Abstract N°: ID-222

Topic: Dermoscopy

Real-World Evaluation of GPT-4 Turbo Vision for Dermoscopic Skin Cancer Detection

Paula Ďuríková*[1]

[1]Faculty of Medicine, Comenius University in Bratislava, Clinic of Dermatovenerology, Faculty of Medicine, Comenius University in Bratislava, and University Hospital Bratislava., Bratislava, Slovakia

Introduction

Generative artificial intelligence (AI) models, such as ChatGPT, are increasingly being integrated into dermatology for skin cancer detection, despite limited validation. This study simulates real-world primary care workflows to bridge the gap between AI innovation and clinical application. The findings aim to determine whether integrating generative AI into dermatologic triage is feasible, particularly in underserved settings with limited specialist access. This protocol adheres to the latest Standards for Reporting Diagnostic Accuracy Studies (STARD 2015) and Transparent Reporting of a Multivariable Prediction Model for Individual Prognosis or Diagnosis – Artificial Intelligence Extension (TRIPOD-AI) guidelines.

Materials and Methods

In this retrospective, cross-sectional diagnostic accuracy study, 750 prospectively curated dermoscopic images (533 benign, 217 malignant/precancerous) from validated repositories (International Skin Imaging Collaboration Archive, DermNet New Zealand, dermatology textbooks) were analyzed. Lesions spanned melanocytic, non-melanocytic, keratinocyte-derived, and vascular tumors, reflecting real-world diagnostic diversity. GPT-4 Turbo with Vision (OpenAI) provided diagnoses via standardized, clinician-mimicking prompts without clinical metadata. The reference standard consists of histopathologically or expert-confirmed diagnoses. Primary outcome: overall diagnostic accuracy. Secondary outcomes: diagnostic certainty (re-prompting frequency, unclassifiable responses), lesion-specific sensitivity/specificity, triage performance (benign, precancerous, malignant), explainability, and management suggestions.

Results

GPT-4 Turbo with Vision demonstrated an overall diagnostic accuracy of 37.6% (282/750; 95% CI 34.1–41.1) across eight lesion categories. Sensitivity varied widely: highest for melanoma (0.64, 95% CI 0.50–0.76) and lowest for actinic keratosis (0.07, 95% CI 0.02–0.18). Broad specificity ranged from 0.85 (nevi) to 0.98 (SCC/actinic keratosis). In mimic-specific comparisons, specificity was 0.80 for melanoma vs. atypical nevi and 0.86 for SCC vs. actinic keratosis. Cohen's kappa showed moderate agreement for nevi ($\kappa=0.45$) and BCC ($\kappa=0.36$) but minimal concordance for SCC/actinic keratosis ($\kappa\leq0.17$). The model required follow-up reprompting in 32 cases (4.3%, 95% CI 3.0–5.9), with no unclassifiable images (0·0%, 95% CI 0·0–0·5).For triage classification (benign/precancerous/malignant), accuracy was 48.8% (366/750; 95% CI 45.2–52.4), with malignant lesions showing the highest sensitivity (0.77, 95% CI 0.70–0.83) and precancerous lesions the lowest (0.11, 95% CI 0.07–0.18). Management recommendations aligned with reference standards in 27.7% (208/750; 95% CI 24.8–30.9) of cases. Explainability analysis revealed a mean of 3.17 correctly identified dermoscopic features per lesion (95% CI 3.08–3.25), with melanocytic nevi (3.82) and melanoma (3.76) achieving the highest feature-level accuracy.

Conclusions

This study highlights significant limitations in the diagnostic performance of GPT-4 Turbo with Vision for dermoscopic image analysis, with an overall accuracy of 37.6% across benign, precancerous, and malignant lesions. While the model shows some ability to detect melanoma (sensitivity 0.64), its low sensitivity for actinic keratosis (0.07) and inconsistent triage accuracy (48.8%) underscore key areas for improvement. The suboptimal performance likely reflects the model's lack of specialized training in dermoscopy, which relies on pattern recognition distinct from general image interpretation. These findings suggest that, in its current form, this AI tool is not yet reliable for clinical decision support. Importantly, the protocol is designed not only to quantify performance at the time of evaluation, but also to serve as a benchmark substrate for longitudinal monitoring of generative AI evolution and stability, facilitating future comparative syntheses across further model iterations that can support evidence-based forecasting.

Abstract N°: ID-399

Topic: Dermoscopy

When “Dirty Skin” Is Not Dirt: A Case Report of Terra Firma-Forme Dermatosis Revealed by Dermoscopy and UV-Enhanced Dermoscopy Examination

Mikołaj Łanocha*[1], Anna Tekielak[1], Stanisław Anczyk[1], Beata Bergler-Czop[1]

[1]Medical University Of Silesia, Katowice, Poland

Introduction

Terra firma-forme dermatosis (TFFD) is a benign yet frequently underrecognized dermatological condition first described by Duncan in 1987. The name originates from Latin and translates to “dry land,” reflecting the characteristic morphology of the lesions. TFFD presents as asymptomatic, brown to black, dirt-like patches or plaques that cannot be removed with routine washing using soap and water. The exact pathogenesis remains unknown; however, abnormal or delayed keratinocyte maturation leading to retention of keratin, sebum, and exogenous debris within a thickened stratum corneum has been proposed. TFFD may occur at any age and affect any anatomical site, although it predominantly affects children and young adults, most commonly involving the trunk, extremities, and neck. Atopic dermatitis is the most frequently reported associated condition. Due to its benign nature and resemblance to poor hygiene or other pigmentary disorders, TFFD is often misdiagnosed, leading to unnecessary diagnostic procedures or ineffective treatments. The objective of this report is to highlight the clinical and dermoscopic and UV-enhanced dermoscopic features of TFFD and to emphasize its simple diagnostic approach.

Materials and Methods

A 47-year-old man presented to the dermatology clinic with symptoms of allergic contact dermatitis affecting the skin of the hands. The patient was employed at a wastewater treatment facility. During a comprehensive full-body skin examination, an asymptomatic, irregularly demarcated area composed of rough, hyperkeratotic, brown papules coalescing into plaques was incidentally observed on the right knee. The lesions closely resembled adherent dirt and had been present for several months according to the patient, despite normal personal hygiene habits. Dermoscopic examination revealed compact, polygonal brown clods grouped in a mosaic pattern. Additional examination using UV-enhanced dermoscopy demonstrated bright blue fluorescence within the structureless areas, suggesting the presence of compacted keratin and retained material within the stratum corneum.

Results

As an initial diagnostic step, an attempt was made to remove the lesions using water and soap, which proved ineffective. Subsequently, a diagnostic and therapeutic alcohol swab test was performed using 70% isopropyl alcohol. Gentle rubbing resulted in immediate and complete removal of the lesions, confirming the diagnosis of terra firma–forme dermatosis. Post-cleansing dermoscopic examination revealed resolution of the previously observed structureless areas, with only discrete punctate petechiae visible at the sites of prior lesions, likely caused by mechanical friction during alcohol application. No recurrence of the lesions was observed during short-term follow-up.

Conclusions

Terra firma–forme dermatosis is a common but underrecognized condition that should be considered in the differential diagnosis of dirt-like or hyperpigmented skin lesions resistant to conventional washing. Such lesions may be distressing

for patients and may lead to excessive or aggressive hygiene practices that are ineffective and potentially harmful. Unlike dermatosis neglecta, TFFD does not respond to standard cleansing with soap and water but resolves promptly with alcohol application. The differential diagnosis includes dermatosis neglecta, acanthosis nigricans, tinea versicolor, confluent and reticulated papillomatosis, and other causes of cutaneous hyperpigmentation. Awareness of this entity and the use of simple bedside diagnostic tests can prevent unnecessary investigations and treatments.

Abstract N°: ID-444

Topic: Dermoscopy

Dermoscopy of Basal Cell Carcinoma in Skin Phototypes III, IV & V

Rashmi Mittal (Jindal)*[1, 1]

[1]Himalayan Institute of Medical Sciences, Dermatology, Dehradun, India

Introduction
Basal cell carcinoma (BCC) is the most common cutaneous malignancy worldwide, and its diagnosis has been significantly enhanced by dermoscopy, which allows recognition of characteristic vascular, pigmented, and non-vascular non-pigmented structures. Dermoscopic criteria for BCC—such as arborizing vessels, blue-grey ovoid nests, maple leaf–like areas, and short telangiectatic vessels—have been extensively described and validated in Caucasian populations. However, BCC in individuals with darker skin phototypes often presents with greater clinical pigmentation, which may alter or obscure classical dermoscopic patterns. In the Indian population, where skin phototypes III–V predominate, literature on dermoscopic morphology of BCC remains sparse. Understanding population-specific dermoscopic features is essential to improve early diagnosis, reduce diagnostic delays, and guide appropriate management in this demographic.

Materials and Methods
This study aimed to describe and systematically analyze the dermoscopic characteristics of BCC in Indian patients with skin phototypes III, IV, and V, and to compare the observed patterns across different clinical subtypes of BCC.

Results
This retrospective observational study included all biopsy-proven cases of BCC diagnosed at between June 2020 and June 2024. Demographic data, clinical details, and archived dermoscopic images were retrieved from institutional records. Dermoscopic images were reviewed for the presence of predefined vascular, pigmented, and non-pigmented structures, including arborizing vessels, short telangiectatic vessels, maple leaf–like areas, blue-grey dots, globules, and ovoid nests. Lesions were categorized clinically into nodulo-ulcerative, superficial, and morpheiform subtypes. Statistical analysis was performed to evaluate the distribution of dermoscopic features across subtypes.

Conclusions
A total of 40 patients (28 women and 12 men) with 50 BCC lesions fulfilled the inclusion criteria. The mean age was 56.8 ± 11.5 years. Skin phototype III was observed in 21 patients, phototype IV in 14, and phototype V in five patients. The most frequent clinical subtype was nodulo-ulcerative BCC (42/50 lesions), followed by superficial BCC (7/50 lesions); one lesion demonstrated a morpheiform pattern.

Clinically evident pigmentation was present in 45 lesions (90%), underscoring the pigmented nature of BCC in darker skin phototypes. Arborizing vessels and short telangiectatic vessels were each identified in 58% of lesions. All superficial BCC lesions demonstrated short telangiectatic vessels, which showed a statistically significant association when compared with nodulo-ulcerative BCC. Maple leaf–like areas were observed in 42% of lesions, without a significant difference between superficial and nodulo-ulcerative subtypes.

Pigmented dermoscopic structures were prominent. Blue-grey dots were present in 72% of lesions, while blue-grey globules and ovoid nests were each identified in approximately 53% of lesions. Blue-grey ovoid nests were markedly

more frequent in nodulo-ulcerative BCC (75%) than in superficial BCC (~20%), suggesting their utility in subtype differentiation.
The principal limitation of this study is the absence of direct one-to-one histopathological correlation with individual dermoscopic features, which restricts precise structure–pathology mapping.

