





## Trichoscopy of 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 using a dermoscope. This tool allows for the observation of specific characteristics 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 the diagnosis of scalp psoriasis by describing the various trichoscopic signs observed.

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

A retrospective and descriptive study was conducted over a 6-year period in the dermatology department, focusing on patients with psoriasis involving the scalp.

## **Results:**

A total of 98 cases were included in the study. The average age of the patients was 32 years, with a standard deviation of 18.93 years. The patient group showed a male predominance, with a male-to-female ratio of 1.89. The average disease duration, calculated from the time of initial diagnosis, was 4.16 years. In terms of clinical forms, the majority of cases presented with erythrodermic psoriasis, representing 41% of the cases (40 patients). Guttate psoriasis accounted for 37% (36 patients), and plaque psoriasis was observed in 28.6% of cases (28 patients). In 38% of the cases (37 patients), the scalp was the only area affected by psoriasis, indicating isolated scalp involvement. Scalp involvement was observed across all regions of the scalp, with the occipital region being the most commonly affected area in 42% of the cases.

Trichoscopic examination revealed several notable features. Diffuse erythema, characterized by widespread redness of the scalp, was observed in 60% of cases (59 patients). Twisted vascular loops, indicative of vascular changes in psoriasis, were found in 19% of cases (19 patients). Red dots, representing areas of dermal inflammation and commonly seen in psoriasis, were present in 38% of cases (37 patients). Red globules, another vascular feature seen in psoriasis, were observed in 37% of cases (36 patients). Glomerular vessels, with their characteristic pattern of small, clustered blood vessels, were found in 14% of patients (14 cases). Thick white scales, a hallmark feature of psoriasis, were present in 90% of the cases (88 patients). Yellow dots, which can indicate sebaceous gland activity or scale remnants, were noted in 18% of patients (18 cases). Finally, black dots, which suggest the presence of hair follicle openings or follicular plugging, were seen in 15% of cases (15 patients).

#### **Conclusion:**

Trichoscopy of psoriasis reveals specific characteristics that enable accurate differential diagnosis from other scalp diseases. This non-invasive technique is essential for a detailed evaluation and effective follow-up of patients.







# The role of dermoscopy in the evaluation of melasma

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## **Introduction & Objectives:**

Dermoscopy is a simple, rapid, non-invasive, and reproducible examination that enables visualization of morphological characteristics often imperceptible to the naked eye.

Melasma is a common acquired hyperpigmentation disorder that primarily affects women with darker phototypes. It is challenging to treat and significantly impacts the quality of life due to its predilection for the face.

In addition to helping establish the correct diagnosis, dermoscopy can assist in excluding differential diagnoses, guide therapeutic decision-making, and recognize treatment-related adverse effects.

The aim of this study is to identify the dermoscopic features of melasma and differentiate between the epidermal, dermal, and mixed types.

# **Materials & Methods:**

This is a retrospective, descriptive study conducted at the Dermatology Department, covering a four-year period from November 2020 to November 2024. All patients who consulted for melasma during this period were included.

## Results:

A total of 180 patients were included in the study, consisting of 149 women and 31 men, with a clear female predominance (female/male ratio 4.8). The average age of the patients was  $36.4 \pm 10.09$  years, ranging from 24 to 52 years. The majority of patients (92.2%) were of phototype IV.

Sixty-four percent of patients had a history of contraceptive pill use, and 37.5% had a history of menstrual cycle disorders. The majority of patients (78.8%) reported frequent sun exposure. One hundred four patients (57.7%) had a disease duration of more than six months.

Centrofacial melasma was the most common clinical form in our sample.

Analysis of dermoscopic images of melasma revealed the presence of a brown pigment network (45.6%), bluish-gray pigmentation (36.1%), and mixed patterns (18.3%).

The brown pigment network was predominant in all three clinical forms of melasma (centrofacial, malar, and mandibular), with a diffuse distribution in 69.5% of cases and patchy distribution in 30.5% of cases.

