under UV dermoscopy as a diagnostic marker for psoriasis: A prospective case-control study

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Introduction & Objectives:

Plaque psoriasis (PP) is the most common form of psoriasis, typically appearing as erythematous plaques with silvery scales. Although diagnosis is often clinical, early, atypical, or localized forms may mimic other erythematosquamous (ES) dermatoses, such as eczema, mycosis fungoides (MF), or pityriasis lichenoides (PL), necessitating histological confirmation. In psoriasis, a characteristic pink-red fluorescence attributed to protoporphyrin IX in the stratum corneum has been reported under ultraviolet-induced fluorescence dermoscopy (UVFD). However, its diagnostic utility, specificity, and reproducibility remain underexplored. The present study was designed to (1) describe the patterns of pink-red fluorescence under UVFD across different clinical subtypes and anatomical locations of psoriasis, and (2) evaluate its diagnostic performance—specifically its sensitivity and specificity—in distinguishing PP from other ES dermatoses.

Materials & Methods:

A prospective, two-phase study was conducted. In Phase 1, 57 patients with confirmed psoriasis (excluding pustular, nail, and mucosal types) were enrolled to describe UVFD features across clinical variants. In Phase 2, a case-control design compared 35 patients with PP (Group 1) to 25 patients with non-psoriatic ES dermatoses (Group 2), including eczema (n=17), MF (n=2), PL (n=2), pityriasis rosea, porokeratosis, verruca vulgaris, and lichen planus. Patients on interfering topical treatments were excluded. UVFD images were independently assessed by two dermatologists blinded to diagnosis. Primary endpoints included the presence, intensity, and distribution of pink-red fluorescence, and its diagnostic accuracy.

Results:

Among 82 patients, 57 (69.5%) had psoriasis, including 35 with PP. Pink-red fluorescence was observed in 33/82 patients (40.2%), including 23/35 with PP (65.7%). It was also seen in 10/22 patients with other psoriasis forms, notably scalp (60%) and inverse psoriasis (44.4%), but not in palmoplantar cases. None of the 25 non-psoriatic controls showed fluorescence, yielding a sensitivity of 65.7% and specificity of 100% for PP diagnosis. Fluorescence intensity was high in 18.2%, moderate in 30.3%, and low in 51.5% of positive cases. Distribution was dot/clod-like in 42.4%, area-based in 30.3%, and mixed in 27.3%. No significant correlation was found between fluorescence and clinical variables (e.g., age, treatment status, PASI score). A statistically significant association was found with Fitzpatrick phototype, with type III skin more likely to exhibit fluorescence (p=0.021), although not linked to intensity or pattern.

Conclusion:

This is the first study to comprehensively assess pink-red fluorescence under UVFD in psoriasis. The findings support its role as a highly specific, moderately sensitive marker for PP. The absence of fluorescence in all non-

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psoriatic cases reinforces its diagnostic value. Topographic differences—such as absence in palmoplantar psoriasis—may relate to variations in stratum corneum thickness or porphyrin metabolism. The association with lighter skin phototypes may reflect reduced melanin interference with UV transmission or intrinsic differences in fluorophore accumulation. While the biological mechanism remains unclear, these findings justify further research, including spectroscopic and biochemical analysis, and call for multicenter studies to standardize UVFD use in clinical practice.

Dermoscopic evaluation of leprosy

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Introduction & Objectives:

Dermoscopy aids in the early diagnosis, classification, and monitoring of leprosy. This study explores dermoscopic features across the leprosy spectrum.

Materials & Methods:

A cross-sectional study was conducted on patients with leprosy. All underwent detailed cutaneous and neurological exams. Skin lesions were photographed and assessed dermoscopically.

Results:

Twenty-one patients (ages 15–80) with active lesions were included. Leprosy types per Ridley-Jopling: indeterminate (1, 4.76%), borderline tuberculoid (6, 28.57%), borderline lepromatous (3, 14.29%), lepromatous (6, 28.57%), histoid (2, 9.52%). Two had necrotic ENL (9.52%), and four had type 2 reactions (19.05%).

Dermoscopy revealed:

- Distorted pigment network (11, 52.38%)
- Focal white areas (10, 47.62%)
- Reduced eccrine/follicular openings (10, 47.62%)
- Widened skin lines (9, 42.86%)
- Circle hairs and shiny streaks (6 each, 28.57%)
- Yellow-orange globules and yellow crusts with erosions

Findings by subtype compared with previous studies are summarised in the table.

Subtype	Current study	Agharia et al. (2023)	Ankad BS et al. (2024)
Tuberculoid (TT)	Orangish-yellow areas,follicular plugging, brown perifollicular and periappendageal pigmentation, telengiectasia, white structureless areas and	Orangish-yellow & white structureless areas Peripheral erythema Telangiectatic vessels Moderate follicular loss (vellus hair spared) Absence of white dots Extensive pigment	Distorted pigment network (90.6%) Focal white areas (75.5%) Reduced follicular & eccrine openings (81.1%) Widened skin lines (52.8%) Circle hairs (28.3%) White shiny streaks (32.1%)

Subtype	sparse nair Current study	Aghanaverkil (2023)	Brownish background Ankad BŞ-et al. (2024)
			Linear vessels (49%) Milky red globules (30.2%) Pinkish hue (41.5%)
Borderline Tuberculoid (BT)	Yellow-orange background, focal white areas, widened skin lines and distorted pigment network.	Yellowish-orange areas Branching vessels Violaceous- erythematous background Patchy pigment network loss Diminished hair/sweat glands Yellow dots & globules	Similar to TT Additional branching vessels (30.2%)
Borderline Lepromatous (BL)	focal white areas, widened skin lines, distorted pigment network, circle hair, scaling	Loss of pigment network Focal hyperpigmentation White shiny streaks Relative sparing of appendages	Similar to BT Variable prominence of branching vessels Brownish background, focal white areas, distorted pigment network
Lepromatous Leprosy (LL)	yellow-orange globular structures, branching vessels, reduced appendages, focal white areas	Yellowish-orange areas Shiny skin Sparse appendages Yellow globules Reticular pigment network accentuated	Similar to BL Prominent shiny streaks, pigment network distortion Milky red globules Pinkish hue Reduced appendages
Histoid Leprosy (HL)	yellowish orange structureless areas, crown vessels, central hypopigmented and blanchable dome- shaped structures with perilesional hyperpigmentation, keratotic plugs, and shiny white areas	Yellowish-orange areas Crown vessels Central hypopigmented dome structures Perilesional hyperpigmentation Shiny white areas Central white dots & keratotic plugs	Similar to LL Milky red globules Serocrusts Focal white areas White shiny streaks

Conclusion:

Dermoscopy reveals subtle skin changes, aiding diagnosis, classification, and monitoring, especially valuable in resource-limited settings.

Clinico-Dermoscopic Spectrum of Topical Steroid Damaged Face: Correlation with Potency and Duration of Corticosteroid Use

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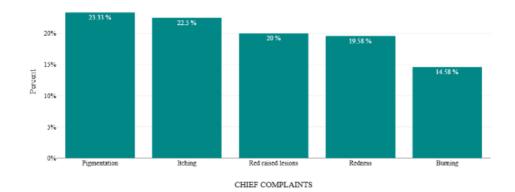
Introduction and objectives:

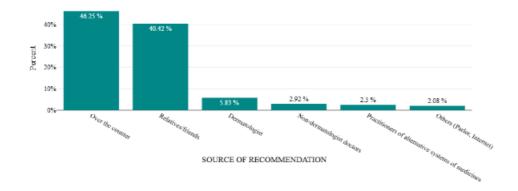
Topical steroid damaged or dependent face (TSDF) is a growing dermatologic condition caused by prolonged misuse of topical corticosteroids (TCS). It presents with distinct clinical and dermoscopic features. Dermoscopy provides a non-invasive diagnostic advantage, but data correlating findings with disease duration and potency of steroid usage are limited. Our study aims to assess clinico-dermoscopic features of TSDF, examine correlations between clinical and dermoscopic findings, analyze variation with TCS potency and duration of usage.

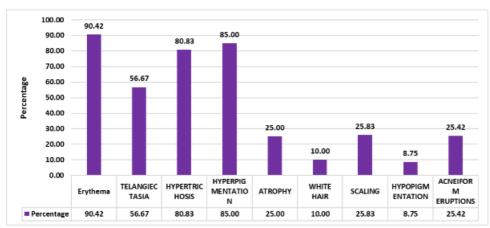
Materials and Methods: A cross-sectional study was conducted on 240 patients aged 10–60 years with continuous TCS use for ≥4 weeks. Clinical features such as erythema, hyperpigmentation, hypertrichosis, and telangiectasia were recorded. Dermoscopy was performed using Dermlite DL5, documenting findings including red diffuse areas, brown globules, vessels (serpentine, polygonal, Y-shaped), and white structureless areas. Dermoscopic features were analyzed across TCS duration groups (1-3, 3-6, 6-9, >9months) and potency groups (class I-II, III-IV, V-VII)

Results: Erythema (90.42%) and hyperpigmentation (85%) were the most frequent clinical findings, while red diffuse areas (95.8%), brown globules (94.17%), and vessels (87.92%) were dominant dermoscopically. Polygonal vessels showed a strong, statistically significant correlation with steroid duration (p < 0.001), rising from 16.67% (1–3 months) to 100% (>9 months), indicating their role as a marker of chronic steroid damage. White hair also increased with duration (p = 0.04), from 50% (≤ 6 months) to 70.24% (>9 months), suggesting a time-dependent development. In contrast, papules declined significantly over time (p = 0.02), indicating prominence in early TSDF stages. Development of serpentine vessels (p = 0.001) and polygonal vessles (p = 0.01) showed significant association with class I potent steroid abuse whereas white hair (p = 0.001) and hypertrichosis (p = 0.04) showed significant association with class IV steroid abuse

Conclusion: TSDF is characterized by reproducible clinico-dermoscopic features that intensify with duration and potency of steroid use. Dermoscopy facilitates early diagnosis and improves disease staging.. Integrating dermoscopy in clinical practice may enhance management outcomes in TSDF.