Abstract N°: ID-520

Topic: Dermoscopy

A Cross-sectional Study of the Dermoscopic Attributes of Darier Disease

Nisim Asayag*[1, 1], Alon Scope[2], Roni Dodiuk Gad[1]

[1]Technion Israel Institute of Technology, Haifa, Israel
[2]Tel Aviv University, Tel Aviv, Israel

Introduction

Introduction: Darier disease ('DD') is a rare autosomal dominant disorder characterized by acantholysis and abnormal keratinization affecting the skin, nails, and mucosa. While dermoscopy may aid the bedside diagnosis of inflammatory dermatoses ('inflammoscopy'), there is a lack of systematic dermoscopic characterization of DD lesions. To address this gap, the study aims to describe the dermoscopic features of the spectrum of DD lesions.

Materials and Methods

Materials and Methods: Patients with confirmed diagnosis of DD were enrolled without age or gender restrictions. Representative lesions from pre-defined anatomic sectors including head and neck, trunk, extremities, acral regions and nails were imaged clinically and dermoscopically via non-contact polarized dermoscopy, contact polarized dermoscopy, and contact non-polarized dermoscopy. Lesions were analyzed using inflammoscopy criteria (scale, vascular patterns, color, follicular changes), alongside DD-specific and novel dermoscopic features. Descriptive statistics were used via analysis performed with SAS v9.4.

Results

Results: Twenty-six patients were included, 61.5% female, mean age 46 years, with 53.8% having mild disease severity. A total of 379 lesions were analyzed. The most common anatomic sites involved were acral regions (39.5%) and trunk (38%). Clinically, 89.2% of lesions were classified as classic type, with keratotic papules (25.3%) and erosive papules (21.1%) predominating. Dermoscopically, erosions (37.7%) and scales (29.0%) were the most frequent findings. Of 128 erosive lesions, 29.7% exhibited a characteristic star-like configuration, 21.1% were surrounded by a white rim and 31.3% showed scale. The leading vascular pattern seen was dotted vessels (28.5%), and the most frequent feature combination was erosions with vessels (25.3%). White circles were observed in 8.7% of lesions, primarily on the trunk and ears. There was no significant difference in frequency of dermoscopic findings between lesions clinically classified as keratotic papules vs. erosive papules.

Conclusions

Conclusions: Darier disease presents consistent dermoscopic findings across various anatomic sites. Dermoscopic attributes can contribute to the correct clinical classification of lesions. Recognition of the dermoscopic features of DD may aid in disease diagnosis and management.

Abstract N°: ID-820

Topic: Dermoscopy

Beyond Histopathology: Dermoscopic and Clinical Predictors in Spitzoid Lesions

Çınar Yıldız*[1], Nilay Duman[1], Banu Yaman[2], Ece Gökyayla[1], Aslıhan Özel[1], Taner Akalın[2], Işıl Karaarslan[1]

[1]Ege University, Department of Dermatology and Venerology, İzmir, Türkiye
[2]Ege University, Department of Pathology, İzmir, Türkiye

Introduction

Spitzoid lesions comprise a broad spectrum of melanocytic proliferations, including Spitz/Reed nevi, atypical spitzoid tumors (ASTs), and spitzoid melanoma. Classic Spitz nevi (SN) typically exhibit characteristic dermoscopic features, most notably a symmetric structure–color distribution and the starburst pattern. However, a substantial subset of spitzoid lesions—particularly in adults, nodular lesions, and ASTs—deviate from these classic criteria and display atypical or nonspecific dermoscopic appearances. To address this diagnostic challenge, the International Dermoscopy Society proposed the concept of a “suggestive pattern” for the evaluation of spitzoid lesions. While these criteria have been shown to aid in the recognition of SN, their diagnostic performance in distinguishing SN from ASTs remains incompletely defined. In this study, we analyze the clinical, dermoscopic, and demographic characteristics of a large, histopathologically confirmed cohort of spitzoid lesions from a tertiary referral center, with a particular focus on the diagnostic value of dermoscopic patterns and clinical features in differentiating SN from ASTs.

Materials and Methods

This retrospective study included histopathologically confirmed spitzoid lesions diagnosed at a tertiary dermatology center between 2005 and 2025, comprising Spitz/Reed nevi and ASTs; spitzoid melanomas were excluded. Clinical, dermoscopic, and histopathologic data were systematically reviewed, and only lesions with available dermoscopic images were included. Dermoscopic features were independently evaluated by three experienced dermatologists. Group comparisons were conducted using appropriate parametric or non-parametric tests, and multivariable binomial logistic regression analysis was performed to identify independent associations. A two-sided p value < 0.05 was considered statistically significant.

Results

A total of 89 histopathologically confirmed spitzoid lesions were included, comprising 59 Spitz/Reed nevi and 30 ASTs. Patients with ASTs were significantly older and had larger lesions compared with those with SN ($p<0.01$), whereas no significant differences were observed regarding sex, lesion duration, anatomical location, clinical morphology, pigmentation status, or family history ($p>0.05$). Dermoscopic asymmetry was more prevalent in ASTs ($p=0.017$), and overall pattern distribution differed significantly between groups ($p=0.011$). The starburst pattern was exclusively observed in SN, while ASTs predominantly exhibited multicomponent and homogeneous patterns. The presence of a suggestive dermoscopic pattern was strongly associated with a diagnosis of SN (OR=18.3, $p=0.002$) and remained an independent predictor after multivariable adjustment (OR=23.0, $p=0.007$). Suggestive pattern presence was not associated with age, sex, or lesion localization ($p>0.05$), but was significantly more frequent in pigmented compared with non-pigmented lesions ($p=0.039$).

Conclusions

In this 20-year single-center cohort, the presence of a suggestive dermoscopic pattern was independently associated with a diagnosis of SN and remained significant after multivariable adjustment. Consistent with prior reports, Spitz/Reed nevi predominantly exhibited symmetric and starburst patterns, whereas ASTs more frequently demonstrated multicomponent or nonspecific features. Although ASTs occurred at older ages, age was not an independent determinant of suggestive pattern presence, supporting the notion that dermoscopic patterning reflects intrinsic tumor biology rather than patient-related factors. No associations were observed with lesion localization, clinical morphology, or sex. Suggestive dermoscopic patterns were significantly more common in pigmented lesions, likely driven by the predominance of starburst-pattern morphology. Overall, the presence of a suggestive dermoscopic pattern emerges as a robust and practical diagnostic marker favoring SN in the evaluation of spitzoid lesions.

Abstract N°: ID-826

Topic: Dermoscopy

Dermoscopy of non-pigmented skin lesions: Diagnostic approach

Gabriela Mariana Iancu*[1, 2], Andrada Mihaela Ilcus[2]

[1]Facultatea de Medicină, Ulbs, Sibiu, Romania
[2]Spitalul Clinic Județean de Urgență Sibiu, Sibiu, Romania

Introduction

Non-pigmented ("pink") skin lesions represent one of the most challenging areas in dermatology due to their wide clinical spectrum and the absence of melanin-related dermoscopic structures. Unlike pigmented lesions, non-pigmented lesions lack universally accepted standardized dermoscopic criteria, which increases the risk of diagnostic uncertainty. Dermoscopy plays a crucial role in improving diagnostic accuracy, particularly through the assessment of vascular morphology and distribution.

Materials and Methods

This presentation reviews the dermoscopic evaluation of non-pigmented skin lesions using the *Prediction Without Pigment* algorithm by Rosenthal et al. The diagnostic approach is based on a stepwise assessment of ulceration, presence of white structures, and analysis of vascular morphology and vascular patterns. Dermoscopic vascular features are correlated with the most frequent benign and malignant skin tumors, including melanocytic, epithelial and vascular lesions, according to published dermoscopic algorithms and literature data.

Results

Numerous published studies have described the dermoscopic features of non-pigmented lesions. Several authors have proposed structured descriptive models aimed at improving diagnostic accuracy in non-pigmented lesions leading to the development of algorithm-based approaches that rely primarily on vascular morphology and pattern analysis. Rather than being derived from a single dataset, the Prediction Without Pigment algorithm is the result of cumulative evidence from multiple studies.

In the absence of pigmentation, vascular structures become the main diagnostic clue. Ulceration, when present without a clear traumatic cause, strongly suggests malignancy and warrants biopsy. White structures may indicate fibrosis or keratinization, guiding further evaluation.

Distinct vascular morphologies were associated with specific tumor types: dotted vessels with amelanotic melanoma, lacunar vessels with hemangiomas, linear and serpentine vessels with basal cell carcinoma, glomerular and spiral vessels with squamous cell carcinoma, and centered vascular patterns with benign lesions such as dermal nevi or Kaposi sarcoma. The organization and distribution of vascular patterns further contributed to lesion differentiation, improving the identification of malignant non-pigmented tumors.

Conclusions

Dermoscopy is an essential tool in the evaluation of non-pigmented skin lesions, where diagnosis relies predominantly on vascular morphology and pattern analysis. The *Prediction Without Pigment* algorithm provides a practical and structured approach for distinguishing benign from malignant lesions. A systematic dermoscopic assessment can significantly enhance diagnostic confidence, support early detection of skin cancer and guide appropriate management decisions.

Abstract N°: ID-829

Topic: Dermoscopy

Improving dermatology assessments via targeted teledermatology photography training for improved dermoscopic photographs and better assessments

Zakiyyah Bibi*[1], Hon Fung Alvin Leung[2], Daniel Drodge[1], Sophie Constantinou[1], Charankumal Thandi[1], Helen Audrain[1]

[1]North Bristol NHS Trust, Bristol, United Kingdom
[2]Bristol Medical School, Bristol, United Kingdom

Introduction
Teledermatology is widely used for skin lesion assessment, with clinical decision-making dependent on the quality of the referral image. The photograph quality, in particular for dermoscopy can be variable. Excision and management outcomes in teledermatology and face-to-face pathways were evaluated before and after targeted photography training sessions for healthcare assistants who took the photographs.

Materials and Methods
A retrospective review compared two consecutive years (2024–2025), including 100 patients per year (50 teledermatology, 50 face-to-face). Data were collected from the Careflow electronic record system. Outcomes assessed included excision rates, benign excision rates, excision booking pathways, and rates of direct discharge from teledermatology compared with face-to-face clinic review.

Results
In 2024, 14 of 50 (28%) teledermatology patients underwent excision, with 8 of 14 (57.1%) benign. Only 4 of 14 (28.6%) excisions were booked directly, while 10 of 14 (71.4%) were scheduled following a face-to-face review. 44% were discharged directly from teledermatology review.

In the face-to-face group, 19 of 50 (38%) underwent excision; 15 of 19 (78.9%) were benign. 52% were discharged directly from clinic.