The reticuloglobular pattern was the most frequent (60.5%), followed by perifollicular sparing in 53.3%, brown globules in 38.9%, and arcuate and annular structures in 33.3%.

For the epidermal type, patients exhibited scattered islands of brown reticular networks with fine granules dispersed on the surface, well-defined borders, and perifollicular sparing.

Telangiectasias were present in 21.1% of patients.

For the dermal type, we observed a diffuse brown pseudoreticular pattern with blue-gray pigment granules and blue-gray perifollicular accentuation, with indistinct borders.

Finally, the mixed type presented with hyperpigmentation ranging from dark brown to gray, forming patterns such as a honeycomb reticular pattern, arcuate pigmented lines, pigment granules, and concentric gray-brown circles around follicular openings and glandular ducts, indicating both epidermal and dermal features.

## **Conclusion:**

Dermoscopy plays a crucial role in the evaluation and diagnosis of melasma. It allows for the identification of specific morphological patterns that help distinguish between epidermal, dermal, and mixed types of melasma. Our study highlights the importance of dermoscopic examination in improving diagnostic accuracy, guiding treatment decisions, and monitoring the effects of therapy.







# Efficacy of Topical 2% Carteolol in the Treatment of Infantile Hemangiomas: A Dermoscopic and Clinical Evaluation

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**Introduction & Objectives:** Infantile hemangiomas (IH) are the most common benign vascular tumors in infants, often requiring treatment in 10-15% of cases due to complications. While systemic propranolol is the first-line treatment, its potential for systemic side effects raises interest in topical therapies. This study investigates the efficacy of topical 2% carteolol in treating IH and its dermoscopic changes over time.

**Materials & Methods:** A total of 15 patients with IH were treated with topical 2% carteolol drops applied twice daily for 3 months. Clinical and dermoscopic images were captured at baseline, 1 month, and 3 months. Dermoscopic features such as erythema, clods, coiled vessels, dotted vessels, and others were evaluated. Visual Analog Scale (VAS) scores were used to assess treatment response.

**Results:** The most frequent dermoscopic findings at baseline were coiled vessels, followed by serpentine and dotted vessels. At 1 and 3 months, significant improvements were observed, with reductions in erythema and coiled vessel scores (p<0.05) and at 3 months with reductions in clod score (p<0.05). The skin-colored structureless area significantly increased, indicating lesion regression (p<0.05). VAS scores showed a significant decrease over the 3-month period, with a positive correlation between baseline dotted vessel scores and treatment response (r:0.656, p:0.008). A negative correlation was found between VAS and erythema at 3 months (r:-0.634, p:0.011).

**Conclusion:** Topical 2% carteolol is an effective and safe treatment for IH. Dermoscopic monitoring provides valuable insights into treatment progression, showing significant changes in erythema, clod, and vascular patterns. The presence of dotted vessels at baseline may serve as a predictor of a favorable treatment response. Further studies with longer followup are needed to validate these findings.

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Clinical and dermoscopic hallmarks of Merkel cell carcinoma: insights from 16 cases, including two reflectance confocal microscopy evaluation.

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## **Introduction & Objectives**

Merkel cell carcinoma (MCC) is a rare and aggressive skin cancer, able to mimic several both benign and malignant cutaneous lesions. The recognition of specific dermoscopic and reflectance confocal microscopy (RCM) features is essential for early detection and to improve patient's outcomes.

#### **Materials & Methods**

A single center retrospective study of the clinical and dermoscopic features was conducted among patients histologically proven MCC, from January 2016 to date. In two cases RCM (VivaScope® 1500) was also performed and data analyzed.

## **Results**

16 patients (9 M, 7 F) were retrieved, with a median (IQR) age at diagnosis of 81 (9) years old. Clinically, MCCs presented as nodules (69%) or plaques (31%) with predominant pinkish to reddish coloration, primarily locating on the head and neck region (50%), followed by upper and lower limbs (25% each). Dermoscopically, structureless areas were observed in 75% of cases, with pinkish and white structureless background reported in 75% and 62.5%, respectively. The vascular component appeared polymorphous (94%), with variably focused and dilated irregularly linear and arborizing (81% each) vessels as *hallmarks*. Disarranged epidermis, aggregates of hyporeflective small cells outlined by fibrotic linear septae and scattered hyperreflective cells in the dermis resulted at RCM evaluation. Combining clinic and dermoscopy, four distinct types of MCC have been defined (Fig.1): Pinkish plaque MCC (A, a); *cherry-red* nodular MCC (B, b); ulcerated erythematous nodular MCC (C, c); hyperkeratotic MCC (D, d).