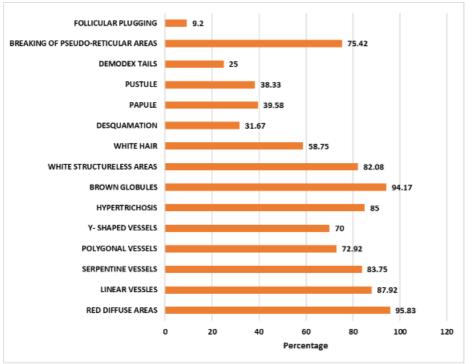


	Table: 21 P	resence	e of Derm	ascor	jc finding	s am	ong Durat	tion of	f Steroid ι	ıse	
	Dermascopic findings	1-3 1	months	3-6	months	6-9	months	> 9	months	Total	p- Value (Chi- square test)
L		n	%	n	%	n	%	n	%	n	
	RED DIFFUSE AREAS	69	95.83%	45	93.75%	34	94.44%	82	97.62%	230	0.66
	LINEAR VESSLES	64	88.89%	42	87.50%	29	80.56%	76	90.48%	211	0.48
	SERPENTINE VESSELS	61	84.72%	39	81.25%	32	88.89%	69	82.14%	201	0.79
	POLYGONAL VESSELS	12	16.67%	44	91.67%	35	97.22%	84	100%	175	<0.001
3	Y- SHAPED VESSELS	55	76.39%	38	79.17%	22	61.11%	53	63.10%	168	0.09
	HYPERTRICHOSIS_1	62	86.11%	39	81.25%	30	83.33%	73	86.90%	204	0.80
	BROWN GLOBULES	68	94.44%	44	91.67%	34	94.44%	80	95.24%	226	0.85
	WHITE STRUCTURELESS AREAS	61	84.72%	41	85.42%	32	88.89%	63	75%	197	0.23
	WHITE HAIR_1	36	50%	24	50%	22	61.11%	59	70.24%	141	0.04
	DESQUAMATION	25	34.72%	12	25%	8	22.22%	31	36.90%	76	0.29
	PAPULE	39	54.17%	17	35.42%	10	27.78%	29	34.52%	95	0.02
	PUSTULE	34	47.22%	12	25%	14	38.89%	32	38.10%	92	0.11
	DEMODEX TAILS	15	20.8%	15	31.3%	12	33.3%	18	21.4%	60	0.30
	BREAKING OF PSEUDO- RETICULAR AREAS	55	76.39%	36	75%	29	80.56%	61	72.62%	181	0.84
	FOLLICULAR	6	8.3%	5	10%	4	12%	7	8.33%	22	0.93

100% 36

72

100% 48

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A New UV Dermoscopy Sign for Diagnosing Phthiriasis: The Glowing Crab Louse Sign

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Introduction & Objectives:

Pthirus pubis (PP), commonly known as pubic lice, is primarily a sexually transmitted infestation affecting adults, often manifesting as intense itching in the pubic and genital areas. Dermoscopy has proven to be a valuable tool in diagnosing phthiriasis, allowing for the direct visualization of PP, which is larger and more flattened compared to Pediculus capitis, and firmly adheres to pubic hair while feeding on blood. The blood-filled intestines of the parasite give its body a distinctive scorpion-like appearance. Recent advancements in dermatoscopic techniques, particularly ultraviolet fluorescence dermoscopy (UVFD), have further enhanced the diagnostic accuracy for various skin infections. For instance, UVFD enhances the diagnosis of scabies by revealing the green-fluorescing "ball sign" and has also been used to identify a tulip-like fluorescence pattern in pediculosis. However, its application in the diagnosis of phthiriasis pubis remains unexplored. This case report aims to describe a novel UV dermoscopic finding—termed the "glowing crab louse sign"—observed in a patient with confirmed PP infestation.

Materials & Methods:

Herein, we present the case of a 27-year-old man who had been experiencing intense, disruptive itching in the pubic region for two weeks. The patient reported multiple instances of unprotected sexual intercourse with different partners. Clinical examination was challenging due to the patient's excessive pubic hair. Both polarized and UVFD were employed to to improve visualization of the affected area and to explore the origin of this persistent pruritus.

Results:

Dermoscopy revealed both nits and multiple PP parasites, which exhibited a characteristic scorpion-like appearance. Notably, UV-induced fluorescence dermoscopy highlighted a novel feature, with bright blue fluorescence emitted by the entire body of PP, which we have termed the "glowing crab louse sign".

The diagnosis of pubic lice was confirmed, and the patient was successfully treated with a dimeticone-based product. A full sexually transmitted infection screen was negative.

Conclusion:

To the best of our knowledge, this is the first description of the blue fluorescence emitted by PP under UV dermoscopy. The exact chromophore responsible for this fluorescence remains to be identified and warrants further investigation. This novel diagnostic feature could be especially beneficial for clinicians with less experience, particularly in challenging cases where the diagnosis is not immediately evident, thereby improving diagnostic accuracy. Additionally, it could be integrated into future artificial intelligence-assisted diagnostic models and used as a tool for monitoring treatment efficacy.

Dermoscopic insights into pityriasis lichenoides chronica in skin of color: a case report

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Introduction & Objectives:

Pityriasis lichenoides chronica (PLC) is a rare papulosquamous disorder that primarily affects adolescents and young adults. It typically presents as multiple erythematous to red-brown papules with a crusted and scaly appearance, most commonly involving the trunk, proximal extremities, and buttocks. Lesions tend to resolve over weeks to months, often leaving behind post-inflammatory hypo- or hyperpigmentation. Due to its clinical resemblance to other squamous conditions such as pityriasis rosea, guttate psoriasis, or mycosis fungoides (MF), PLC is frequently misdiagnosed, emphasizing the importance of histological confirmation. Dermoscopy can aid in the diagnosis by revealing yellow-orange structureless areas, focal scaling, dotted or linear vessels, and peripheral hypopigmented zones. However, interpreting dermoscopic features in individuals with skin of color presents unique challenges, as certain features may be obscured, absent, or misleading. This case report aims to highlight the diagnostic difficulties associated with PLC, focusing on dermoscopic findings in patients with darker phototypes.

Materials & Methods:

Herein, we present the case of a 49-year-old woman with Fitzpatrick skin type IV, who had a 20-year history of chronic pruritus unresponsive to multiple topical treatments. Clinical examination revealed numerous keratotic follicular papules, some of which were eroded, located on the limbs and trunk, all resting on slightly lichenified pigmented plaques. The clinical presentation raised several differential diagnoses, including folliculotropic MF, lichen spinulosus, and PLC. Dermoscopic evaluation was conducted to support the etiological investigation and refine diagnostic orientation.

Results:

Dermoscopy showed yellowish-orange to light brown structureless areas, follicular and non-follicular white scales, dotted and irregular linear vessels with a patchy distribution, and scattered brown granules. Wickham striae were absent. Furthermore, multiple achromic macules were observed on the back, with no involvement of the palms, soles, face, mucosa, or appendages. Skin biopsy confirmed PLC, showing focal parakeratosis, clusters of necrotic keratinocytes, intraepidermal erythrocytes, and a mild perivascular and lichenoid lymphocytic infiltrate.

Conclusion:

In individuals with darker skin phototypes, PLC lesions often exhibit a brownish hue overlying the characteristic yellow-orange areas, with scattered dark brown to black granules, globules, and clods. These findings are indicative of focal basal vacuolar damage and pigment incontinence, which is frequently observed in inflammatory conditions affecting darker skin types. It is crucial to differentiate these features from the gray-brown dots and granules seen in lichen planus, which may present in an annular pattern. Furthermore, vascular structures are more challenging to detect in darker skin due to the pigmentation of the underlying skin, with only a few vessels being visible.

This case underscores the additional value of careful dermoscopic evaluation to avoid misdiagnosis, as PLC can be easily confused with other conditions. Additionally, it highlights the need for increased awareness when assessing skin of color, along with the necessity for further large-scale studies to better understand the dermoscopic features of PLC in individuals with darker skin tones.



Unraveling the mysteries of chronic facial ulceration: A report of two cases

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Introduction & Objectives: Cutaneous leishmaniasis is a chronic protozoal parasitosis, endemic in many tropical regions, typically presenting as localized ulcerative crusty or nodular lesions. Basal cell carcinoma (BCC), the most common malignant skin tumor, usually appears in photo-exposed areas but can also develop in sites of chronic inflammation or scarring. The association of a BCC on a previous cutaneous leishmaniasis lesion remains rare. We report two cases illustrating this unusual association.

Materials & Methods:

We collected two cases of immunocompetent patients who shared a history of localized cutaneous leishmaniasis, confirmed by skin smear, both located on the left cheek. The first patient, a 51 years old woman, initially developed an ulcerative-crusty plaque on the left cheek, treated with intralesional injections of meglumine antimoniate, with partial improvement. A relapse occurred a few months after discontinuation of treatment, manifesting as a rounded, ulcerated, centimeter sized plaque with a crusty surface and pearly border. Dermoscopic examination revealed a central ulceration, white scales, yellowish crusts, and peripheral telangiectatic vessels, suggesting nodular basal cell carcinoma, which was confirmed by histological examination of a skin biopsy. The second patient, a 67 years old man, had also been treated for localized cutaneous leishmaniasis on the left cheek, with a good initial response. One year later, he presented with a relapse in the form of a 3 cm oval shaped ulceration, centered on the initial site and extending linearly toward the ipsilateral nasal tip. The lesion rested on sclerotic skin with a partially pearly border. Dermoscopy revealed white scales, hemorrhagic crusts, blue gray globules, ovoid nests, and arborizing vessels at the periphery, suggestive of sclerodermiform basal cell carcinoma, which was also confirmed by skin biopsy.

Results:

In both cases, histology showed no evidence of active parasitic signs of leishmaniasis. The first patient underwent wide surgical excision followed by directed wound healing. The second patient, who declined surgery, received several sessions of localized radiotherapy. The outcome was favorable in both cases, with complete healing and no recurrence after six months of follow-up.

Conclusion:

These observations highlight the need for increased vigilance in cases of persistent or recurrent cutaneous leishmaniasis. The appearance of clinical changes, atypical progression, or an insufficient therapeutic response should raise suspicion of a possible underlying neoplastic transformation and prompt histological evaluation. Early diagnosis of basal cell carcinoma in this context is crucial, as it enables timely curative management while minimizing the risk of aesthetic or functional complications.



Dermoscopic Features Associated With Breslow Thickness in Cutaneous Melanoma: A Cross-Sectional Study From a Referral Center

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Introduction & Objectives: Dermoscopy has emerged as a non-invasive technique that enables the visualization of skin structures from superficial to deeper layers, not visible to the naked eye. It significantly increases diagnostic accuracy, improving melanoma detection sensitivity by 10–27% and reducing unnecessary excisions of benign lesions. Breslow thickness remains the most important histological prognostic factor in melanoma, guiding surgical margins, sentinel lymph node biopsy, and preoperative staging. This study aims to analyze the association between dermoscopic features and Breslow thickness in cutaneous melanoma.