In 2025, following targeted photography training, 17 of 50 (34%) teledermatology patients underwent excision, with 14 of 17 (82.4%) excisions identified as benign. Sixteen of these excisions (94.1%) were booked directly via teledermatology; the remaining one excision was performed after face-to-face review and was benign. Discharge rates remained high at 86%, with 14% of patients followed up. 16 of 50 (32%) were discharged directly from teledermatology without follow up clinic.

In the face-to-face group, 13 of 50 (26%) patients underwent excision; 6 of 13 (46.2%) were benign, 64% were discharged, and 36% were followed up. 18 of 50 (36%) were discharged directly from clinic.

Conclusions
Following targeted photography training, teledermatology enabled a greater proportion of excisions to be booked directly without the need for interim face-to-face review. This supports the effectiveness of teledermatology in facilitating confident lesion management, reducing unnecessary clinic attendance between assessment and treatment, and optimising face-to-face capacity when supported by high-quality dermoscopic images.

EADV Symposium 2026 – Athens
07 MAY - 09 MAY 2026
POWERED BY M-ANAGE.COM

EA DV SYMPOSIUM 2026
ATHENS 7 - 9 MAY

Abstract N°: ID-840

Topic: Dermoscopy

Adult xanthogranuloma of the penile glans: a case report.

Jean EL Hajj*[1], Claudia Chidiac[1], Riam Hijazi[1], Maria Theresa Gebrael[1], Roland Tomb[1]

[1]Saint Joseph University-Faculté De Medecine, Dermatology, Beirut, Lebanon

Introduction

Xanthogranuloma is a benign, self-limited proliferative disorder of non-Langerhans cell histiocytes, typically occurring in infancy and childhood. Histologically, it features a dense dermal infiltrate of histiocytes and Touton giant cells. Fat stains are positive, whereas anti-S-100 staining of histiocytes is absent.

Adult xanthogranuloma (AXG) is much less frequent and generally manifests in the late twenties to early thirties, with an equal sex distribution, as solitary papules or nodules on the head, neck, or trunk. Both the adult form and penile localization are exceptionally rare, with only a few cases reported in the literature. Reporting such presentations is important, as rare benign lesions of the genital mucosa may be mistaken for sexually transmitted infections, neoplastic processes, or adnexal tumors. This case highlights the clinical and dermoscopic features of AXG localized to the penile glans.

Materials and Methods

A 29-year-old man presented with a solitary, asymptomatic papule on the penile glans, first noticed two weeks before consultation. The lesion was non-painful, non-pruritic, and the patient denied any history of trauma, discharge, bleeding, or recent sexual activity. His medical, surgical, and family histories were unremarkable, and he reported no systemic symptoms or previous genital dermatoses.

Examination revealed a single, well-circumscribed, yellow-orange papule measuring 4 mm in diameter, located on the glans penis. The lesion was firm, non-infiltrated, and non-tender. Dermoscopy showed a well-circumscribed, structureless yellow-orange area with a smooth, translucent mucosal surface and no evident vascular structures, findings suggestive of a xanthomatous process (Figure 1).

The lesion was excised under local anesthesia for diagnostic and cosmetic purposes. Histopathological analysis confirmed the diagnosis of AXG involving the penile mucosa. No adjunctive treatments were required. Postoperative care consisted of routine local wound care. Postoperative healing was uneventful, and no recurrence was observed after six months of follow-up.

Results

AXG is an uncommon benign proliferative disorder, markedly less frequent than its juvenile counterpart. Genital involvement, particularly of the penile glans, is exceedingly rare and only isolated cases have been reported. Dermoscopy played a key role in narrowing the differential diagnosis in this case. While juvenile xanthogranulomas frequently display dotted, comma-like, or linear vessels due to dermal inflammation and angiogenesis, adult and mucosal xanthogranulomas appear to behave differently. In the few published cases of genital or mucosal xanthogranulomas, vascular patterns are inconsistently described or entirely absent, and reported findings focus predominantly on the homogeneous yellow-orange hue. In our case, dermoscopy demonstrated a structureless yellow-orange area without visible vessels, a pattern likely influenced by the lesion's early developmental stage and its mucosal

site. This lack of vascular structures helped distinguish the lesion from more common penile papules such as condyloma acuminatum and molluscum contagiosum. Nevertheless, histopathological evaluation remains the gold standard for diagnosis.

Conclusions

This case underscores the importance of integrating dermoscopy into the evaluation of solitary penile papules. In an anatomic region where clinical suspicion often prioritizes infectious or neoplastic processes, the recognition of a homogeneous yellow-orange area can orient the clinician toward a benign histiocytic lesion, avoiding unnecessary alarm and guiding appropriate management. Given the extreme rarity of AXG on the penile glans, particularly in adults, this report contributes to the limited dermoscopic documentation of mucosal xanthogranulomas and reinforces the diagnostic utility of dermoscopy in uncommon presentations.

Abstract N°: ID-870

Topic: Dermoscopy

When Benign Mimics Malignant: A Case Report of Cutaneous Melanoacanthoma

Ana-Maria Kašnar*[1], Romana Čeović[1, 2], Daška Štulhofer Buzina[1, 2], Jaka Radoš[1, 2]

[1]University Hospital Center Zagreb, Department of Dermatology and Venereology, Zagreb, Croatia
[2]School of Medicine Zagreb, Zagreb, Croatia

Introduction
Cutaneous melanoacanthoma is an uncommon benign epithelial neoplasm, predominantly affecting individuals around the median age of 65, with a male predominance. It typically manifests as a slowly enlarging, solitary, pigmented nodule, most commonly found on the head, neck, or trunk. Diagnostic challenges frequently arise, as its clinical appearance can closely resemble melanoma. The reported incidence is variable, ranging from approximately one per 100,000 histopathological specimens to up to 38% among lesions initially identified as seborrheic keratoses.

Materials and Methods
A 55-year-old male presented with a progressively enlarging pigmented lesion on his right lower leg over one year. His medical history was unremarkable for cutaneous malignancies, including melanoma, both personally and in his family. Clinical examination identified a solitary, darkly pigmented, crusted patch measuring 6 × 7 mm with asymmetry and irregular borders on the medial aspect of the right lower leg. Dermoscopic evaluation revealed a prominent, irregular, and broken reticular network, focal areas of structureless gray pigmentation, and irregular patchy hyperpigmentation. Tape stripping led to partial removal of superficial pigment. Given the discordance between this lesion's features and those of the patient's other pigmented lesions, as well as concern for early melanoma, a complete excision was performed for further histopathological evaluation.

Results
Histopathology confirmed the diagnosis of melanoacanthoma. Microscopically, melanin granules and parakeratosis within the stratum corneum were observed, with irregular epidermal acanthosis composed of uniformly proliferating keratinocytes, and scattered individual dendritic melanocytes. Sparse perivascular lymphocytic infiltration was present in the dermis. Immunohistochemistry using Melan-A, SOX10, and S-100 identified dispersed dendritic melanocytes throughout the epidermis.

The primary differential diagnosis included melanoma in situ, due to irregular hyperpigmentation and the presence of gray dermoscopic pigmentation. Flat pigmented seborrheic keratosis was also considered, given the crusted surface, sharp demarcation, and "stuck-on" appearance. However, typical comedo-like openings and milia-like cysts were absent. Pigmented Bowen's disease was ruled out based on negative immunohistochemical staining for CK20 and p16 and inconsistent micromorphological features. Ink spot lentigo, indicated by a thick pigment network and angulated lines on dermoscopy, was similarly evaluated.

Conclusions
Melanoacanthoma is a rare, benign cutaneous lesion that must be clearly differentiated from melanoma. In this case, the lesion presented as an early, sharply demarcated plaque in an atypical site on the lower leg. Dermoscopic features

such as a disrupted network and irregular patchy hyperpigmentation closely simulated those observed in malignant melanocytic lesions.

While dermoscopy contributed important diagnostic insight, the lack of definitive benign features prompted complete surgical excision for exclusion of malignancy. Histopathological examination revealed parakeratosis and melanin granules within the stratum corneum, a feature not specific to melanoacanthoma and more commonly associated with both benign and malignant melanocytic lesions. In the context of melanoacanthoma, this histological pattern, together with the clinical and dermoscopic findings, such as a crusted surface and irregular hyperpigmentation, likely reflects secondary irritation of the lesion. Final diagnosis relies on comprehensive correlation of clinical, dermoscopic, and histopathological features to distinguish melanoacanthoma from malignant melanocytic neoplasms.

Abstract N°: ID-951

Topic: Dermoscopy

Kaposi sarcoma of the scalp – trichoscopic findings of the great mimicker

Martyna Rogowska*[1], Martyna Sławińska[2], Carlos Peralta[3]

[1]Dermatological Students Scientific Circle, Department of Dermatology, Venereology and Allergology, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland, Department of Dermatology, Venereology and Allergology, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland, Department of Dermatology, Venereology and Allergology, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland, Gdańsk, Poland
[2]Department of Dermatology, Venereology and Allergology, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland, Gdańsk, Poland
[3]Consultant Professor, Department of Dermatopathology, LABPAT Pathology Laboratory, Mar del Plata, Buenos Aires, Argentina, Buenos Aires, Argentina

Introduction

KS is an angioproliferative disorder associated with human herpesvirus 8 (HHV-8). Many morphological variants involving the skin have been described, including patch, plaque, nodular, lymphadenopathic, exophytic, infiltrative, ecchymotic, telangiectatic, keloidal, and cavernous or lymphangioma-like forms. Thus, the disease may mimic other inflammatory and neoplastic skin conditions. In patients with acquired immunodeficiency syndrome (AIDS), head and neck involvement is often the primary site of cutaneous manifestation.
While dermoscopic patterns of KS in other anatomical locations are relatively well described, there is scarce knowledge regarding its trichoscopic presentation.

Materials and Methods

Case report study.

Results

We report the case of a 28-year-old HIV-positive man who presented with brownish-reddish plaques within the scalp area that had appeared 3 months earlier. Trichoscopy revealed brown regular lines (pigment network), a reddish background, and white dots, along with hair shaft heterogeneity limited to the skin lesions — a pattern not previously described on the scalp. Based on histopathological assessment, KS was diagnosed. During further diagnostic evaluation, similar lesions appeared in other anatomical areas.

Conclusions

Typical dermoscopic features of Kaposi's sarcoma described in the literature vary and include a rainbow (polychromatic) pattern, bluish-reddish/violaceous structureless background coloration, surface scale (scaly surface), white lines, white dots, four-dot clods, white clods, the collarette sign, small brown globules, serpiginous (serpentine) vessels, dotted vessels, curved vessels, and coiled vessels. Despite the frequent involvement of the scalp in HIV-related KS, we found no previous trichoscopic descriptions of this entity. These observations broaden the spectrum of known trichoscopic features of Kaposi's sarcoma and underscore the importance of trichoscopy in the assessment of scalp lesions.