# Conclusion

Dermoscopic and RCM features of MCC, as rapidly growing *cherry-red* nodule, were characteristic and reproducible. The variably focused and dilated, *polymorphous vessels* on a *pinkish-reddish homogeneous structureless background* at dermoscopy, as well as the aggregates of hyporeflective small cells outlined by fibrotic linear septae at RCM were the most striking features. Keratotic nodular lesions increasing significantly in number should be carefully evaluated as suspicious of MCC.

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Unmasking sebaceous tumors. Dermoscopic characteristics of sebaceous adenoma, sebaceoma and sebaceous carcinoma: a systematic review

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## **Introduction & Objectives**

Sebaceous neoplasms (SNs) are a rare group of skin tumors originating from the sebaceous glands, ranging from benign types, such as sebaceous adenoma and sebaceoma, to malignant forms of non-melanoma skin cancers (NMSCs), such as sebaceous carcinoma. A systematic exploration of the dermoscopic features of these lesions could enhance early detection, accurate diagnosis, and differentiation, which are crucial for determining appropriate treatment strategies.

#### **Materials & Methods**

A systematic literature review from Medline (via PubMed) and Scopus databases was made using specific search strings. Articles written in English and Spanish languages were retrieved. After screening, 39 studies were selected for full-text review.

#### **Results**

A total of 55 cases of sebaceous neoplasms (SNs) were collected, with a predominance in female (79%) and a median (IQR) age at diagnosis of 81 (7) years. At dermoscopy, yellowish structures (95%) and yellowish structureless areas (90%) were consistent as hallmark features of this SNs. Along with the clinical findings, notable dermoscopic differences were identified between malignant and benign lesions. Sebaceous carcinoma showed a higher prevalence of whitish-pink areas, reddish/purplish globules, shiny white blotches/strands, ulceration, and polymorphic vessels. Instead, specific vascular patterns were characteristic of benign tumors: radial linear irregular vessels were predominantly reported in sebaceomas, while linear/arborizing vessels appeared more typical of sebaceous adenomas.

## Conclusion

Dermoscopic features of sebaceous neoplasms, particularly sebaceous carcinoma, may significantly aid in\*\* early detection and differentiation from other benign lesions and NMSCs. Further prospective case-control\*\* studies are required to confirm these findings.







## **Evaluation of Pigmented Skin Lesions Using Fiji: An Open-Source Software**

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## **Introduction & Objectives**

Dermatoscopy is a key diagnostic tool in dermatology, enabling visualization of subsurface structures. Technological advances highlight the potential of software tools for quantitative analysis of pigmented lesions. Fiji, an advanced version of the open-source software ImageJ, offers capabilities for biomedical applications, yet its use in dermatology remains underexplored. This study evaluates Fiji's potential for objective assessment of pigmented lesions by measuring key parameters such as area and pigmentation characteristics.

## **Materials & Methods**

We analyzed dermatoscopic images of pigmented lesions using automated methods in Fiji. A custom macro was developed to segment lesions, measure areas, and extract pigmentation intensity. Image preprocessing involved median filtering and morphological operations (dilation and erosion) to enhance segmentation accuracy. Data were output in CSV format for statistical analysis. The images were taken using a DinoLite video dermatoscope.

#### **Results**

The automated process reduced analysis time and standardized measurements, overcoming the subjectivity of visual assessments. Key parameters, including lesion area, mean pigmentation intensity, and standard deviation, were successfully extracted. Preprocessing steps improved segmentation quality, eliminating noise such as hairs or artifacts. Results demonstrated high consistency across multiple samples, highlighting the method's reproducibility.