Materials & Methods: A cross-sectional observational study was conducted using clinical records, histopathology reports, and dermoscopic images obtained from the FotoFinder platform. Patients were evaluated at a national melanoma referral clinic in Southern Brazil. Two dermatologists and two dermatology residents assessed dermoscopic features according to the standardized definitions proposed by Argenziano et al. Evaluated criteria included asymmetry, atypical pigment network, negative network, pseudopods, radial streaming, irregular dots or globules, blotch, blue-white veil, regression structures, shiny white streaks, milky-red areas, atypical vessels, and ulceration. Melanomas were categorized into three groups: in situ, thin (<1.0 mm), and thick (≥1.0 mm). Fisher's exact test was used for comparisons, with significance set at p<0.05 (SPSS v.23.0).

Results: Among 117 melanomas, 54 (46.2%) were in situ, 57 (48.7%) thin, and 6 (5.1%) thick. Most lesions were superficial spreading melanomas located on the trunk (44.4%). Dermoscopic features significantly associated with Breslow thickness included: atypical pigment network (p=0.033), more frequent in in situ and thin melanomas; blue-white veil (p=0.002), observed only in thin and thick melanomas; shiny white streaks (p=0.006), absent in in situ cases; milky-red areas (p=0.017), predominant in thick melanomas; and atypical vessels (p=0.002) and ulceration (p=0.005), both showing increased frequency with increasing tumor thickness. Other features, such as regression structures, pseudopods, and radial streaming, while more common in invasive melanomas, were not statistically significant.

Conclusion: Specific dermoscopic patterns—especially blue-white veil, white streaks, atypical vessels, and ulceration—are significantly associated with greater Breslow thickness. Recognizing these features can support early detection of invasive melanomas and influence biopsy, surgical, and staging decisions. These findings reinforce the value of dermoscopy in melanoma diagnosis and prognosis assessment.

Nail dermoscopy of longitudinal melanonychia in skin of color, an International Dermoscopy Society study

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Introduction & Objectives: Many dermoscopic features described as concerning for malignancy in current longitudinal melanonychia (LM) literature are found in benign nail lesions in patients with skin of color (SOC). This is of particular importance due to the increased burden of nail melanoma in SOC patients.1,2 This study aims to characterize the dermoscopic features of nail melanoma in SOC and update the dermoscopic algorithm for LM.

Materials & Methods: This study was a retrospective cohort study. Authors sent a call for images to the International Dermoscopy Society and Council for Nail Disorders. Sixty-three dermoscopic photos were collected from six international institutions. Eleven of these lesions were malignant melanoma in situ, and 52 were benign. Patients all had Fitpatrick skin types of IV-VI, were between ages 18-105, and had a confirmed diagnosis of longitudinal melanonychia, with final diagnosis confirmed by serial imaging or biopsy. Images were analyzed for dermoscopic and clinical features associated with malignancy, adapted from Ko et al.3 Features studied included presence of multiple colors, band color, band thickness, band spacing, asymmetry, loss of parallelism, background color, width of pigment, border clarity, Hutchinson sign, and nail dystrophy. Statistical comparisons were performed using Fisher's exact tests in RStudio.

Results: Among the features examined, irregular band thickness was the only feature that was significantly associated with malignant lesions, with 100% (11/11) of malignant lesions having this feature compared to 69.2% (36/52) of benign lesions having this feature (p=0.05). Another dermoscopic feature present in all malignant etiologies of LM was irregular band color, but the prevalence of this feature was not found to be significantly different from lesions that were benign (p=0.18). Of note, the average width of the lesions was similar across groups, measuring 46.36% of the nail plate for malignant and 47.60% for benign.

Conclusion: In contrast to established dermoscopic algorithms, which endorse a myriad of features associated with malignancy, this study reveals a single feature associated with malignant causes of LM in SOC, irregular band thickness. These results underscore the difficulty of accurate diagnosis before biopsy for patients with skin of color, even with the assistance of dermoscopy. Limitations include small sample size, interobserver variability of some dermoscopic criteria, and inconsistent quality of images.

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Design and development of a systematic validation protocol for synthetic melanoma images for a responsible use in medical Artificial Intelligence

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Introduction & Objectives:

Malignant melanoma is the deadliest form of skin cancer, with diagnosticis challenges andthat artificial intelligence (AI) could help address its diagnostic challenges. Generative Adversarial Networks (GANs) can generate synthetic dermoscopicatologic images to augment limited real datasets, but the lack of standardised validation protocols compromises clinical trust and model reliability.

This study aims to design and develop a systematic validation protocol combining quantitative metrics and qualitative expert assessments to evaluate the realism, fidelity, diversity, and usefulnessclinical utility of GAN-generated dermoscopic melanoma images.

Materials & Methods:

A StyleGAN2 model, designed and trained in a previous study, was selected for its superior quantitative performance (FID = 18.89; KID = 0.0025) and exploited to generate 25 synthetic melanoma images, matched with 25 real images. A panel of 17 dermoscopists with differentiarying expertise assessed a total of 50 randomised images each, using a 7-point Likert scale, across multiple qualitative attributes (real vs synthetic, skin texture, visual realism, confidence) and pattern analysis). Accuracy, sensitivity, specificity, Fleiss' Kappa, and Krippendorf's Alpha were calculated to analyse inter-rater agreement and evaluation outcomes.

Results:

Accuracy in real vs synthetic images classification was moderate (64%), with sensitivity at 73% and specificity at 56%, and correlated with personal expertise, with poor inter-rater concordance over qualitative attributes. Synthetic images obtained superior scores in medium visual and overall realism, and confidence level, while the frequency of recognition of pigment network-patterns was comparable with real images.

Conclusion:

This study presents a robust validation protocol integrating both human and computational assessments, essential for the responsible use of synthetic images in medical AI. High-fidelity GAN-generated images can simulate clinical conditions effectively, but qualitative expert evaluations remain crucial to ensure their safe deployment in dermatology and telemedicine.

Pigmented mammary Paget disease presenting as an unilateral painful nipple lesion

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Introduction and Objectives:

Mammary Paget disease (MPD) is a rare intraepidermal adenocarcinoma usually associated with underlying ductal carcinoma in situ (DCIS) or invasive ductal carcinoma. (1) Pigmented variants of MPD are particularly rare and can mimic melanoma or chronic dermatitis both clinically and dermoscopically. (2) Early recognition and diagnosis are crucial to prevent delayed treatment. We present a case of pigmented MPD in a relatively young female patient, whose dermoscopic and histopathological findings were consistent with MPD and correlated with those reported in a retrospective study by the International Dermoscopy Society (IDS). (3)

Materials and Methods:

A 60-year-old woman presented with a 2-year history of a slowly growing, erythematous and pigmented lesion on the lower part of the left nipple. There was accompanying pain and discharge but no palpable mass. Physical examination revealed a unilateral, irregularly bordered, crusted pigmented plaque. Dermoscopic evaluation showed white scales, pink structureless areas, superficial erosions, irregular dotted vessels, shiny white streaks and brown-gray dots.

Results:

A 4 mm punch biopsy revealed large tumor cells with pale cytoplasm and prominent nucleoli, dispersed singly and in clusters within the epidermis. Immunohistochemical staining showed strong cytokeratin 7 (CK7) positivity, confirming the diagnosis of Paget disease of the breast. Following the dermatologic diagnosis, the patient was referred to general surgery. Breast imaging and subsequent tissue sampling revealed underlying ductal carcinoma in situ (DCIS), confirming that the MPD was a cutaneous manifestation of underlying breast cancer. Treatment planning was continued by the breast surgery and oncology team.

Conclusion:

This case emphasizes the importance of suspecting mammary Paget disease in persistent, unilateral nipple lesions, even in the absence of palpable mass. Pigmented MPD may be misdiagnosed as melanoma or eczema, leading to delays in treatment. Dermoscopy is a valuable tool in raising suspicion for MPD and can guide early biopsy decisions. The concordance of our dermoscopic findings with those described by the IDS supports the reproducibility of specific dermoscopic features in MPD. Early biopsy and referral for imaging are essential for accurate diagnosis and appropriate oncologic management.

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Dermoscopy of Hypertrophic Lichen Planus: A Case Study and Diagnostic Insights

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Introduction & Objectives:

Hypertrophic lichen planus (HLP) is a chronic, pruritic variant of lichen planus characterized by hyperkeratotic, violaceous plaques, predominantly affecting the lower extremities. Clinical differentiation from mimickers like prurigo nodularis (PN) is challenging due to overlapping features, necessitating adjunct tools like dermoscopy. This non-invasive technique enhances visualization of subsurface structures, aiding in accurate diagnosis and reducing reliance on biopsies. We present a case of a 35-year-old male with bilateral, symmetric pretibial lesions, highlighting the role of dermoscopy in HLP evaluation.

Materials & Methods:

A 35-year-old male presented with bilateral, symmetric, hyperkeratotic pretibial plaques, intensely pruritic for 3 years. Dermoscopy was performed using a polarized DermLite DL5 device after clinical assessment. The following dermoscopic features were observed: peripheral striations: radially arranged white lines, indicative of Wickham striae, were present in all lesions, Comedo-like openings, Blue-gray globules, yellowish structures, and brownish-black globules. A 4-mm punch biopsy confirmed HLP histopathologically, revealing hyperkeratosis, acanthosis, and a lichenoid infiltrate. Exclusion criteria included recent steroid use or procedural interventions.

Results:

Dermoscopy plays a pivotal role in the evaluation of HLP, providing insights into the lesion's microstructure and aiding in distinguishing it from other pruritic dermatoses. The presence of peripheral striations is a consistent feature across HLP cases, reflecting epidermal hypergranulosis. Comedo-like openings and follicular plugging are indicative of follicular involvement, a common characteristic in HLP. Blue-gray globules suggest the presence of melanophages, while yellowish and brownish-black structures point towards follicular plugging and hyperkeratosis, respectively. These dermoscopic findings align with histopathological features such as hyperkeratosis, acanthosis, and basal cell damage confined to the tips of rete ridges.

Conclusion:

Dermoscopy is pivotal in diagnosing HLP, offering specific markers like blue-gray globules and comedo-like openings that differentiate it from PN and other hypertrophic dermatoses. While histopathology remains confirmatory, dermoscopy reduces diagnostic delays and unnecessary biopsies. This case underscores the utility of integrating clinical, dermoscopic, and histologic data for optimal management of chronic lichenoid disorders.