Abstract N°: ID-965

Topic: Dermoscopy

Dermoscopy of Sister Mary Joseph's Nodule: A Case Report

Zineb Diouri*[1], Hanine Nohaila[1], Iness Komat[1], Soumia Chiheb[1, 2], Fatima-Zahra Agharbi[1]

[1]Hospital Sheikh Khalifa Ibn Zaid, Dermatology and Venerology, Casablanca, Morocco
[2]Hôpital Ibn Rochd, Casablanca, Morocco

Introduction

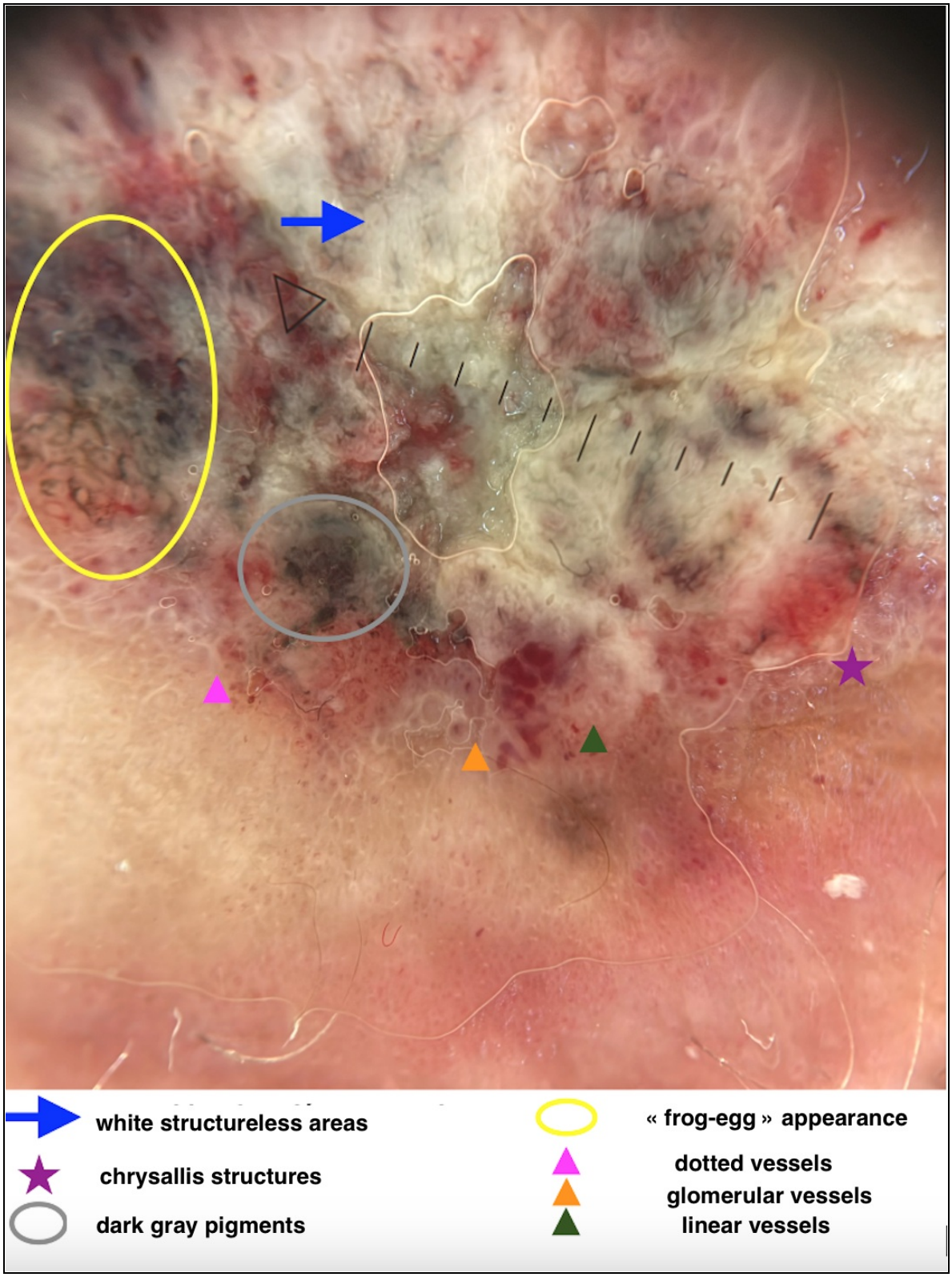
Sister Mary Joseph's nodule (SMJN) corresponds to an umbilical metastasis, most commonly secondary to an intra-abdominal adenocarcinoma, particularly of gastric, colonic, or pancreatic origin, and more rarely of gynecological origin (1).This clinical sign usually reflects advanced malignancy and is associated with a poor prognosis. Dermoscopic features of these metastatic nodules are poorly described, but dermoscopy may provide distinctive semiological clues to help orient the diagnosis. We report the diagnostic value of dermoscopy in a case of pigmented SMJN mimicking melanoma.

Materials and Methods

An 80-year-old woman with a history of ischemic heart disease and arterial hypertension, presented with a painless umbilical nodule evolving over four years, with progressive enlargement. Clinical examination revealed a 5-cm umbilical nodule with an ulcerated, exophytic appearance, partially pigmented, surrounded by an ill-defined erythemato-violaceous area. Dermoscopy showed vascular polymorphism, including dotted, glomerular, and linear vessels, associated with centrally and peripherally distributed dark gray pigmented areas, chrysalis structures, white structureless areas, and a peripheral "frog-egg" appearance. Given the clinical presentation and umbilical location, SMJN was the primary diagnostic consideration, however, the hypothesis of hypochromic melanoma was also raised. Paraclinical investigations included a thoraco-abdomino-pelvic CT scan, which revealed a hepatic lesion in segment VI, peritoneal carcinomatosis lesions and an ulcerated umbilical collection with a suspicious appearance. The patient underwent surgical excision of the umbilical tumor. Histopathological examination revealed omental involvement by a moderately differentiated adenocarcinoma. Immunohistochemistry supported a gastric digestive origin, with positivity for CK7 and CK20. The diagnosis of Sister Mary Joseph's nodule was therefore confirmed.

Results

SMJN represents a rare umbilical metastatic involvement, accounting for approximately 1–3% of cutaneous metastases, and is associated with an intra-abdominal malignancy with poor prognosis. Dermoscopy in our case revealed polymorphous vessels, white structureless areas, chrysalis structures, a grayish veil, and dark gray pigmented areas. These findings are consistent with the systematic review by Żółkiewicz et al (2), who reported polymorphous vessels in all cases, frequently associated with milky-red areas and white structureless areas. Dong et al (3) described a characteristic "frog-egg appearance" of SMJN, which was also observed in our patient. However, gray pigmented areas have not been reported in other published cases. The pigmented aspect of the lesion raised the issue of differential diagnosis between SMJN and melanocytic tumors, particularly hypochromic melanoma. In dermoscopy, melanoma typically presents a homogeneous gray background, an atypical pigment network, peripheral dark brown globules, and chromatic heterogeneity. Additional features include irregular dots and globules, pseudopods, irregular radial streaks, a blue-white veil, an ink-blot appearance, regression structures, polymorphous atypical vessels, asymmetry, and structureless areas. In contrast, SMJN does not follow the typical pigmentary architecture of melanocytic lesions. In our patient, dermoscopy revealed centrally and peripherally distributed dark gray pigmented areas, polymorphous vascularization, chrysalis structures, white structureless areas, and a peripheral "frog-egg" appearance.



(2) Żółkiewicz, J.; Sławińska, M.; Maińska, U.; Nowicki, R.J.; Sobjanek, M.; Thomas, L. Dermoscopy of Umbilical Lesions—A Systematic Review. J. Clin. Med. 2024, 13, 1790. (3)Dong, H.; Liu, N. A Sister Mary Joseph nodule with novel dermoscopic features. Australas. J. Dermatol. 2016, 57:143–144.

Conclusions

Dermoscopy of SMJN may provide valuable clues to orient the diagnosis and to differentiate this lesion from other causes of umbilical nodules, particularly hypochromic melanoma. Our observation reports, for the first time, the presence of dark gray pigmented areas, highlighting the importance of considering a differential diagnosis with melanocytic tumors, especially melanoma. Nevertheless, definitive diagnosis relies on histopathological examination and immunohistochemistry

Abstract N°: ID-1022

Topic: Dermoscopy

Which dermoscopic features change clinical decision-making in rosacea?

Artina Pajaziti*[1], Laura Pajaziti[2], Antigona Gerqari[1], Hava Redenica[1], Artizana Dushi[1], Gramoz Bunjaku[1]

[1]University Clinical Center of Kosovo, Prishtine, Kosovo
[2]Proderm, Prishtine, Kosovo

Introduction

Rosacea is a chronic inflammatory facial dermatosis characterized by heterogeneous clinical phenotypes and frequent overlap with other erythematous facial conditions, which may complicate diagnosis in daily practice. In recent years, dermoscopy has emerged as a valuable non-invasive tool for visualizing vascular and follicular structures in rosacea, and its dermoscopic spectrum has been increasingly well defined. However, most published studies have focused on descriptive pattern recognition rather than on the practical relevance of dermoscopic findings in clinical decision-making. In routine practice, clinicians are often faced with diagnostically ambiguous presentations, including early or mixed rosacea phenotypes and rosacea mimickers such as facial demodicosis or photodamage-related facial telangiectasia. The specific dermoscopic features that meaningfully influence diagnostic refinement and lead to changes in clinical decisions remain insufficiently explored.

Materials and Methods

This case-based observational study included 22 consecutive patients (10 male, 12 female) with a clinical diagnosis of rosacea. All patients underwent facial dermoscopic examination as part of routine clinical assessment. Dermoscopic images were obtained using a digital dermoscopy system with 20× magnification, focusing on clinically representative facial areas. Polarized dermoscopy was used to evaluate vascular and follicular structures. Dermoscopic images were recorded and subsequently analyzed by a dermatologist, with assessment focused on vascular morphology, vessel distribution, follicular findings, and additional background structures. Clinical–dermoscopic correlation was performed to determine whether dermoscopic findings confirmed the initial clinical diagnosis or resulted in diagnostic refinement.

Results

All 22 patients showed dermoscopic vascular structures, most commonly linear, linear-branched, and linear-curved vessels. These vascular morphologies were frequently arranged in a reticular or reticular–patchy distribution, particularly in erythematotelangiectatic rosacea, and were associated with a high concordance between clinical and dermoscopic diagnoses.