#### **Conclusion**

This study demonstrates the applicability of Fiji for the objective assessment of pigmented lesions in dermatology. The methodology bridges the gap between manual and automated analysis, providing a standardized approach for clinical and research applications. Future work is needed focusing on incorporating adaptive algorithms to enhance accuracy and applying this method to larger datasets for validation.







# **Dermoscopy Reveals Pseudopitting of the Nail in Psoriasis**

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## **Dermoscopy Reveals Pseudopitting of the Nail in Psoriasis**

# **Introduction & Objectives:**

Nail involvement in psoriasis is very common, with a reported lifetime incidence of up to 90% in all psoriatics. Nail psoriasis (NP) has diverse clinical manifestations [1]. Despite their high frequencies, nail alterations are usually neglected in psoriasis [2]. However, findings of NP are usually specific, which allows a clinical diagnosis of psoriasis even if cutaneous lesions are absent [3,4]. Di Chiacchio et al described a unique manifestation of NP, which they called pseudopitting. They presented a patient with NP, in whom pits were seen only above salmon patches (SP) [2]. Herein, we will present three patients with dermoscopic images of pseudopitting and a description of other features related to pseudopitting.

## **Materials & Methods:**

Three patients with dermoscopic images of pseudopitting and a description of other features related to pseudopitting will be presented.

#### **Conclusion:**

Findings of the patients will contribute to a deeper understanding of dermoscopy of NP.







## Disseminated Fusariosis: A Case Report with Dermoscopic Featurest

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**Introduction:** Fusarium spp. are emerging pathogens causing severe disseminated infections, primarily in immunocompromised patients, ranking as the second most common fungal infection in this population. We report a case of disseminated Fusarium spp. infection in a patient with acute myeloid leukemia (AML).

Case Report: A 42-year-old female with AML, diagnosed in 2019, was admitted for disease relapse and treated with FLAG-IDA salvage chemotherapy. Since June 2024, she developed painful papulonodular skin lesions with central necrosis, ulceration, and occasional blistering, located on the limbs, trunk, and face. Dermoscopy using DermLite 4 (10× polarized contact mode) revealed superficial white scales on an erythematous background, central gray-blue ulceration, red areas, and non-structured white zones. Skin swabs confirmed fungal infection due to *Fusarium spp.*. Skin biopsy microscopy showed intra- and extracellular spores, indicative of fungal etiology. CT scan revealed bilateral pulmonary nodules, nodular hepatic, splenic, and renal lesions, along with enterocolitis. Empirical treatment with liposomal amphotericin B (5 mg/kg/day) and oral voriconazole (540 mg/day) was initiated. Despite therapy, the patient developed severe sepsis, progressing to septic shock and fatal cardiac arrest two months later.

**Discussion:** Invasive fusariosis (IF) is rare but potentially fatal in immunocompromised patients, particularly those with AML. Prolonged neutropenia and T-cell dysfunction are key risk factors. *Fusarium spp.* is the second most common invasive fungal pathogen in AML and HSCT (hematopoietic stem cell transplant) patients, after *Aspergillus spp.* Clinical manifestations often include pulmonary infections from fungal conidia inhalation and skin infections due to direct inoculation, both potentially leading to dissemination. Skin lesions typically present as painful erythematous to violaceous papules or nodules with central necrosis, predominantly on the trunk and extremities. Rapid clinical progression is common, as observed in our case.

Dermoscopy, while utilized in other fungal infections, is underreported for IF. Similar patterns, including yellow globules and black dots, have been described in eumycetoma and chromoblastomycosis but not in fusariosis. IF's deceptive clinical appearance complicates diagnosis, mimicking other severe fungal infections such as invasive aspergillosis (IA). Unlike IA, positive blood cultures are more frequent in IF, aiding differentiation. Other molds, such as mucormycosis, should also be considered.

Prognosis remains poor, with mortality rates ranging from 60–80% in disseminated fusariosis among immunocompromised patients . Successful management relies on host immune recovery, particularly neutrophil count restoration. Preventive measures are critical in reducing the high mortality rate.