A case series on the clinical & dermoscopic features of cutaneous tuberculosis in skin of color

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Introduction & Objectives: Cutaneous tuberculosis (CTB) is an uncommon extrapulmonary manifestation of tuberculosis. In TB-endemic areas of Asia like the Philippines, lupus vulgaris (LV) and scrofuloderma are the most common CTB presentations. However, diagnosing CTB in skin of color can be difficult, as erythema and other features may be less apparent. Dermoscopy offers a noninvasive window to detect subtle features enhancing its early recognition. This case series presents six biopsy-confirmed CTB seen at a tertiary dermatology clinic in the Philippines with skin phototypes III–V.

Materials & Methods: Dermoscopic examination was performed with a handheld polarized dermoscope on lesional skin and findings were correlated with histopathology. Patients were put on anti-TB therapy with noted significant improvement or resolution of lesions.

Results:

Case 1 – Erythema nodosum-like A 34-year-old female with a 2-year history of painful, non-ulcerating erythematous nodules on both legs. Dermoscopy showed a diffuse reddish-brown structureless area, consistent with a deep panniculitic process.

Case 2 – Classic erythema induratum 24-year-old female with a 4-year history of recurrent, painful, ulcerating nodules on both legs, initially misdiagnosed as pyoderma gangrenosum. Dermoscopy showed yellow-orange crusted areas and polyangular white structureless zones on a violaceous background, with polymorphous blood vessels (linear and dotted) at the periphery. Biopsy revealed lobular panniculitis.

Case 3 – Arthropod-like. 54-year-old female with a 3-week history of painful papules on both legs. Initially presumed to be an arthropod bite reaction. Dermoscopy showed red dots and globules, a central white structureless area, white scales, on a light orange to erythematous background, suggesting vascular dilatation, dermal inflammation, and granulomatous infiltration seen in panniculitic processes.

Case 4 – Lupus vulgaris 67-year-old female with 1-year history of solitary plaque on the forehead. Dermoscopy showed follicular plugging, white structureless area, yellow-orange structures, linear blood vessels with perilesional white halo consistent with LV.

Case 5 – Scrofuloderma 30-year-old pregnant woman over 4-year history of indurated subcutaneous nodules on the neck and lumbar area, some ulcerated with purulent discharge, and healed with scarring and hyperpigmentation. Dermoscopic examination showed pink-white structureless areas (extensive dermal fibrosis) with serpentine and linear vessels crossing the surface. Scattered yellow-white globules were noted, correlating with underlying caseation and granulomas. Central atrophic zones and faint erythema were present in long-standing lesions.

Case 6 – Discoid lupus-like. 19-year-old female with a 4-year history of multiple ulcerating nodules & plaques on anterior neck. Dermoscopy showed polymorphous vessels with white streaks, white structureless area, and yellowish crust over an orange to pink background with reticular pigment network.

Conclusion: This case series highlights the clinical and dermoscopic features of CTB in patients with skin of color

revealing yellow-orange granulomatous areas and specific vascular patterns that raised suspicion for CTB. Moreover, it underscores the importance of considering CTB in the differential diagnosis of chronic skin lesions in endemic areas and utilizing dermoscopy to facilitate its early identification and prevent delays in treatment.

Poroma vessels can be better identified by high magnification dermoscopy compared to conventional dermoscopy

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Introduction & Objectives:

Eccrine poroma (EP) is an uncommon, benign sweat gland tumor that clinically may show a variety of features, mimicking other neoplasms. The most frequent clinical presentation is a single slow-growing, asymptomatic, pinkto-red, well-circumscribed papule or nodule, commonly affecting the distal extremities of adult patients. Dermoscopy improves the diagnosis of EP, typically showing a polymorphous vascular pattern, including branched vessels with rounding endings. The latter are considered a clue for EP and sometimes may be hardly visible with conventional dermoscopy (20x magnification). High magnification dermoscopy is a new non-invasive imaging tool that has been shown to add information for clinically difficult-to-diagnose skin tumors, revealing many elements not otherwise visible in traditional dermoscopy.

Materials & Methods:

We report the case of a female patient with an EP of the leg, describing for the first time the dermoscopic features observed at high magnification dermoscopy, with a focus on its characteristic branched vessels with rounding endings.

Results:

An 88-year-old woman with history of multiple basal cell carcinomas presented with an asymptomatic, pink-to-red, firm papule, 2mm in diameter, on her left posterior leg, of 2 months' duration. Dermoscopy at magnification 20x (Medicam 1000, Fotofinder System, Bad Birnbach, Germany) showed a yellow central structureless area, surrounded by white interlacing areas around polymorphous vessels. At magnification 300x and 400x, the latter appeared as branched vessels with rounded endings. Histopathologic examination revealed features compatible with EP.

Conclusion:

The peculiar vascular morphology in EP may be hardly visible with conventional dermoscopy. High magnification dermoscopy may be useful to better identify branched vessels with rounding endings in EP, improving the diagnostic accuracy compared to dermoscopy with low magnification.

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Differentiating Benign and Atypical Nodular Hidradenoma: Dermatoscopic Findings and Diagnostic Challenges

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Introduction & Objectives: Nodular hidradenoma (NH) is a rare, benign, and slow-growing tumor, typically of apocrine origin. It usually appears as a solitary lesion that may be nodular, cystic, or pedunculated. Dermatoscopic data on NH is limited, with most information derived from case reports and a multicenter study by Serrano et al. Notably, the dermatoscopic characteristics of atypical NHs have not yet been described. This study aimed to identify and compare the specific dermoscopic features of benign and atypical NHs.

Materials & Methods: From January 1, 2013, to January 1, 2025, nine patients diagnosed with NH via excisional biopsy at the Department of Dermatology and Venereology, Ankara University, were included in this study. Lesions were categorized as benign or atypical based on histopathological criteria—such as loss of circumscription and mitotic activity—and immunohistochemical markers including Ki-67 and p53. Clinical and dermatoscopic images of all lesions were recorded and analyzed.

Results: Nine NH lesions were analyzed: six were benign, and three were atypical. The cohort included eight females and one male, aged between 27 and 80 years. Lesions were located on the scalp (n=3), face (n=2), upper leg (n=2), ear (n=1), and lower leg (n=1). Among the benign NHs, the most common dermatoscopic features were a homogeneous predominant color—purple in 83.3% and blue in 50%—and the presence of white lines both observed in all cases. Out-of-focus branched vessels were noted in all six cases, while serpentine vessels appeared in 50%. Additional findings observed in individual cases included large yellow clods, large purplish clods, numerous white clods, eccentric blue clods, peripheral light purplish structureless areas, and multifocal brown reticular lines.** In the atypical NH group, dermatoscopic features varied. One case showed a skin-colored homogeneous area, out-of-focus branched and dotted vessels, and peripheral light purplish areas. Another case presented multiple homogeneous areas of varying colors, fine out-of-focus branched vessels, blue, brown, and gray clods, structureless blue-gray and white areas, and ulceration. The third case revealed a large central ulcerated area (containing fibrin, serous fluid, and red structureless zones), surrounded by a pink-purple structureless peripheral region, with scattered peripheral looped vessels. White lines/structures were present in two of the three atypical NHs (66.7%).** NH was included in the differential diagnosis in four benign cases but was not considered in any of the atypical ones. The most common alternative diagnosis across all cases was basal cell carcinoma (noted in 44% of patients).

Conclusion: NH presents a diagnostic challenge due to its ability to mimic both benign and malignant skin tumors. While benign NHs demonstrate some consistent dermatoscopic features—such as a homogeneous purple or blue coloration, white structures, and out-of-focus branched vessels—atypical NHs show more diverse and less predictable patterns. These findings highlight the importance of considering NH in the differential diagnosis of nodular lesions with these dermatoscopic clues. However, the variability seen in atypical cases underscores the need for histopathological confirmation and further studies to better define their dermatoscopic profile.

Dermoscopy of Eruptive Syringoma: A Case Report

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Introduction & Objectives:

Syringomas are benign adnexal tumors arising from the eccrine sweat glands, most commonly presenting as small, firm, asymptomatic papules in the periorbital region. Eruptive syringoma is a rare variant, characterized by the sudden appearance of multiple lesions, often in successive outbreaks, affecting the trunk, neck, and extremities. Given its clinical resemblance to various papular dermatoses, non-invasive tools like dermoscopy are valuable for accurate diagnosis. We report a case of eruptive syringoma in a female patient, emphasizing its dermoscopic features.

Materials & Methods:

A 59-year-old woman with no personal or family history of systemic or dermatologic disease presented with a 10-year history of gradually appearing, asymptomatic, non-pruritic papules. The lesions initially appeared on the trunk and later spread to the face and neck in successive flares. Clinical examination revealed multiple firm, brownish papules of varying sizes with a slightly keratotic surface. Dermoscopic examination under polarized light revealed a fine reticulated light brown network on a light brown background, corresponding to basal melanosis and fibrotic stroma. Scattered light brown and red areas were also observed, reflecting epidermal hyperpigmentation and underlying vascular structures. The most distinctive finding was the presence of glittering yellow-whitish round structures, which likely correspond to keratin-filled eccrine ducts within the dermis. Histopathology confirmed the diagnosis, revealing typical comma-shaped ductal structures within fibrotic stroma.

Results:

Dermoscopy proved to be a crucial diagnostic tool in this case of eruptive syringoma. The reticulated brown network corresponded histologically to basal melanosis and fibrosis, while the yellow-whitish round structures matched keratin-filled eccrine ducts—hallmarks of syringoma. Subtle vascular structures were also noted, although less prominent. These dermoscopic findings facilitated differentiation from clinically similar conditions such as lichen planus (with Wickham's striae), eruptive xanthomas (with yellow, foamy appearance), and papular mucinosis (translucent, gelatinous look without the brown network). Previous reports support dermoscopy's role in minimizing diagnostic delays and avoiding unnecessary biopsies. Given the benign and asymptomatic nature of eruptive syringomas, a conservative approach was adopted, with no treatment initiated.

Conclusion:

Dermoscopy plays a pivotal role in the diagnosis of eruptive syringoma by revealing distinctive patterns that aid in differentiating it from other papular dermatoses. The combination of a fine reticulated brown network, yellow-whitish ductal structures, and subtle vascular elements provides strong diagnostic clues. By enhancing diagnostic accuracy, dermoscopy reduces the need for invasive procedures, facilitates early recognition, and ensures appropriate patient management.