Follicular findings were observed in 6 of 22 patients and included follicular plugs or rosettes, white protrusions, and perifollicular changes. Dermoscopy led to a change in the final diagnosis in 4 of 22 cases (18.2%), all of which exhibited follicular abnormalities and/or a non-reticular clustered vascular distribution. These cases were reclassified as facial demodicosis, Demodex-associated rosacea, or photodamage-related facial telangiectasia. In contrast, no diagnostic change occurred in patients lacking follicular findings, who predominantly showed regular reticular vascular patterns consistent with classic rosacea phenotypes. Among follicular features, white follicular protrusions and follicular plugs represented the most decisive dermoscopic clues, whereas vascular morphology alone did not influence diagnostic reclassification.

Domain	Finding	n	% (of 22)	Diagnostic change (n)	Comment
Final diagnosis	Erythematotelangiectatic rosacea (ETR)	14	63.6		
Final diagnosis	Papulopustular rosacea (PPR)	2	9.1		
Final diagnosis	Facial demodicosis (pityriasis folliculorum)	2	9.1		
Final diagnosis	Demodex-associated rosacea	1	4.5		
Final diagnosis	Photodamage-related facial telangiectasia	1	4.5		
Diagnostic impact	Diagnostic change (Yes)	4	18.2	4.0	All reclassified cases
Diagnostic impact	Diagnostic change (No)	18	81.8	0.0	
Vessel morphology	Linear vessels	19	86.4		
Vessel morphology	Linear-branched vessels	17	77.3		
Vessel morphology	Linear-curved vessels	18	81.8		
Vessel distribution	Reticular / reticular–patchy	16	72.7	0.0	No diagnostic change observed
Vessel distribution	Non-reticular clustered	6	27.3	4.0	Decision-changing pattern
Follicular findings	Any follicular finding present	6	27.3	4.0	
Follicular findings	Follicular findings absent	16	72.7	0.0	
Key follicular clues	Follicular plugs / rosettes	5	22.7	4.0	
Key follicular clues	White protrusions (Demodex tails)	4	18.2	4.0	Most decisive clue
Inflammatory clue	Yellow clods (follicular pustules)	1	4.5	0.0	

Table 1. Distribution of dermoscopic features in rosacea and their influence on clinical decision-making. Vascular morphology was present in all patients and showed limited diagnostic impact, whereas follicular findings—particularly white follicular protrusions and follicular plugs—and non-reticular clustered vascular patterns were consistently associated with diagnostic reclassification.

Conclusions

In this case-based study, dermoscopy influenced clinical decision-making in rosacea primarily through the identification of follicular abnormalities and atypical vascular distribution patterns. While vascular structures were universally present, follicular plugs, white protrusions, and non-reticular clustered vessels were the key dermoscopic features prompting

diagnostic reclassification, particularly in cases initially considered as rosacea but ultimately identified as rosacea mimickers. These findings highlight the value of dermoscopy not merely as a descriptive tool, but as a decision-modifying technique in routine clinical practice, supporting more accurate diagnosis and tailored management of rosacea patients.

Abstract N°: ID-1252

Topic: Dermoscopy

Barriers to effective remote skin cancer referral pathways and strategies for improvement in a UK regional dermatology centre

Zakiyyah Bibi*[1], Alvin Leung[2], Louis Naraine[1], Helen Audrain[1], Charankumal Thandi[1], Amrit Darvay[1], Will Hunt[1], Joanne Smart[1], Alec Gear[1]

[1]North Bristol NHS Trust, Bristol, United Kingdom
[2]Bristol Medical School, Bristol, United Kingdom

Introduction
Teledermatology is widely used in the United Kingdom to support dermatological assessment and triage from primary care to secondary care services. While it offers significant benefits in efficiency and access, a proportion of referrals remain unsuitable for remote assessment, potentially impacting patient care and service workload.

Materials and Methods
A retrospective analysis was conducted using teledermatology data collected at a regional dermatology centre in the United Kingdom. Data were obtained from an electronic reporting system documenting outcomes of teledermatology referrals from primary care, assessed predominantly by consultant dermatologists in secondary care. Referrals included clinical information and accompanying clinical photographs. Cases deemed unsuitable for teledermatology and requiring further action were identified and sub-analysed to determine underlying causes.

Results
During the study period, 607 teledermatology referrals were deemed unsuitable for remote assessment and required further action. The most common reason identified was categorised as Other (n = 254), reflecting heterogeneous or complex factors not captured by predefined groups. Image-related issues were a major contributor to unsuitability, including lesions not suitably prepared for imaging (n = 102), blurred images (n = 91), photographs not attached to the referral (n = 45), and multiple lesions not adequately photographed or distinguishable (n = 35). Additional barriers included insufficient lesion labelling (n = 15), inappropriate pathway selection (n = 12), lack of relevant clinical history (n = 12), absence of dermoscopic images where indicated (n = 12), inappropriate image distance (n = 12), obscured lesions (n = 10), image lighting issues (n = 5), and low overall image quality (n = 2).

Row Labels	Count of Meta Group
Blurred Images	91
Image lighting issue	5
Inappropriate lens distances from image	12
Inappropriate pathway	12
Insufficient lesion labelling	15
Lack of historical context	12
Lesion not suitably prepared	102
Low image quality	2
Multiple lesions - not all photographed or separately identifiable from photos	35
No dermoscopy image	12
Obscured lesion	10
Other	254
Photograph not attached to referral	45
Grand Total	**607**

Conclusions

A significant number of teledermatology referrals remain unsuitable for remote assessment. Systematic identification and categorisation of referral issues can support clearer communication with primary care, improve referral quality, and enhance the overall effectiveness of teledermatology services. Standardised terminology for referral problems may facilitate more effective feedback to general practitioners and contribute to improved patient care.

Abstract N°: ID-1350

Topic: Dermoscopy

Beyond Visible Light: Ultraviolet-Induced Fluorescence Dermoscopy (UVFD) in Routine Skin Examination

Milos Nisavic*[1]

[1]University of Novi Sad, Faculty of Medicine, Novi Sad, Serbia

Introduction

Ultraviolet (UV) examination using Wood's lamp has long been part of dermatological diagnostics, particularly in infectious and pigmentary disorders. The integration of UV light in dermoscopy, known as ultraviolet-inducedfluorescence dermoscopy (UVFD), represents an important extension of routine skin examination by enabling magnified visualisation of fluorescence patterns not detectable on naked-eye clinical examination under visible light or with conventional polarised or non-polarised dermoscopy. However, its broader clinical applicability across different dermatoses still remains underutilised, despite growing evidence of its diagnostic utility.

Materials and Methods

From October 2023 to January 2026, a large number of consecutive patients underwent routine dermatological examination including clinical examination and dermoscopy supplemented by UVFD using the same dermoscopic device. Over 400 cases were photodocumented using UVFD during daily clinical practice. From this cohort, sixteen representative cases were selected for detailed presentation in which UVFD proved essential for achieving more precise diagnosis than clinical examination and standard dermoscopy could provide alone.

Results

UVFD revealed diagnostically relevant fluorescence patterns across infectious, inflammatory, pigmentary, neoplastic conditions, and benign anatomic variants. Sixteen representative cases were selected to illustrate how UVFD contributed to diagnostic accuracy and clinical decision-making. *Sarcoptes scabiei* infestations were visualised through bright green fluorescence of the mites in clinical cases with subtle clinical signs (Figure 1A). *Erythrasma* was detected in intergluteal (Figure 1B) and interdigital foot regions (Figure 1C), as well as in coexisting infection with genital warts (Figure 1D), highlighted by coral-red fluorescence to distinguish it from clinically similar conditions. *Pseudomonas* nail (Figure 1E) and foot intertrigo (Figure 1F) exhibited green fluorescence. *Molluscum contagiosum* demonstrated bright blue fluorescence of polylobular structures (Figure 1G), which is a new finding recently published. *Tinea* infections of the face caused by *Microsporum spp.* showed characteristic green-blue fluorescence (Figure 1H), which guided selection of sites for mycological sampling and appropriate therapy. *Trichobacteriosis pubis* (previously termed *Trichomycosis*) was visualized through yellow-green fluorescence along hair shafts, consistent with pubic hair bacterial concretions (Figure 1I). Nummular eczema mimicking fungal skin infection was distinguished by yellow-green fluorescence of crusts (Figure 1J). *Psoriasis* within a *vitiligo* patch showed red fluorescence under UVFD (Figure 1K), differentiating it from other inflammatory diseases presenting with plaques. Subclinical *vitiligo* was detected under UVFD for more precise assessment of lesion margins (Figure 1L). *Demodicosis* showing bright bluish fluorescence pre-therapy (Figure 1M) served as baseline for monitoring treatment response. Basal cell carcinoma margins were better visualised under UVFD (Figure 1N), guiding adequate surgical excision planning. Fordyce spots on the areola of the breast were highlighted by bright blue/green fluorescent dots corresponding to sebaceous duct openings under UVFD (Figure 1O). *Porokeratosis* showed bright bluish-green fluorescence along the keratin rim under UVFD (Figure 1P), supporting diagnosis and

differentiation from other keratinization disorders.