**Conclusion:** Cutaneous fusariosis in leukemic patients presents as erythematous papules and nodules evolving into ulcerative lesions with blistering and necrotic centers. Early diagnosis, immune reconstitution, and preventive strategies are vital for improving outcomes in at-risk populations.

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## **Dermoscopic patterns of trichotillomania**

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## **Introduction & Objectives:**

Trichotillomania, or hair-pulling disorder, is currently included in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as a separate diagnosis joining the group of obsessive-compulsive and related disorders, along with body dysmorphic disorders. The pathophysiology remains unknown, and the diagnosis is often one of elimination. The aim of our work is to describe the various dermoscopic signs of trichotillomania.

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

We conducted a cross-sectional, descriptive study collating patients who are followed up in consultation in the dermatology department, between the period of January 2018 to January 2024.

## **Results:**

We enrolled 14 patients with trichotillomania, with a mean age of  $20.8 \pm 3.6$  years and a clear female predominance (64.3%). The diagnosis of trichotillomania was retained in all our patients by the presence of DSM-5 criteria. Alopecic plaques of the scalp were the most frequent (84.6%), followed by the eyebrows (30.7%), and finally the eyelashes (7.6%).

Dermoscopic examination of alopecic plaques in these patients revealed the presence of cut hair in 92.8% of cases, flaming hair in 57.1% of cases, fractured hair in 64.3% of cases, the V sign in 50% of cases, broom hair in 42, 8% of cases, tulip hair in 28.5% of cases, corkscrew hair in 35.7% of cases, exclamation hair in 35.7% of cases, perifollicular haemorrhage in 71.4% of cases, match hair in 42.8% of cases and weapon hair in 21.4% of cases.

## **Conclusion:**

Trichoscopy is an easy and accessible tool for the assessment and diagnosis of trichotillomania. Recognizing and understanding the dermoscopic patterns associated with trichotillomania can significantly improve treatment and follow-up of patients, leading to better management of this often under-diagnosed condition.







## Dermoscopy of lichenoid reactions: a series of 6 patients

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## **Introduction & Objectives:**

Drug-induced cutaneous lichenoid eruptions are a rare form of adverse drug reaction. Relatively limited data based on large patient samples are available concerning clinical presentation, but with very little data in terms of dermoscopy and mucoscopy. Our aim is to describe the different dermoscopic aspects during lichenoid reactions.

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

This is a retrospective, descriptive study, conducted in the Dermatology Department, spread from June 2018 to April 2024, including all histologically confirmed cases of lichenoid reactions.

#### **Results:**

We collected 6 patients with a lichenoid reaction, the mean age was 60.1 + /- 8.6 years, all our patients were male. All our patients had been taking imatinib, 67% of patients had chronic myeloid leukemia, and 33% of patients had gastrointestinal stromal tumors, one of which was metastatic. The initial dose was  $400 \, \text{mg/d}$  for all our patients, and the mean time between the start of treatment and the appearance of signs was  $3 \pm 0.6$  months. Clinically, an erythematoviolet maculopapular rash on the flexion zones was reported in 84% of cases, and in 16% it was associated with psoriasiform erythematosquamous plaques.

Mucosal involvement was present in 33% of cases, in the form of lichenified cheilitis. Dermoscopically, structureless erythematous areas were present in all patients, predominating in the periphery in 84% of cases, a red-orange background in 67% of cases, blue-grey pigments in 50% of cases, a hyperpigmented reticulated network in 33%, fine whitish scales in the periphery in 67% of cases, and Wickham's striae in 33% of cases. Regarding vascular patterns, glomerular and stippled vascularization was reported in 50% of cases, and telangiectasias in 16%. On mucoscopy, white, erythematous areas without structures were present in all these patients, Wickham's striae, glomerular and linear vascularization in places in 50% of cases.