Halo Nevus and Vitiligo: Retrospective Cross-Sectional Study of Clinical and Dermoscopic Characteristics in a Single Tertiary Center

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Introduction and Objectives

Halo nevus (HN) is a melanocytic nevus surrounded by a depigmented halo, typically occurring before adulthood. Both HN and vitiligo involve immune responses targeting melanocytes, but with distinct immunological and genetic profiles. HN may precede or coexist with vitiligo, especially in young individuals; however, some suggest that two entities may have separate mechanisms. This study aims to investigate the association between clinical and dermoscopic features of HN and vitiligo development.

Materials and Methods

This retrospective cross-sectional study included 52 patients diagnosed with HN between 2015 and 2025 at a tertiary center. Demographic data, lesion characteristics, vitiligo onset, comorbidities, and family history were recorded. Dermoscopic features were analyzed in 38 images from 19 patients. Statistical comparisons were made using SPSS.

Results:

52 patients (mean age 17.2 \pm 10.9; 34 male, 18 female) were included. 19 developed vitiligo, 33 did not. Vitiligo group had a significantly lower age of onset (12 \pm 8 vs. 21 \pm 11 years, p = 0.001). Vitiligo emerged, on average, 2 years after HN onset and patients more commonly presented at \leq 12 years (p = 0.033). Lesion count and duration did not differ between groups. No significant differences were found in sex, localization, leukotrichia, autoimmunity, or family history. While most HN lesions were located on the trunk, vitiligo showed multifocal involvement (p < 0.001).

In dermoscopic analysis, the median halo area was significantly larger in vitiligo patients (175 mm² vs. 85 mm²; p = 0.030). Larger halo area remained significantly associated with vitiligo development (OR = 1.01 per mm², p = 0.039). No other dermoscopic parameters showed significant associations (p > 0.05 for all).

Conclusion

The association between HN and vitiligo remains obscure, with previous studies reporting inconsistent findings regarding predictive factors such as lesion count, age, localization, and personal or familial history of autoimmune diseases. In our study, early-onset age was found to be a significant risk factor for the development of vitiligo (p = 0.001). While dermoscopic studies on HN are limited, our findings indicate a significant association between increased halo area and a higher risk of vitiligo (p = 0.03).

We did not detect a statistically significant relationship between autoimmune comorbidities or family history and vitiligo development, consistent with the findings of De Vijlder et al., who reported a lower frequency of autoimmune diseases in patients with HN-associated vitiligo and their relatives. Additionally, their demonstration of distinct HLA associations between HN and vitiligo supports the hypothesis that these conditions may follow independent immunogenetic pathways.

Overall, our findings support the notion that HN and vitiligo may develop through independent mechanisms rather than a direct causal relationship, despite the presence of statistically significant associations with factors such as age, vitiligo localization, and halo area. However, due to the limited sample size (n = 52), definitive conclusions cannot be drawn. Importantly, the inclusion of dermoscopic evaluation adds a valuable dimension to the analysis. While the mere presence of HN may not indicate a direct link to vitiligo, the potential association with halo diameter warrants further large-scale studies to elucidate the nature of this relationship.

Table 1. Clinical	Features of HN	Patients by	Vitiligo Development
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/ariable	Overall (N = 52)1	No Vitiligo (n = 33) ¹	Vitiligo (n = 19)1	p-value
Age of onset (years)	18 ± 11 (16, 0-42)	21 ± 11 (20, 3-42)	12 ± 8 (12, 0-30)	0.001
Sex				>0.9
Male	34 (65%)	22 (67%)	12 (63%)	
Female	18 (35%)	11 (33%)	7 (37%)	
Vitiligo development time (years)	2.00 ± 0.82 (2.00, 1.00- 3.00)		2.00 ± 0.82 (2.00, 1.00- 3.00)	
HN Localization	1 1 1 1 1 1			0.14
Face	12 (23%)	10 (30%)	2 (11%)	
Trunk	29 (56%)	19 (58%)	10 (53%)	
Extremity	1 (1.9%)	0 (0%)	1 (5.3%)	
Genital	1 (1.9%)	0 (0%)	1 (5.3%)	
Multiple	9 (17%)	4 (12%)	5 (26%)	
Leukotrichia	21 (40%)	10 (30%)	11 (58%)	0.10
Coexisting autoimmunity	9 (17%)	6 (18%)	3 (16%)	>0.9
Family history	19 (37%)	9 (27%)	10 (53%)	0.13
Vitamin deficiency	15 (29%)	6 (18%)	9 (47%)	0.055
Course	(3000 3)			0.8
Regression	22 (48%)	13 (45%)	9 (53%)	
Same	24 (52%)	16 (55%)	8 (47%)	
Vitiligo localization				<0.001
Face	5 (9.6%)	0 (0%)	5 (26%)	
Trunk	1 (1.9%)	0 (0%)	1 (5.3%)	
Extremity	2 (3.8%)	0 (0%)	2 (11%)	
Genital	0 (0%)	0 (0%)	0 (0%)	
Multiple	11 (21%)	0 (0%)	11 (58%)	

Table 2. Dermatoscopic Features of HN Lesions by Vitiligo Development

/ariable	No Vitiligo			
	Overall (N = 38) ¹	(n = 27)1	Vitiligo (n = 11)1	p-value ²
Halo area (mm²)	108 (17–1,005)	85 (17– 470)	175 (28–1,005)	0.030
Halo color				0.402
White	22 (58%)	16 (59%)	6 (55%)	
Light pink	13 (34%)	8 (30%)	5 (45%)	
Pigmented	3 (7.9%)	3 (11%)	0 (0%)	
Halo symmetry				>0.999
Asymmetric	9 (24%)	6 (22%)	3 (27%)	
Symmetric	29 (76%)	21 (78%)	8 (73%)	
Global pattern				0.997
Homogeneous	11 (29%)	8 (30%)	3 (27%)	
Globular	15 (39%)	11 (41%)	4 (36%)	
Reticular	3 (7.9%)	2 (7.4%)	1 (9.1%)	
Atypical	3 (7.9%)	2 (7.4%)	1 (9.1%)	
Regressed	6 (16%)	4 (15%)	2 (18%)	
Nevus color	,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,	0.818
None-Regressed	5 (13%)	3 (11%)	2 (18%)	
Brown	30 (79%)	22 (81%)	8 (73%)	
Gray-Black	3 (7.9%)	2 (7.4%)	1 (9.1%)	
Nevus symmetry	5 (1.570)	2 (1.170)	2 (3.2,0)	0.943
Asymmetric	8 (21%)	6 (22%)	2 (18%)	0.0.0
Symmetric	24 (63%)	17 (63%)	7 (64%)	
None–Regressed	6 (16%)	4 (15%)	2 (18%)	
Pigment network	0 (10/0)	4 (1570)	2 (10/0)	0.740
Regular	9 (26%)	6 (25%)	3 (30%)	0.740
Irregular	17 (50%)	13 (54%)	4 (40%)	
Absent	8 (24%)	5 (21%)	3 (30%)	
Regression present	14 (37%)	10 (37%)	4 (36%)	>0.999
Regression features	14 (3770)	10 (3770)	4 (30%)	0.605
None	21 (55%)	14 (52%)	7 (64%)	0.003
Blue-gray area White area	1 (2.6%)	1 (3.7%)	0 (0%)	
Perifollicular	13 (34%)	9 (33%)	4 (36%)	
	3 (7.9%)	3 (11%)	0 (0%)	
pigment loss Vessels				0.170
	0 (240/)	7 (200/)	2 (100/)	0.170
Punctate	9 (24%)	7 (26%)	2 (18%)	
Linear None	10 (26%) 19 (50%)	9 (33%)	1 (9.1%) 8 (73%)	
	19 (50%)	11 (41%)	8 (73%)	>0.999
Lesion count	20 (740)	20 (740/)	0 (720/)	>0.999
Multiple	28 (74%)	20 (74%)	8 (73%)	
Single	10 (26%)	7 (26%)	3 (27%)	0.017
Nevus type	42 (220)	0./200/3	4 (200)	0.817
None–Regressed	12 (32%)	8 (30%)	4 (36%)	
Junctional	9 (24%)	6 (22%)	3 (27%)	
Dermal	7 (18%)	6 (22%)	1 (9.1%)	
Compound	10 (26%)	7 (26%)	3 (27%)	
Median (Min-Max); Wilcoxon rank sum e				

Clinical, dermoscopic, histological, and molecular correlations in anogenital warts

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Clinical, dermoscopic, histological, and molecular correlations in anogenital warts

Introduction & Objectives:

Anogenital warts (AGW) represent the most common sexually transmitted disease. They are caused by well-defined serotypes of Human Papillomavirus (HPV). Our objective was to describe the clinical, histological, dermoscopic, and molecular profiles of AGW and to analyze the correlations between these findings.

Materials & Methods:

We conducted a monocentric, descriptive, and analytical study of 67 clinically diagnosed cases of AGW over a 2-year period (January 2023 – January 2025) in the dermatology department. Each case underwent clinical, dermoscopic, histological, and molecular evaluation. A skin biopsy and molecular typing using the HPV Direct Flow Chip technique (multiplex PCR followed by reverse hybridization) were performed.

Results:

The male-to-female sex ratio was 1.68, with a mean age of 37.8 years. Disease duration varied widely, ranging from 1 week to 35 years. Lesions were exophytic in 50.7% of cases, papular in 44.8%, flat in 4.5%. Dermoscopic examination revealed a mosaic pattern in 40.3% of cases, a fingerlike pattern in 23.9%, a knoblike pattern in 19.4%, a cerebriform pattern in 3%, and a non-specific pattern in 4.5%. A combination of two patterns was observed in 9% of cases. Vascular structures were seen in 83.6% of cases (glomerular in 60.7% and hairpin in 22.9%) Statistically significant associations were found between papular lesions and the mosaic pattern (p < 10^{-3}), as well as between exophytic lesions and the digitiform pattern (p < 10^{-3}). Additionally, the digitiform pattern was significantly associated with hairpin vessels (p < 10^{-3}), and the mosaic pattern with glomerular vessels (p < 10^{-3}).

Molecular typing showed a positivity rate of 85.5%. Low-risk HPV serotypes were found in 83% of cases (HPV 6 in 77.3%, HPV 11 in 32%), while high-risk serotypes were identified in 3.8% of cases (HPV 16 in 3.7%, HPV 18 in 1.8%). A significant correlation was observed between the presence of HPV 6 and koilocytosis (p = 0.003), and between papillomatosis and the fingerlike pattern (p = 0.036).