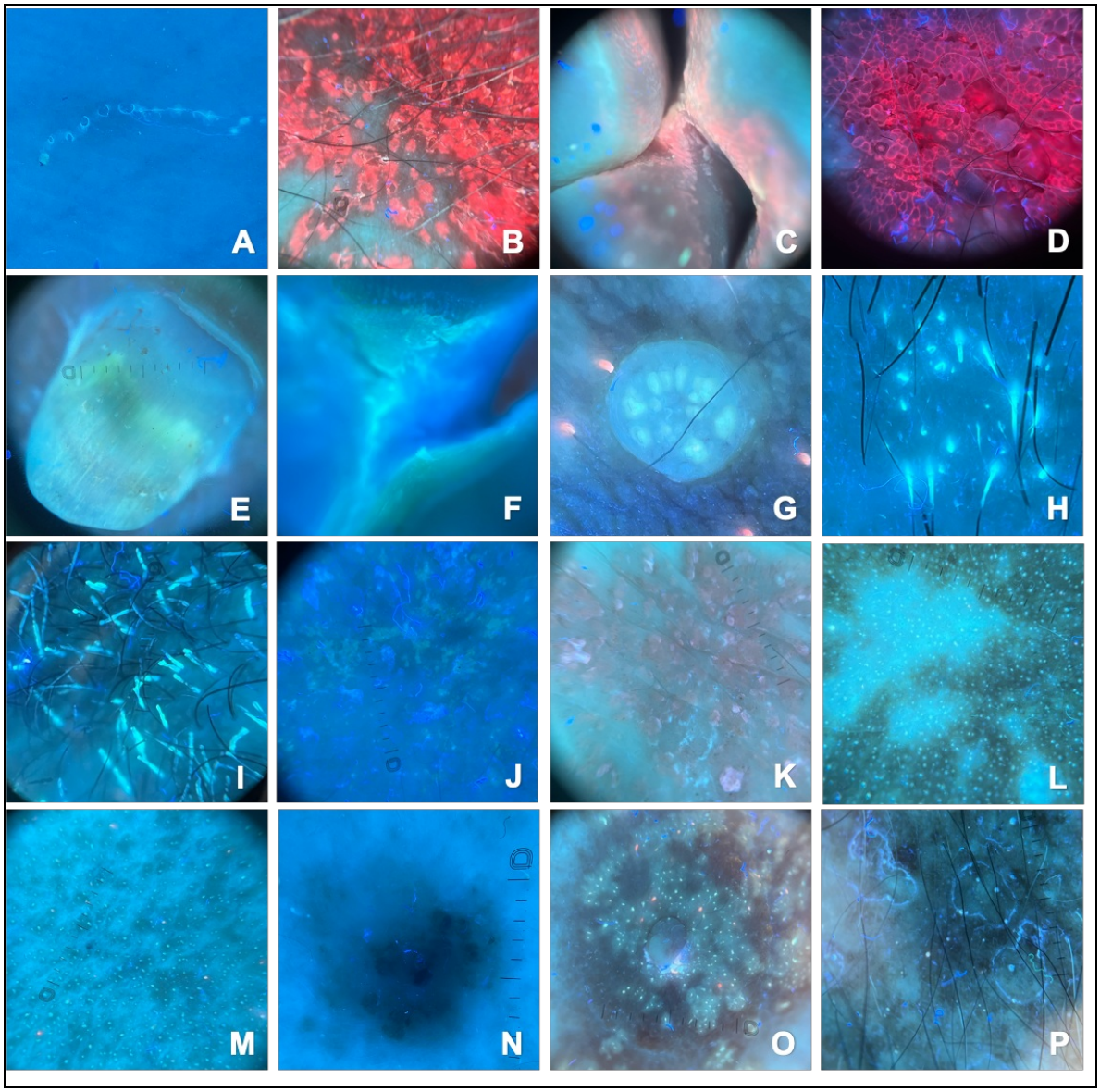


Figure 1. Representative UVFD images illustrating diagnostically relevant fluorescence patterns: (A) Sarcoptes scabiei showing bright green fluorescence of mites; (B) intergluteal erythrasma with coral-red fluorescence; (C) interdigital foot erythrasma with coral-red fluorescence; (D) coexisting genital warts and erythrasma highlighted by coral-red fluorescence; (E) Pseudomonas nail infection with green fluorescence; (F) Pseudomonas foot intertrigo with green fluorescence; (G) Molluscum contagiosum with bright blue fluorescence of polylobular structures, newly reported and recently published; (H) Tinea infection of the face caused by Microsporum spp. showing green-blue fluorescence; (I) Trichobacteriosis pubis (previously termed Trichomycosis) with yellow-green fluorescent concretions along hair shafts consistent with pubic hair bacterial concretions; (J) nummular eczema mimicking fungal disease with yellow-green fluorescence of crusts; (K) psoriasis within a vitiligo patch showing red fluorescence; (L) subclinical vitiligo detected under UVFD for more precise lesion assessment of lesion margins; (M) demodicosis showing bright bluish fluorescence pre-therapy (Figure 1M), serving as baseline for monitoring treatment response; (N) basal cell carcinoma margins better visualized under UVFD, guiding adequate surgical excision planning; (O) Fordyce spots on the areola of the breast showing bright blue/green fluorescent dots under UVFD, corresponding to sebaceous duct openings; (P) porokeratosis showing bright bluish-green fluorescence along the keratin rim.

Conclusions

UVFD significantly expands the diagnostic capabilities of routine dermatological examination by revealing clinically relevant findings both beyond naked-eye examination under visible light and conventional polarised or non-polarised

dermoscopy. Its broad applicability across diagnosing multiple dermatoses and its impact on diagnostic precision support the integration of UVFD as a valuable adjunct and a potential future standard in everyday dermatological practice.

Abstract N°: ID-1358

Topic: Dermoscopy

Unveiling Novel Clues: Two Previously Undescribed Dermoscopic Patterns in Onychomycosis

Barbara Bulińska*[1], Martyna Sławińska[2]

[1]Department of Dermatology, Venereology and Allergology, Medical University of Gdańsk, University Clinical Centre in Gdańsk, Clinic of Dermatology, Venereology and Allergology, Department of Dermatology, Venereology and Allergology, Gdańsk, Poland
[2]Department of Dermatology, Venereology and Allergology, Medical University of Gdańsk, University Clinical Centre in Gdańsk, Dermatology, Venereology and Allergology, Department of Dermatology, Venereology and Allergology, Gdańsk, Poland

Introduction
Onychomycosis remains a pervasive diagnostic challenge. While dermoscopy has enriched the non-invasive diagnostic arsenal with recognized signs like jagged edges and "ruin-like" hyperkeratosis, the full spectrum of its presentation is yet to be mapped. Identifying novel, highly specific dermoscopic patterns is crucial to refining differential diagnosis from mimics like traumatic onychodystrophy or psoriasis.

Materials and Methods
This prospective single-center study enrolled adult patients with suspected onychomycosis. Nail plates with concurrent treatment, other primary nail disorders were excluded. All affected nails underwent standardized dermoscopic imaging using a dermatoscope (10× magnification) coupled with a high-resolution camera, performed immediately prior to and without interfering with mycological sampling. The diagnosis was confirmed in all cases by gold-standard mycological examination (direct microscopy with KOH/DMSO and/or culture on Sabouraud agar). Dermoscopic images were evaluated independently by two investigators for 23 predefined signs derived from literature. Throughout this systematic assessment, previously unreported patterns were identified and documented.

Results
Beyond confirming established features, our investigation led to a significant discovery: two novel, distinct dermoscopic patterns never previously detailed in the literature.
The Checkered Pattern: A grid-like appearance formed by intersecting linear grooves, suggesting a superficial nail plate disruption. Prevalence: 24.3% (35/144 plates).
The Beaded Pattern: A linear arrangement of superficial scales resembling a string of beads along the longitudinal axis, indicating a possibly new mode of superficial spread. Prevalence: 8.9% (13/146 plates).
The identification of these patterns was consistent across observers, underscoring their reproducible morphology.

Conclusions
This study breaks new ground by delineating two original dermoscopic signs in onychomycosis—the checkered and beaded patterns. Their description expands the fundamental dermoscopic lexicon of nail fungal infection. This discovery holds immediate translational promise: it provides clinicians with new visual criteria to heighten diagnostic suspicion and accuracy at the bedside. Future research correlating these patterns with specific fungal species or clinical subtypes could unlock further diagnostic and therapeutic insights, marking a meaningful step towards more precise and efficient

nail diagnostics.

Abstract N°: ID-1401

Topic: Dermoscopy

Dermoscopy of Bowen disease : a mini-systematic review and advanced diagnostic reasoning framework

Imane Hakim*[1], Bendaoud Layla[1], Mariem Aboudourib[1], Hocar Ouafa[1], Amal Said[1]

[1]Faculty of Medicine and Pharmacy, Mohammed VI University Hospital, Bioscience and health laboratory, Dermatology department, Marrakech, Morocco

Introduction
Bowen disease, corresponding to squamous cell carcinoma in situ, represents an early stage of keratinocyte malignancy with a significant risk of progression to invasive squamous cell carcinoma if not promptly diagnosed and treated. Clinically, Bowen disease exhibits considerable heterogeneity, often presenting as erythematous, scaly, or slightly pigmented plaques that closely resemble inflammatory dermatoses or benign keratinocytic lesions. Dermoscopy has emerged as a pivotal non-invasive diagnostic tool that enhances lesion characterization by revealing vascular and surface patterns correlated with underlying histopathological changes. The objective of this review was to analyze dermoscopic features of Bowen disease reported in the literature and to correlate dermoscopic patterns with histopathological findings, and propose an advanced, reasoning-based dermoscopic framework to guide biopsy decisions.

Materials and Methods
A mini-systematic narrative review was conducted using PubMed databases. Articles published between January 2005 and December 2024 were included. Search terms combined Bowen disease, squamous cell carcinoma in situ, dermoscopy, vascular patterns, and non-pigmented skin tumors. Eligible publications included original studies, case series, and review articles describing dermoscopic findings. Data extraction focused on vascular morphology, background coloration, scaling patterns, pigmentary structures, and histopathological correlation. Findings were synthesized qualitatively to establish reproducible diagnostic principles.

Results
Across studies, Bowen disease demonstrated a consistent dermoscopic profile characterized predominantly by glomerular or clustered dotted vessels arranged in a regular or patchy distribution on a structureless pink-to-red background. These vascular patterns reflect dilated capillary loops within elongated dermal papillae, corresponding histologically to intraepidermal neoplastic proliferation. Diffuse white scaling or keratin was frequently observed, while pigment network was typically absent. Pigmented variants occasionally exhibited gray or brown dots, further complicating differentiation from other lesions. The reproducibility of vascular morphology emerged as the most reliable diagnostic feature across lesion subtypes.
This review underscores vascular morphology as the cornerstone of dermoscopic diagnosis in Bowen disease. While erythema and scaling are non-specific, the presence of regularly distributed glomerular vessels significantly increases diagnostic confidence. Importantly, dermoscopic interpretation should rely on global pattern analysis rather than isolated signs.

Conclusions
Recognition of Bowen disease through dermoscopy facilitates timely biopsy and reduces inappropriate treatment of presumed inflammatory dermatoses. Dermoscopy should be integrated into a structured diagnostic reasoning framework that considers lesion morphology, patient risk factors, and anatomical location. This approach optimizes early detection and prevents progression to invasive carcinoma.

Dermoscopy significantly enhances the early recognition of Bowen disease when interpreted through structured, reasoning-based analysis of vascular and surface patterns. Dermatologists should systematically evaluate erythematous or scaly plaques with dermoscopy and prioritize biopsy when characteristic vascular patterns of Bowen disease are identified.

Abstract N°: ID-1414

Topic: Dermoscopy

Dermoscopy of different stages of acquired perforating dermatosis: Case report.

Nadia Lahmamsi*[1], Iness Komat[1], Soumia Chiheb[1], Fatima-Zahra Agharbi[1]

[1]Cheikh Khalifa University Hospital, Dermatology and Venerology Department, Casablanca, Morocco

Introduction

Acquired perforating dermatosis (APD) is a rare skin disorder characterized by transepidermal elimination of dermal components, most commonly associated with diabetes mellitus and chronic renal failure. It typically presents as pruritic papules or nodules with a central keratotic plug, mainly on extensor surfaces (1). Dermoscopy, a valuable non-invasive tool, can reveal patterns such as concentric multi-zone arrangement and keratotic plugs, guiding diagnosis (2). This report describes the dermoscopic features of different stages of APD in a patient successfully treated with UVB TL01 phototherapy.

Materials and Methods

A 67-year-old man with insulin-treated type 2 diabetes presented with a three-month history of multiple pruritic, hyperkeratotic nodules on the head, trunk, back, and hands. Clinical examination revealed erythematous-violaceous papulonodules with ulcerated or crusty surfaces. Histopathology confirmed APD, showing a cup-shaped epidermal invagination filled with a keratotic plug and collagen fibers mixed with cellular debris and neutrophils. The patient was treated with UVB TL01 phototherapy. Dermoscopy, performed throughout therapy, documented the evolution. In the developing stage, lesions showed a three-zone concentric pattern: a solid central crust over a yellow-brown structureless area, surrounded by a middle white halo with a thin peripheral scaling ring and an erythematous-violaceous outer zone. Peripheral globular and dotted vessels were noted. In the recovery stage, the erythematous-violaceous halo regressed while the whitish halo expanded, with partial resolution of the central crust. The healing stage featured crust detachment, leaving whitish branched striae and white scales with peripheral hyperpigmentation.

Results

The dermoscopic features align with established APD patterns (3). The classic three-zone pattern corresponds to a central keratotic plug (extruded material), a middle "white-collar" area (acanthosis), and an outer erythematous-violaceous halo (dermal inflammation) (3, 4). The peripheral globular and dotted vessels match characteristic radial or garland-like hairpin and looped vessels (4, 2). The sequential changes under UVB therapy mirrored recognized APD stages (4). Regression of the erythematous halo and prominence of the whitish zone indicated reduced inflammation, while the healing stage findings corresponded to re-epithelialization and post-inflammatory change (4, 5). This case confirms dermoscopy as a crucial non-invasive tool for both diagnosing APD and objectively monitoring therapeutic response.

Conclusions

This case demonstrates the dynamic, stage-specific dermoscopic evolution of APD and its histopathological correlation. Dermoscopy facilitates diagnosis through characteristic patterns and enables objective monitoring of treatment efficacy, as demonstrated by successful UVB TL01 phototherapy.

Abstract N°: ID-1444

Topic: Dermoscopy

Bowen-Like lesions under dermoscopy: a mini-systematic review

Imane Hakim*[1], Bendaoud Layla[1], Mariem Aboudourib[1], Hocar Ouafa[1], Amal Said[1]

[1]Faculty of Medicine and Pharmacy, Mohammed VI University Hospital, Bioscience and health laboratory, Dermatology department, Marrakech, Morocco

Introduction
Bowen-like lesions encompass a heterogeneous group of conditions that clinically and dermoscopically mimic Bowen disease, often presenting as erythematous or keratotic plaques with limited specificity. This diagnostic overlap may lead to delayed recognition of carcinoma in situ or unnecessary biopsies. Dermoscopy is a key non-invasive tool, though interpretation remains challenging due to shared features. The objective of this review is to examine dermoscopic criteria that aid differentiation and to propose a structured diagnostic reasoning framework.

Materials and Methods
A mini-systematic narrative review was conducted using PubMed databases. Articles published between January 2005 and December 2024 were included. Search terms combined Bowen-like lesions, squamous cell carcinoma in situ, dermoscopy, vascular patterns, actinic keratosis, lichen planus-like keratosis, superficial basal cell carcinoma, and inflammatory dermatoses. Eligible publications included original studies, observational cohorts, large case series, and review articles describing dermoscopic findings. Data extraction focused on vascular morphology, background coloration, surface structures, follicular involvement, pigmentary patterns, and histopathological correlations. Findings were synthesized qualitatively to identify reproducible diagnostic principles.

Results
The literature demonstrates that Bowen-like lesions share non-specific dermoscopic features such as erythema and surface scaling, which limit diagnostic specificity when considered in isolation. Actinic keratosis frequently exhibits the strawberry pattern, characterized by a reddish pseudo-network with prominent follicular openings surrounded by white halos. Lichen planus-like keratosis commonly shows gray dots, peppering, and whitish scar-like areas reflecting regression. Superficial basal cell carcinoma displays arborizing or short fine telangiectatic vessels, shiny white structures, and occasional erosions. Inflammatory dermatoses such as psoriasis may present regularly distributed dotted vessels but lack the clustered or glomerular vascular architecture typical of Bowen disease. When systematically analyzed, these patterns allow meaningful differentiation. This review emphasizes vascular morphology and pattern distribution as the cornerstone of dermoscopic differentiation between Bowen disease and Bowen-like lesions. While erythema and scaling are ubiquitous findings, the size, shape, and organization of vascular structures provide critical diagnostic clues. Importantly, dermoscopic interpretation should rely on global pattern recognition rather than isolated criteria. A structured diagnostic reasoning approach integrating dermoscopic findings with clinical context, lesion evolution, patient risk factors, and anatomical location allows rational stratification of malignancy risk. Dermoscopy should be viewed as a decision-support tool that optimizes biopsy selection, reduces unnecessary procedures, and facilitates early diagnosis of squamous cell carcinoma in situ.

Conclusions
Dermoscopy significantly improves differentiation of Bowen-like lesions when interpreted through an advanced, structured reasoning framework, supporting timely and appropriate clinical decision-making. Dermatologists should adopt systematic dermoscopic evaluation for erythematous or scaly plaques, particularly in sun-exposed areas, to enhance early detection of carcinoma in situ while minimizing overtreatment.

Abstract N°: ID-1454

Topic: Dermoscopy

Dermoscopy of Melanotic Lupus Erythematosus: Case Report and Literature Review in a 60-Year-Old Woman

Ben Salem Molka*[1], Mariem Tabka[1], Feryel Amri[1], Souissi Asmahan[1], Mourad Mokni[1]

[1]rabta hospital, tunis, Tunisia

Introduction

Dermoscopy of Melanotic Lupus Erythematosus: Case Report and Literature Review in a 60-Year-Old Woman

Melanotic lupus erythematosus (MLE) is a rare pigmented variant of chronic cutaneous lupus erythematosus (CCLE) that may mimic other facial hyperpigmentary disorders. Dermoscopy enables non-invasive evaluation of subtle features, facilitating accurate diagnosis.

Materials and Methods

A 60-year-old woman with a history of type 2 diabetes mellitus and asthma presented with a seven-month history of centrofacial erythema, followed by the progressive appearance of poorly demarcated brown macules involving the forehead, cheeks, chin, nasal wings, and nasal bridge. The patient reported associated xerostomia and denied inflammatory arthralgia or other systemic symptoms. She reported no history of prolonged use of cosmetic products or topical depigmenting agents. There was no clinical history of flushing, burning, or stinging sensations suggestive of rosacea.

On physical examination, the nasolabial folds, perioral area, and eyelids were spared, and no facial oedema was observed. Scaling, epidermal atrophy, and follicular plugging were absent. In addition to facial involvement, extrafacial lesions were noted on the dorsal aspects of the hands and forearms, presenting as ill-defined brown macules on a faintly erythematous background. The remainder of the cutaneous, mucosal, and general physical examination was unremarkable. Dermoscopic examination of facial lesions was performed at ×10 magnification.

Results

Dermoscopy of the facial lesions revealed a combination of perifollicular and interfollicular peppering, a pseudonetwork pattern, brown dots, preserved follicular ostia, subtle background erythema, and fine telangiectatic vessels. Pigmentation was poorly demarcated and distributed around follicular openings without scaling, hyperkeratosis, or epidermal atrophy. Early lesions were characterized by erythema preceding pigment deposition.

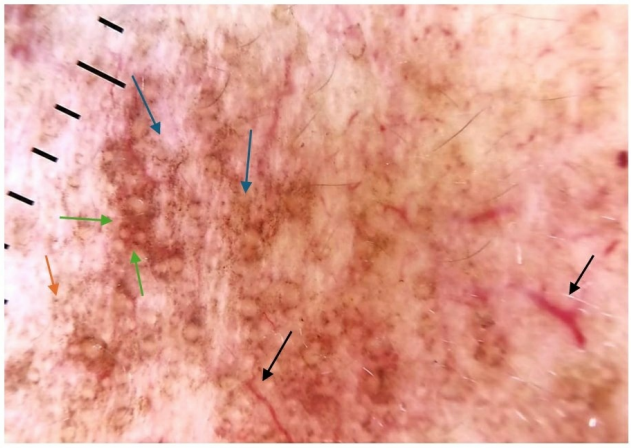
The absence of clinical flushing, burning sensations, papules, pustules, or inflammatory signs, together with the lack of polygonal or arborizing vessels and Demodex-related structures on dermoscopy, argued strongly against rosacea. Lichen planus pigmentosus was considered; however, the clinical distribution was atypical, as LPP predominantly affects the face, neck, and intertriginous areas, while extrafacial involvement outside flexural sites is less characteristic. Although LPP may show pigment dots, globules, and pseudonetwork patterns, vascular structures are inconsistently reported and not a dominant dermoscopic feature. Melasma was deemed unlikely given the presence of background erythema, telangiectatic vessels, and perifollicular/interfollicular peppering on dermoscopy, as well as the presence of extrafacial lesions. Indeed, melasma is classically confined to the face, with extrafacial involvement being rare and usually limited to the forearms in specific contexts.

Exogenous ochronosis was excluded based on the absence of a history of prolonged topical cosmetic or depigmenting agent use and the lack of typical clinical features such as blue-grey or slate-coloured pigmentation with caviar-like papules.

The association of the clinical history , the characteristic facial dermoscopic findings with extrafacial photoexposed involvement supported the diagnosis of melanotic lupus erythematosus

Conclusions

This case emphasizes the value of dermoscopy in differentiating melanotic lupus erythematosus from other pigmented disorders with overlapping clinical features. Recognition of perifollicular and interfollicular peppering, pseudo-network pattern, preserved follicular ostia, subtle erythema, and fine telangiectatic vessels, together with extrafacial photoexposed involvement facilitates accurate diagnosis and appropriate management.



Dermoscopy (×10) shows perifollicular and interfollicular peppering (blue arrows), a pseudonetwork pattern with preserved follicular openings (green arrows), brown dots (red arrows) subtle background erythema, and fine telangiectatic vessels (black arrows)

Dermoscopy (×10) shows perifollicular and interfollicular peppering (blue arrows), a pseudonetwork pattern

with preserved follicular openings (green arrows), brown dots (red arrows) subtle background erythema, and fine telangiectatic vessels (black arrows)

Abstract N°: ID-1483

Topic: Dermoscopy

Dermoscopic clues in inflammatory dermatoses: a systematic review

Imane Hakim*[1], Bendaoud Layla[1], Mariem Aboudourib[1], Hocar Ouafa[1], Amal Said[1]

[1]Faculty of Medicine and Pharmacy, Mohammed VI University Hospital, Bioscience and health laboratory, Dermatology department, Marrakech, Morocco

Introduction
Inflammatory dermatoses often display overlapping clinical features, making diagnosis challenging with naked-eye examination alone. Dermoscopy, initially used in oncology, has become a valuable tool in assessing inflammatory skin diseases by revealing vascular patterns, scaling distribution, and background coloration, thereby supporting refined diagnostic reasoning.
The objective of this review is to evaluate dermoscopic features of common inflammatory dermatoses and to propose a structured diagnostic reasoning framework for routine clinical practice.