Conclusion:

Our study highlights the clinical and dermoscopic polymorphism of AGW, which does not appear to be strongly related to HPV serotype. The coexistence of multiple dermoscopic patterns may reflect an evolutionary progression—from early papular lesions with a mosaic pattern and glomerular vessels to more developed fingerlike or knoblike lesions with hairpin vessels. Dermoscopy may also aid in distinguishing AGW from differential diagnoses such as vestibular papulosis and pearly penile papules, which typically exhibit more irregular, tapered projections with separate bases. Additionally, dermoscopy could assist in screening immunocompromised patients and guiding biopsies for early detection of malignant transformation in AGW.

A new dermatoscopic and clinical sign in Vitiligo

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Introduction & Objectives:

Needling is a simple and easily accessible surgical technique used in vitiligo, where a 30 gauge needle is passed repeatedly along the edge of vitiligo lesions, from the normal pigmented borders towards the central depigmented parts thereby resulting in movement of melanocytes and repigmentation of the vitiligo lesions.

Needling may be combined with excimer laser/light or narrowband UVB to speed up the process of repigmentation.

Needling can also be used to fill in areas that have achieved incomplete repigmentation following surgical procedures like non-cultured melanocyte grafting.

Needling is now regarded as a useful adjunctive surgical treatment for vitiligo, along with other established treatment modalities.

When the technique is combined with excimer laser/light, a question often arises about which technique is actually producing the repigmentation - the needling or the eczema laser/light.

Materials & Methods:

Patients with vitiligo who had needling in combination with excimer light were examined with the dermatoscope at intervals to determine the degree and nature of repigmentation. In some of the patients, excimer light was used on two lesions whereas needling was performed on only one. The edges of the lesions treated with needling were compared with the edges where only excimer laser/light was used.

Results:

Following needling, an early dermatoscopic sign is the appearance of triangular projections of pigmentation with the apices of the triangles pointing towards the vitiligo area and the bases situated along the pigmented borders. Such a dermatoscopic sign has not been described previously and may conveniently be termed the Triangular Sign.

Such triangular areas of repigmentation are not seen where excimer laser/light is used without needling. The pigmentation pattern following the use of excimer laser/light is usually that of circular areas of perifollicular pigmentation. Even when marginal repigmentation is observed in lesions treated with excimer laser/light, the shape of the repigmented macules is rounded rather that triangular.

The triangles may even be visible to the naked eye with careful clinical examination of the edges of needled vitiligo lesions, corresponding to the dermatoscopic appearance.

Conclusion:

Dermoscopy may provide early evidence of repigmentation following needling of vitiligo lesions. The Triangular Sign provides evidence that the needling is contributing positively to the repigmentation process and encourages

the continuation of this modality of treatment.

Trichoscopic Patterns in Eyebrow Alopecia Areata: A Prospective Observational Study

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Introduction & Objectives: Alopecia areata is an autoimmune disease that can affect hair follicles on the scalp and all other hairy regions. Eyebrow involvement can be an initial symptom and may persist in isolation. The role of trichoscopy continues to expand to support the diagnosis of eyebrow alopecia and therapeutic monitoring.

Materials & Methods: This is a descriptive prospective study of cases of eyebrow alopecia collected in the dermatology department of Sfax between January 2024 and December 2024. The Dermlite IV dermoscope was used with non-polarized light.

Results: We collected data from 15 patients with a female-to-male ratio of 1.14 and an average age of 36.3 years. Eyebrow involvement was unilateral in 33.3% of cases and isolated in 26.6% of cases. Associated scalp involvement was found in 11 cases. The clinical presentation ranged from subtle thinning to clearly demarcated patches of hair loss, often without erythema or visible inflammation.

Under trichoscopy, black dots were the most frequent finding (60% of cases), indicating cadaverized hairs within follicular openings, a hallmark of active disease. Yellow dots and exclamation mark hairs were observed in 40% of patients. Yellow dots reflect dilated follicular infundibula filled with keratin and sebum, while exclamation mark hairs indicate rapid follicular miniaturization and are considered highly specific for alopecia areata. Vellus hairs—suggestive of regrowth—and the flag sign were each noted in 33.3% of cases. Tapered hairs, another marker of disease activity, were found in 20%.

Interestingly, in two female patients with isolated eyebrow alopecia, the flag sign was the only trichoscopic feature. This sign, characterized by alternating bands of hypopigmentation and hyperpigmentation within the same hair shaft, reflects interrupted melanogenesis during regrowth. Its presence in isolated cases highlights its potential as an early marker of disease, even when classic signs are absent.

Conclusion: Eyebrow hairs are biologically distinct from scalp hairs: they are thicker, shorter, and have a significantly shorter anagen phase, with only about 10% of follicles actively growing at any given time. These differences likely account for the relative paucity and subtlety of trichoscopic findings in eyebrow alopecia areata compared to scalp involvement.

Despite these limitations, several dermoscopic patterns remain diagnostically valuable. Black dots, yellow dots, and exclamation mark hairs are among the most reliable indicators of active disease. The flag sign, although less frequently described, may be particularly useful in early or isolated eyebrow presentations, where traditional features are lacking.

Incorporating trichoscopy into routine evaluation of eyebrow alopecia enhances diagnostic accuracy, aids in assessing disease activity, and may help guide therapeutic decisions. Further studies with larger cohorts and comparative analyses are needed to validate the specificity of trichoscopic signs in this unique anatomical location.

Syringotropic Mycosis Fungoides: A Unique Case with Dermoscopic Insights

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Introduction & Objectives:

Syringotropic Mycosis Fungoides (STMF) is a rare variant of Mycosis Fungoides (MF), characterized by significant involvement of eccrine structures. STMF typically presents as red, skin-colored, or brown papules, patches, scaly plaques, and nodules, often accompanied by lichenification, and more commonly affects sun-protected areas. Associated symptoms include pruritus, hair loss, impaired heat tolerance, and sweating abnormalities. While histopathology remains the gold standard for diagnosing both MF and STMF, dermoscopy may provide valuable insights in distinguishing STMF from other follicular dermatoses. However, dermoscopic findings in STMF are rarely described, with only two published case reports. This case report highlights a unique clinical and dermoscopic presentation of STMF, with the aim of enhancing the understanding of this rare condition and exploring the potential role of dermoscopy in its diagnosis.

Materials & Methods:

We present the case of an adult woman with a chronic folliculocentric dermatosis, where dermoscopic examinations were conducted to enhance the diagnostic approach.

Results:

A 40-year-old woman, with a two-year history of folliculotropic Mycosis Fungoides (FMF) confirmed by histology, had previously undergone 20 sessions of PUVA therapy followed by 30 sessions of UVB phototherapy, resulting in significant clinical improvement. Initially, the clinical presentation included highly pruritic, pigmented plaques with overlying erythematous follicular papules located on the trunk, accompanied by xerosis and axillary hair loss. Following phototherapy, the patient presented with post-inflammatory pigmented macules and multiple scattered yellowish-brown papules resembling milia-like cysts on her back and flanks, resting on otherwise normal skin. Dermoscopy of these lesions revealed a yellow-orange center surrounded by an erythematous-pigmented halo, with focal follicular arrangement. UV dermoscopy highlighted focal follicular plugging. These clinical and dermoscopic findings were consistent with the syringotropic variant of MF.

Conclusion:

Dermoscopy findings in STMF are largely consistent with those observed in FMF. Key features shared by both conditions include the absence of hair, dilated follicles with an orange hue, comedo-like openings, and follicular plugging. Additionally, interconnected structureless areas may be observed. These dermoscopic features, particularly the orange hue and follicular plugging, correlate with the dense, diffuse, and perifollicular lymphocytic infiltrate seen in histopathological analysis.

Due to its rarity and diverse clinical presentation, STMF can easily be misdiagnosed as other conditions, including follicular psoriasis, follicular eczema, pityriasis rubra pilaris, and lichen spinulosus. Recognizing the dermoscopic features of STMF is essential for accurate diagnosis and can guide biopsy decisions. However, further studies with larger patient cohorts and at various disease stages are needed to better understand these dermoscopic features and their diagnostic significance.

Use of dermoscopy in dark-skinned patients: Practices, challenges, and diagnostic value

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Introduction & Objectives:

Dermoscopy has revolutionized clinical dermatology by improving the early detection of both pigmented and non-pigmented lesions. While its usefulness is well established for lighter skin types, its application in darker skin phototypes (Fitzpatrick IV to VI) remains underexplored. Classic dermoscopic structures are often harder to identify in dark skin due to the intense melanin background, reduced vascular visibility, and variable pigment patterns.

This study aims to examine dermatologists' practices regarding dermoscopy in dark skin, the challenges they encounter, and their expectations for training and diagnostic standardization.

Materials & Methods:

This is a descriptive cross-sectional study conducted between February and May 2025 using an online questionnaire sent to hospital-based, public and private dermatologists. It assessed dermoscopy practices, common indications, interpretation challenges and suggestions for improvement. Data were analyzed using SPSS 21.

Results:

The study included 64 dermatologists, most of whom worked in hospital settings (86%) with 1 to 4 years of professional experience. Among them, 20% to 50% of their patients had dark skin phototypes. Only 9% had formal dermoscopy certification while 85% learned it through self-study. Most (79.4%) used dermoscopy regularly in their consultations but 35.9% used it less frequently, indicating inconsistency in its use.

Dermoscopy was mainly used for evaluating pigmented lesions (93.8%), skin cancer screening (71.9%), and inflammatory dermatoses (53.1%), while its use for cutaneous infections (18%), scalp disorders (17.6%) and nail conditions (16.8%) was less common.

A large majority (93.8%) of dermatologists recognized that dark skin has specific dermoscopic features, including a more prominent pigment network (90.6%), hyperpigmented follicular openings (89.2%), reduced visibility of vascular structures (73%) and greater difficulty distinguishing benign pigmented lesions from melanomas (60.9%). Additionally, 55.3% reported confusion between ethnic longitudinal melanonychia and subungual melanoma, and 50.1% noted insufficient contrast in dermoscopic structures, making interpretation harder.

Many dermatologists (82.8%) felt that scientific literature on dermoscopy for dark skin is limited, leading to frequent misinterpretations. Nearly 70% reported high false positive rates and 59.4% noted false negatives when diagnosing dark skin. Melanomas were the most challenging to interpret (86%), followed by post-inflammatory hyperpigmentation (67.5%), vascular lesions (56%) and inflammatory dermatoses (49%).