Materials and Methods
A mini-systematic narrative review was conducted using PubMed databases. Articles published between January 2005 and December 2024 were included. Search terms combined “inflammatory dermatoses,” “dermoscopy,” “psoriasis,” “eczema,” “lichen planus,” and “pityriasis rosea.” Eligible publications included original studies, observational cohorts, case series, and review articles describing dermoscopic findings. Data extraction focused on vascular morphology, scaling pattern, background coloration, and lesion distribution. Findings were synthesized qualitatively.

Results
The literature consistently demonstrates that psoriasis exhibits regularly distributed dotted vessels on a light red background, often accompanied by diffuse white scaling. Eczematous dermatitis typically shows patchy dotted vessels associated with yellowish crusts or serous exudation. Lichen planus is characterized by whitish reticular lines corresponding to Wickham striae over a violaceous background, while pityriasis rosea displays peripheral collarette scaling with relative central clearing. Despite clinical overlap, these dermoscopic patterns allow meaningful differentiation when assessed systematically.
This review underscores the importance of integrating dermoscopy into the diagnostic workflow of inflammatory dermatoses. Rather than relying on isolated signs, dermoscopic interpretation should follow a structured reasoning process that sequentially evaluates vascular morphology, scaling characteristics, and lesion distribution. Dermoscopy not only enhances diagnostic accuracy but also reduces the need for unnecessary biopsies and facilitates appropriate therapeutic selection. The extension of dermoscopy into inflammatory dermatology represents a paradigm shift toward non-invasive, pattern-based diagnosis.

Conclusions
Dermoscopy significantly improves diagnostic confidence in inflammatory dermatoses when interpreted through structured, reasoning-based frameworks. Dermatologists should routinely incorporate dermoscopy into the evaluation of inflammatory skin diseases to optimize diagnosis and management.

Abstract N°: ID-1535

Topic: Dermoscopy

T-shaped vessels as a novel trichoscopic clue to scalp tumor-like lesion in a patient with Cutaneous Mastocytosis: a single case observation

Beata Zagorska*[1], Magdalena Lange[1], Rafal Peksa[2], Martyna Sławińska[1]

[1]Medical University of Gdansk, Department of Dermatology, Venereology and Allergology, Gdansk, Poland
[2]Medical University of Gdansk, Department of Pathomorphology, Gdansk, Poland

Introduction

Cutaneous Mastocytosis in children is usually a benign disease, caused by focal dermal accumulation of mast cells. It is most commonly diagnosed in early childhood and typically presents as disseminated maculopapular lesions on the trunk or extremities; less frequently nodular lesions may occur. Tumor-like lesions localized on the scalp of patients with cutaneous mastocytosis are rare, and trichoscopic features of these lesions have not been previously reported. The aim of this case report is to describe the trichoscopic appearance of scalp tumor-like lesion in a pediatric patient with cutaneous mastocytosis.

Materials and Methods

Single case report.

Results

A 14-year-old girl with polymorphic variant of maculopapular cutaneous mastocytosis, diagnosed at the age of 6 years, was referred to a dermatology outpatient clinic because of a rapidly enlarging pink tumor located in the parietal region of the scalp.

The initial manifestations at 6 years of age included light-brown macules on the neck and temples, accompanied by episodic flushing occurring several times per week, as well as transient, pruritic, indurated lesions on the scalp lasting approximately one day. Between the ages of 6 and 11 years, the patient was treated intermittently with antihistamines and topical corticosteroids, with periods of exacerbation and remission of mast cell mediator-related symptoms. At the age of 11 years, flushing episodes and scalp swelling resolved spontaneously. A mild recurrence of symptoms occurred one month prior to presentation, with lower intensity compared to previous years.

During follow-up the patient was treated with oral cetirizine with good control of flushing symptoms. Laboratory investigations, including complete blood count, inflammatory markers, liver function tests, serum tryptase level, and allergological evaluation, were within normal limits, except for vitamin D deficiency. There was no history of anaphylaxis, extracutaneous mediator-related symptoms, insect sting reactions, or relevant family history of mastocytosis. Known triggers reported by the patient's mother included emotional stress and mechanical irritation of skin lesions.

Trichoscopy revealed a non-specific pattern characterized by polymorphic vessels (including linear irregular, thick root-like and t-shaped vessels (previously not reported in the literature). Due to the rapid growth of the lesion and inconclusive trichoscopic findings, a skin biopsy was performed. Histopathological examination demonstrated a dense dermal infiltrate of mast cells, confirming the diagnosis of cutaneous mastocytosis.

Conclusions

Polymorphic skin lesions on the scalp in pediatric patients with cutaneous mastocytosis may present as a rapidly growing pink tumors with non-specific trichoscopic features that differ from those described at other anatomical sites.

In the differential diagnosis, both benign and malignant vascular and non-vascular tumors should be considered. This case represents the first description of trichoscopic features of scalp cutaneous mastocytosis, revealing previously not reported shape of blood vessels.

Abstract N°: ID-1558

Topic: Dermoscopy

Agminated inverted follicular keratosis of the pubic area – clinical and dermoscopic presentation of an uncommon entity

Urszula Maińska*[1, 2], Michał Kunc[3], Jolanta Szade[3], Martyna Sławińska[1, 2]

[1]Medical University of Gdansk, Department of Dermatology, Venereology and Allergology, Gdansk, Poland
[2]University Clinical Centre, Department of Dermatology, Venereology and Allergology, Gdansk, Poland
[3]Medical University of Gdansk, Department of Pathomorphology, Gdansk, Poland

Introduction
Inverted follicular keratosis (IFK) is a benign epithelial tumor usually presenting as a solitary, small nodule or filiform lesion localized within head and neck. Cases of this type of lesion in the anogenital region are rarely described in the literature. Clinical manifestation of the disease is uncharacteristic and may be suggestive of skin malignancy.

Materials and Methods
Case report study.

Results
A 44-year-old woman was referred to Dermatology Outpatient Clinic due to disseminated hyperkeratotic lesions of the pubic area. Some of the lesions have been treated with carbon dioxide laser in another medical facility. Clinically, multiple nodules with a central hyperkeratotic plug in the pubic area were observed. On dermoscopy, a central superficial yellow crust or horn, surrounded by pinkish-white structureless area and fine polymorphous vessels was noted. In some of the lesions arborizing vessels, milia like cysts and central crusting were seen. One of the most prominent lesions was excised with suspicion of keratoacanthoma or SCC, but histopathological examination allowed for the diagnosis of inverted follicular keratosis. Due to unusual presentation and for functional reasons other lesions were excised, with histopathological confirmation of the IFK.

Conclusions
Inverted follicular keratosis should be taken into consideration in the differential diagnosis of hyperkeratotic skin nodules. Pubic area is not typical for IFK, but there are few case reports in the literature describing its occurrence in this location. Lesions may present a clinical and dermoscopic appearance that raises suspicion of other skin lesions, including malignant ones. Oncological vigilance should be maintained, and in case of diagnostic doubt, histopathological verification of the lesions should be undertaken.

Abstract N°: ID-1581

Topic: Dermoscopy

Tattoo-associated mucinosis - dermoscopic clues for an uncommon entity

Daniel Nette*[1], Patrycja Rogowska[1], Aneta Szczerkowska-Dobosz[1], Rafał Pęksa[1], Martyna Sławińska[1]

[1]Medical University of Gdańsk, Department of Dermatology, Venereology and Allergology, Gdańsk, Poland

Introduction

Cutaneous mucinoses constitute a heterogenous group of skin disorders characterized by the deposition of mucin in the dermis, epidermis or hair follicles. Classified into primary (idiopathic) and secondary (associated with an independent lesion or disease), they comprise a plethora of distinct localized and generalized clinicopathological subsets. Clinically, they may manifest as papules, nodules and plaques, often accompanied by varying degrees of fibrosis. Depending on the source, origin involving preexisting inflammation has been attributed to both primary and secondary forms. The upper extremities are a particularly common site of involvement in most subtypes of cutaneous mucinosis, with some specific to this region, such as acral persistent cutaneous mucinosis. Although trauma-induced cutaneous mucinosis has previously been described we have not encountered any reports of tattoo-associated mucinosis.

Materials and Methods

Case report study.

Results

A 38-year-old male patient presented to the dermatology outpatient clinic due to multiple, firm, whitish-yellow nodules that appeared within the tattooed area on his right arm three months earlier. The lesions were predominantly clustered within areas of red pigment, forming aggregates, with a few also present within the black ink. His medical history, apart from hypertension, was unremarkable. Videodermoscopy showed the pattern of polycyclic white-yellowish globules in a clustered distribution with or without vessels (including dotted vessels alone or associated with linear irregular vessels). The differential diagnosis included various cutaneous storage diseases, milia and sarcoidosis. Histopathological examination confirmed the diagnosis of mucinosis. Additional investigations, including systemic screening for extracutaneous organ involvement, were initiated; however, the patient was subsequently lost to follow-up. Therefore, the possibility of mucinosis secondary to systemic disease could not be definitely excluded.

Conclusions

Although the specific subtype of cutaneous mucinosis was impossible to determine with full certainty in this case, the clinical and histopathological findings along with the tattoo-related trauma-induced background were most consistent with multiple focal cutaneous mucinosis. To the best of our knowledge, there are no reports of dermoscopic features in this particular entity; however, several similarities to other subtypes can be identified. Homogenous whitish patterns along with dotted and linear vessels have been described in solitary focal cutaneous mucinosis as well as reticular erythematous mucinosis, with the latter also reporting translucent globular yellowish structureless areas with no scaling collar (apple jelly pattern). A surrounding zone of pigmentation, occasionally observed in focal cutaneous mucinosis, was not present in our case, perhaps due to interference from the tattoo pigment. Brown dots and globular vessels over a reddish-orange background, described in follicular and acral persistent papular mucinosis respectively, were also not identified, possibly allowing dermoscopy to aid in diagnosis of not only cutaneous mucinosis, but also its specific

subtypes. The mechanism of trauma-induced cutaneous mucin deposition remains unclear, with proposed hypotheses including inflammation and chronic antigenic stimulation leading to the dysfunction of fibroblasts. Reports of mucinosis developing after joint replacement surgery additionally suggest the role of foreign body antigens in the pathogenesis of this entity. Alterations of the local cutaneous immune response induced by tattooing may predispose to inflammatory and immune-mediated dermatoses, including mucinosis. In this case, lesions were almost exclusively confined to red ink areas, a pigment classically implicated in hypersensitivity reactions. Nevertheless, mucin deposition is not a characteristic histopathological feature of these reactions, highlighting the unusual nature of the present finding.