Most respondents (90.6%) agreed on the need for specialized training in dermoscopy for dark skin, with all participants recognizing the benefits of dermoscopy for improving diagnosis, clinician confidence, and patient communication. While 71.9% were interested in more resources on dermoscopy in dark skin, 92.2% felt this topic

was underrepresented in conferences and publications.

Conclusion:

This study reveals uneven use of dermoscopy for dark skin, mainly due to limited training and lack of adapted resources. While many dermatologists recognize unique dermoscopic features in darker phototypes, these differences often hinder accurate diagnosis. Despite challenges, dermoscopy is seen as a valuable tool with strong support for more inclusive training and reference materials to improve care for patients with dark skin.

A case of DPN confused with melanoma: clinical, dermoscopic and pathological evaluation of MELTUMP

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Introduction & Objectives: The majority of melanocytic lesions can be diagnosed clinically, dermatoscopically and histopathologically. However, dermatopathologists and clinics may encounter tumors that cannot be classified as benign or malignant. A term that is accepted as accessible for all these lesions is 'melanocytic tumor of uncertain malignancy' (MelTUMP)

Deep penetrating nevus (DPN) is a pigmented melanocytic lesion that is usually <1 cm in diameter between the second and third rows and deeply infiltrates the reticular dermis, and usually shows a female predominance. It is most commonly seen on the head and neck skin, as well as the extremities and trunk. Histopathology showed typical wedge-shaped architecture with spindle and epithelioid melanocytes

Materials & Methods: A 38-year-old female patient presented with a lesion on the anterior chest that had been growing for 1 year. A 3 mm well-circumscribed, dark pigmented papule was noted.

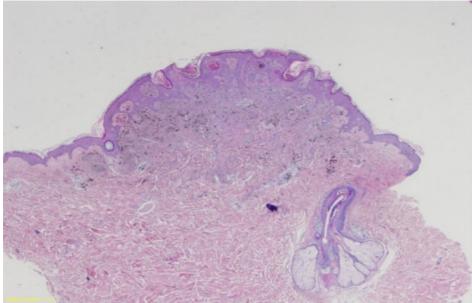
Dermoscopy showed homogeneous dark pigmentation, central blue-black structure, and annular white structures.

A 5mm punch bx was taken from the patient. Pathology result was evaluated in the category of 'Deep Penetrating Nevus (DPN), findings compatible with MELTUMP (Melanocytic Tumor of Uncertain Malignant Potential). Immunohistochemistry was reported as 'Melan-A(+), HMB45(+), P16 (half +), KI67 (low)'.

Re-excision was performed for the patient.

Results: MELTUMPs are lesions that carry the risk of both undertreatment and overtreatment due to their diagnostic uncertainty. Correctly distinguishing these lesions is crucial for proper clinical management, as underdiagnosis may lead to delayed treatment of malignant lesions, while overdiagnosis may lead to unnecessary surgical procedures. This case demonstrates that DPN can be confused with melanoma clinically and dermoscopically, and that correct diagnosis is only possible with histopathological evaluation. Therefore, a conservative but careful approach is important to avoid unnecessary surgery and optimize patient management. We also want to point out the annular white structures, which to our knowledge have not been previously mentioned in dermoscopy





Conclusion: The MelTUMP category can be easily adjusted for intermediate melanocytic tumors with uncertain biological behavior and in the diagnostic gray area.

Varey et al. stated that comprehensive excision margin data are rare and have low reliability for guiding treatment decisions. MelTUMPs are generally well-defined both clinically and histologically. Although 5 mm margins aiming for ≥ 2 mm histological clearance are generally sufficient, wider excision may be preferred in select cases. We also performed re-excision to reach a histological data of ≥ 2 mm.

The dermatoscopic features of DPN are not well defined. Robles-Tenorio et al. reported a case of a Fitzpatrick type 5 patient with a rainbow pattern on dermoscopy.

Guadagni et al. reported a case of negative globular structure on homogeneous blue-brown areas. Ferrara et al. They stated that polychromatic dermatoscopic appearance is usually a deep penetrating nevus with histopathological imaging.

In our patient's dermoscopy, annular white structures on homogeneous blue-brown pigmentation were noted. Epidermal hyperplasia and acanthotic epidermis were noted in the patient's biopsy. Errichetti et al. supported this by hiding white in epidermal hyperplasia in their dermoscopy standardization.

Analysing scalp pemphigus through trichoscopy: a non-invasive diagnostic tool

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Introduction & Objectives:

Pemphigus is an intraepidermal autoimmune bullous dermatosis that can affect the skin and/or mucous membranes. Trichoscopy is a non-invasive tool that can assist in clinical diagnosis, especially in cases where patients have isolated scalp lesions. We conducted this study to investigate the trichoscopic characteristics of scalp lesions in pemphigus.

Materials & Methods:

This is a prospective descriptive study involving 62 patients with a confirmed diagnosis of pemphigus, conducted over an 11month period from June 2024 to April 2025. Trichoscopic examination of the scalp lesions was performed using a DL5 or DL4 dermoscope, with two dermatologists independently analyzing the trichoscopic images of each patient. The results were subsequently cross-verified by both examiners simultaneously. The data was entered and analyzed using SPSS software, and the Student's t-test was employed to assess the statistical significance of differences between variables. A p-value of less than 0.05 was considered statistically significant.

Results:

The mean age of the patients was 52 years, and 76.4% of the cases were female. Thirty-eight patients were diagnosed with superficial pemphigus (SP), and 24 patients with pemphigus vulgaris (PV). Clinical symptoms were reported in 61% of the patients, including pruritus (58%), hair loss (21.5%), and trichodynia (12.8%). The most frequently observed trichoscopic findings included erythema (65.6%), whitish scaling (54.8%), follicular hyperkeratosis (48.2%), hemorrhagic yellow crusts (38.7%), vascular structures (39.2%), yellowish scaling (37.2%), and peripilar casts (17.4%).In PV, hemorrhagic yellow crusts, polymorphic vessels, and extravasations were the most commonly observed features. In contrast, SP was characterized by erythema, whitish scales, follicular hyperkeratosis, and peripilar casts. The majority of patients had a moderate PDAI (Pemphigus Disease Area Index) score. Hemorrhagic yellow crusts, yellowish scales, extravasations, peripilar casts, and polymorphic vessels were associated with higher PDAI scores.

Conclusion:

Pemphigus is an autoimmune blistering dermatosis that can affect both the skin and mucous membranes. The diagnosis is confirmed through histopathological examination and direct immunofluorescence. Trichoscopy has emerged as a valuable non-invasive tool in the clinical assessment and differentiation between pemphigus vulgaris (PV) and superficial pemphigus (SP). Univariate and multivariate studies have shown that vascular extravasation is the most frequently observed dermoscopic feature in PV, followed by hemorrhagic yellow crusts and polymorphic vessels. In SP, the most commonly observed dermoscopic findings include whitish scales, perifollicular hyperkeratosis, peripilar casts, and dotted vessels. Hemorrhagic yellow crusts, polymorphic vessels, and whitish polygonal structures were associated with higher Pemphigus Disease Area Index (PDAI) scores.

Therefore, trichoscopy constitutes a non-invasive diagnostic approach that facilitates the distinction between pemphigus subtypes by identifying characteristic features indicative of the level of epidermal involvement.

Trichoscopy can help in the clinical diagnosis of scalp lesions in pemphigus but should be supplemented by additional diagnostic modalities such as biopsy and direct immunofluorescence for definitive diagnosis.

Beauty and the Biopsy: The Role of Different Industries in Skin Health Surveillance

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Introduction & Objectives:

In the UK, over 16,000 cases of melanoma are diagnosed each year, and incidence rates have more than doubled over the past 30 years. Head and neck melanomas pose a particular diagnostic challenge, as these areas are difficult for individuals to self-examine. However, non-medical professionals—especially those in hair and beauty services—regularly view these regions from ideal vantage points, often seeing clients every 4 to 6 weeks. Despite their strategic position for early detection, a lack of formal education limits their ability to recognise and refer suspicious lesions.

Materials & Methods:

This study evaluates data from SKCIN's MASCED (Melanoma and Skin Cancer Early Detection) training—an accredited, online educational program designed for non-medical professionals, especially in the beauty, hair and wellness sectors. Participants self-reported demographic data (age, profession, employment status) and completed baseline quizzes assessing skin cancer knowledge. The course includes lesion recognition training using both standard and dermatoscopic images, along with guidance on client referral. A review of 16 studies on non-medical professionals—such as hairdressers, massage therapists, and aestheticians—highlighted significant knowledge gaps. Roosta et al. found that while 70% would recommend clients seek medical advice, only 12% felt confident identifying melanomas.

Results:

From participant data, 43.1% of learners were aged 31–45, with 42.2% aged 45+, showing broad engagement across mid-to-late career professionals. The majority (58%) were self-employed. Most participants came from the hair, beauty or skincare industries, with additional uptake from podiatrists (28.8%), dental professionals and complementary therapists. Engagement was high, with 99.5% of participants stating they would recommend the accreditation, and 85% giving it a 5-star rating. These figures suggest that the training is both accessible and valued. Post-training feedback also revealed increased confidence in recognizing suspicious lesions and referring clients for medical review.

Conclusion:

The MASCED training program effectively empowers non-medical professionals in early skin cancer detection. With over 10,000 accredited learners to date, including individuals from across the hair, beauty and allied health sectors, the program demonstrates a promising model for expanding public health surveillance. Real-world success stories underscore the importance of incorporating community-based professionals into early detection strategies. This scalable educational intervention not only improves awareness but also fosters a collaborative approach to reducing skin cancer morbidity and mortality.

Dermoscopy as a diagnostic tool for facial angiofibromas in tuberous sclerosis complex

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Introduction & Objectives:

Tuberous sclerosis complex (TSC) is an autosomal dominant genetic disorder. Its diagnosis is generally straightforward and often based on the early identification of characteristic cutaneous and neurological abnormalities during childhood. Facial angiofibromas (FAs) are benign skin tumors observed in approximately 80% of patients with TSC. Clinical differentiation between FAs and other facial tumors can be challenging. Dermoscopy can help in diagnosis and reduce the need for biopsy, thereby minimizing the risk of facial disfigurement. We report the dermoscopic characteristics of FAs in six patients with confirmed TSC.

Materials & Methods:

This was a prospective descriptive study involving six patients with a confirmed diagnosis of TSC, based on the criteria established by the US National Tuberous Sclerosis Alliance. Dermoscopic evaluation of facial lesions was performed using a DL4 or DL5 dermoscope. Two dermatologists independently examined the dermoscopic images of each patient, and findings were later jointly reviewed to reach a consensus.

Results:

Six patients consulted for facial lesions and were diagnosed with TSC according to the established criteria. The mean age of the patients was 23.5 years. All patients had firm, well-defined, red-brown papules located on the nose, cheeks, and chin areas. Dermoscopic characteristics were consistent across all cases, showing whitish-yellow dots or globules on a brown to reddish-brown background, along with comma-shaped vessels. In some areas, irregularly distributed brown pigmented dots or blotches were observed.

Conclusion:

Tuberous sclerosis complex is a type of phakomatoses characterized by cutaneous, cardiac, cerebral, and renal manifestations. Early diagnosis is crucial to reduce morbidity and mortality. Timely identification of facial angiofibromas is important, as they may be the first visible sign of undiagnosed TSC. Dermoscopy can eliminate the need for biopsy in many cases. To date, reported dermoscopic characterisites of FAs associated with TSC include a reddish-brown background, whitish globules, comma-shaped and/or hairpin vessels, as well as gray-brown dots and surface crypts. The whitish globules are thought to correspond to perifollicular fibrosis, while the reddish-brown background likely reflects dermal vascular proliferation and melanocytic hyperplasia.

Dermoscopy is a simple, non-invasive, and accessible diagnostic tool that enables the clinical recognition of facial angiofibromas in patients with TSC.

Dermatophytic Colonization of Umbilical Seborrheic Keratosis: An Unusual Finding Under Wood's Lamp

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Introduction:

Seborrheic keratosis (SK) is a common benign skin tumor that typically occurs in elderly individuals, with a predilection for the trunk, face, and scalp. Atypical localizations, such as the umbilical region, are rare and may pose diagnostic challenges. Moreover, fungal colonization of SK is an unusual phenomenon, infrequently documented in the literature.

Observation:

We report the case of a 55-year-old woman with a medical history of type 2 diabetes treated with oral antidiabetics, who presented with a pigmented lesion that had been evolving over the course of approximately one year, located in the umbilical area.

Clinical examination revealed a 2×2 cm pedunculated, dark-colored tumor, painless, and mildly pruritic. Conventional dermoscopy showed a typical keratotic pattern with the presence of comedo-like openings and milia-like cysts, highly suggestive of seborrheic keratosis.

However, examination under Wood's lamp unexpectedly revealed green fluorescence within the pigmented lesion, suggesting an associated fungal involvement. In addition, erythematous, circinate, and pruritic lesions were noted surrounding the umbilicus.

An excisional biopsy was performed, confirming the histological diagnosis of seborrheic keratosis. Concurrently, a mycological sample collected from the umbilical region identified Microsporum canis as the causative agent.

Topical antifungal treatment was initiated, leading to significant clinical improvement.

Discussion:

Seborrheic keratosis is a frequently encountered benign tumor, usually easy to recognize through clinical and dermoscopic features. However, when it occurs in unusual locations such as the umbilicus, it may present as a diagnostic challenge.

The umbilicus is a unique embryological remnant and can host a variety of lesions, both benign (warts, infectious dermatoses) and malignant. Among malignant entities, Sister Mary Joseph's nodule—a metastatic umbilical lesion secondary to intra-abdominal cancer in most cases—must always be considered when faced with a firm, painful, or ulcerated mass in that location. Similarly, certain forms of melanoma may clinically mimic pigmented SK, especially in the absence of dermoscopic analysis.

In this case, Wood's lamp examination was pivotal. The discovery of green fluorescence indicated concomitant fungal infection, which was confirmed by the identification of Microsporum canis in the mycological culture. The favorable response to topical antifungal therapy reinforced the diagnosis. Although rarely reported, fungal colonization of SK remains plausible, particularly in immunocompromised or diabetic patients.

Other differential diagnoses of umbilical pigmented or erythematous lesions include: verrucous nevus, viral wart,

benign adnexal tumor, or even rare malignant adnexal neoplasms.

This case highlights the importance of a thorough diagnostic work-up, including complete clinical examination, dermoscopic imaging, Wood's lamp evaluation, and, when necessary, histopathological analysis. The presence of warning signs (ulceration, rapid growth, bleeding, pain, infiltration) should prompt early diagnostic excision to rule out malignancy.

Conclusion:

This case illustrates a rare presentation of umbilical seborrheic keratosis associated with a fungal infection, revealed by green fluorescence under Wood's lamp. It emphasizes the value of a multimodal diagnostic approach in assessing atypical cutaneous lesions.

Trichoscopy in Frontal Fibrosing Alopecia: A Retrospective Monocentric Study

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Introduction & Objectives:

Frontal fibrosing alopecia (FFA) is a primary cicatricial alopecia (PCA) with increasing incidence, significantly impacting patients'self-esteem. Trichoscopy plays a major role as a non-invasive method in the diagnosis and monitoring of FFA by providing distinct trichoscopic features. This study aims to describe the clinical and trichoscopic characteristics of FFA in a cohort of patients, emphasizing the utility of trichoscopy.

Materials & Methods:

We conducted a retrospective single-center from January 2023 to December 2024. Data were collected from consultation records, and trichoscopic features were assessed using a manual dermoscope and smartphone during initial consultations.

Results:

The study included 12 female patients with a mean age of 48.58 years [30,65]; 66.7% were postmenopausal.

Medical histories revealed associations with lichen planus pigmentosus (16.6%) and alopecia areata (16.6%). Clinically, 83.3% exhibited a receding frontal hairline and eyebrow alopecia.

For the trichoscopic signs, as follicular features, we noted the absence of vellus hair in 8 patients (66,7%), single hair follicle in 10 patients (83,3%), lonely hair in 7 patients (58,3%), absence of follicular openings in 12 patients (100%). Second, in the perifollicular features, we noted scaling and dark halo in 9 patients (75%) and erythema in 8 patients (66,7%). As interfollicular features, scaling was found in 2 patients (16,7%). Ivory areas were noted in 6 patients (50%). In addition, we found violaceous areas in 1 patient (8,3%) and elongated linear blood vessels in another patient (8,3%).

For the eyebrow's trichoscopy, 3 patients (25%) had red dots.

Conclusion:

Trichoscopy proves to be a valuable tool for diagnosing FFA and PCA in general, particularly given recent studies correlating trichoscopic findings with histopathology

Dermoscopic features of eccrine poroma in skin of color

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Introduction:

Eccrine poroma is a relatively rare benign tumor in adults that shares the broad topography of eccrine sweat glands. We aimed to study the dermoscopic characteristics of this tumor.

Materials & Methods:

This is a prospective descriptive study conducted at the dermatology department of Ibn Sina University Hospital in Rabat, including all cases of diagnosed and histologically confirmed poromas over a period of 2 years, from June 2023 to April 2025.

Results:

Thirteen cases were included in this series, comprising 8 men and 5 women (sex ratio: 1.6). The mean age was 63 years with a range from 41 to 95 years. The average size of the lesions was 2.4 cm [1–5 cm] with a mean duration of evolution of 33 months.

The clinical presentation was polymorphic: 11 cases were non-pigmented, including one erythematous-scaly plaque, 4 in the form of erythematous papulo-nodules, and 5 as budding lesions. Only 2 cases were pigmented. The lesions were localized on the cephalic extremity in 6 cases (Face [3 cases], neck [1 case], and 2 scalp). Abdominal localization was noted in 2 cases. 4 poromas were located on the lower limbs (leg [2 cases], feet [2 cases]) and 3 on the upper limb (2 arms and 1 forearm). A history of radiotherapy was associated with a budding form of poroma on the neck.

Dermoscopic characteristics associated with poroma included a vascular pattern surrounded by a whitish halo in 70% of cases (ramified vessels, glomerular, hairpin), the presence of erosion or ulceration in 77% of cases, a peripheral whitish collar in 38% of cases, as well as a milky red globular pattern in 38% of cases. All poromas in our study presented a pinkish-white background on dermoscopy and white-yellowish scales, except for one pigmented poroma which appeared as seborrheic keratosis-like.

Conclusion:

Dermoscopy enables early diagnosis despite the considerable clinical polymorphism. Therefore, one should consider eccrine poroma in any lesion presenting with a vascular and/or globular pattern and resting on a white to pink background.

To study the utility of dermoscopy as a technique in diagnosis of onychomycosis and its correlation with clinical, microscopy, histopathology and fungal culture.

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Introduction & Objectives:

Onychomycosis is a common fungal infection of nail which can often pose a diagnostic dilemma, as many dermatological disorders present with nail changes. Onychoscopy is a non-invasive tool that can aid in diagnosis.

To study dermoscopic features of onychomycosis and to correlate the findings with clinical, microscopy, histopathology and culture.

Materials & Methods: 65 cases with clinical suspicion of onychomycosis were taken. All patients were clinically evaluated, dermatoscopic pictures using dinolite video dermatoscope were taken. Nail specimens were sent for KOH, HPE-PAS and culture analysis

Results: Out of 65 cases, 37 were male and 28 were female. Most common clinical findings seen were discoloration of nail plate(100%), nail plate thickness(89.2%), nail surface changes(73.8%) and subungual hyperkeratoses(73.8%). Majority of patients presented with distal lateral subungual onychomycosis (60%) followed by total dystrophic (30.8%) and mixed pattern(9.2%). On dermoscopy, leukonychia(73.8%), ruin appearance(73.8%), distal irregular termination(67.7%), jagged edges(66.2%), onycholytic edge(63.1%), lamellar microsplitting(60%) were the most common findings in decreasing order. A significant association was seen between dermoscopic pattern such as brush like transverse leukonychia, distal irregular termination, lamellar microsplitting, ruin appearance, and different clinical types of onychomycosis(p<0.05). Out of 65, HPE-PAS was positive in 44, KOH in 39 and culture in 24 patients. *Trichophyton* species were isolated in 20 out of 24 culture positive patients. Most common dermoscopic features seen in PAS positive patients were yellow discoloration(77.3%) and ruin appearance(75%), in KOH positive also ruin appearance(68.4%) and yellow discoloration(65.8%), in culture positive – onycholytic edge(66.7%). Yellow discoloration and ruin appearance were the two most sensitive dermoscopic features seen.

Conclusion: Onychoscopy is a sensitive, rapid and non-invasive method that can aid in early diagnosis of onychomycosis.