#### **Conclusion:**

Our study characterized the dermoscopic aspects of cutaneous lichenoid reactions. Our results show that dermoscopic signs, such as structureless erythematous areas, blue-gray pigments and Wickham striae, are consistent with the sparse data available in the literature. These observations underline the importance of dermoscopy and mucoscopy for the diagnosis and management of drug-induced lichenoid reactions.







The potential of dermatoscopy for diagnosis of squamous cell skin cancer and actinic keratosis, depending on the work experience of a dermatologist

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## **Introduction & Objectives:**

Of the entire group of non-melanoma skin cancers, squamous cell skin cancer is prognostically more unfavorable because of aggressive growth and risk of metastasis. Due to the existence of precursors of invasive squamous cell skin cancer, there is a possibility of highly effective prevention of this disease. The aggravation of dysplasia in these neoplasms occurs in the sequence of actinic keratosis, Boven's disease, keratoacanthoma, squamous cell skin cancer. The first stage in the diagnosis of these nosologies is a clinical examination and dermatoscopy. Some dermatoscopic signs may occur in several of these neoplasms, which can lead to diagnostic errors. The aim of the study was to explore the capabilities of dermatoscopy in diagnosis of invasive squamous cell skin cancer, keratoacanthoma, Boven's disease and actinic keratosis, depending on the work experience of a dermatologist.

## **Materials & Methods:**

The study was conducted at the Privolzhsky Research Medical University Ten dermatologists participated, including five with more than four years of experience in dermatoscopy and five with less than four years. The doctors analyzed the dermatoscopic images of actinic keratosis (85 neoplasms), Bowen's disease (28 neoplasms), keratoacanthoma (10 elements), and invasive squamous cell skin cancer (24 elements). The analysis was performed using a list of 23 dermatoscopic signs of these nosologies developed by the authors on the basis of a literature review.

#### **Results:**

Statistically significant differences in the frequencies of dermatoscopic signs between the two groups of specialists were revealed when analyzing images of actinic keratosis and Bowen's disease. When analyzing images of invasive squamous cell skin cancer and keratoacanthoma, no statistically significant differences in the detection rates of dermatoscopic signs were found. Taking into account the average number of signs, a statistically valid result of the analysis is the conclusion that the average group frequencies are equal in both groups of dermatologists.

#### **Conclusion:**

Thus, the capabilities of dermatoscopy in the diagnosis of invasive and non-invasive forms of squamous cell skin cancer and actinic keratosis are high regardless of the experience of dermatologists.







# Dermoscopy based AI risk scoring enhanced experienced dermatologists' decision-making: a large retrospective reader study.

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## **Introduction & Objectives:**

The integration of artificial intelligence (AI) in dermatology, particularly in the field of dermoscopy, holds significant promise for diagnostic and management decisions. This study aims to assess the impact of a deep learning generated AI risk score, based on dermoscopic images and metadata, on dermatologists' diagnostic accuracy, confidence and management strategy for skin lesions suspect of skin cancer.

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

A neural network was developed using a database of dermoscopic images of benign and malignant skin lesions, including both proprietary data (Dermscan database, n=10,138) and public data. A multicenter, cross-sectional study was conducted involving 104 dermatologists who evaluated batches from a test set of 922 benign and malignant skin lesions, resulting in a dataset containing 9198 observations. Each case was assessed before and after the presentation of the AI-generated risk score.\*\* Key outcomes included the correct decision on malignancy, accurate diagnosis, management strategy and confidence in decision making.

# **Results:**

AI assistance significantly improved dermatologists' diagnostic accuracy, particularly for malignant lesions, with correct malignancy decision in melanoma and high-grade dysplastic naevi rising from 66% (95% CI: 62-70%) to 74% (95% CI: 70-77%), in basal cell carcinoma from 91% (95% CI: 88-93%) to 94% (95% CI: 91-95%), and in squamous cell carcinoma from 89% (95% CI: 86-92%) to 93% (95% CI: 91-95%). The use of AI risk scoring was significantly associated with increased odds of making the correct malignancy decision (OR = 2.67, 95% CI: 1.28-5.57, p=0.009) and providing specific diagnosis (OR = 1.82, 95% CI: 1.07-3.07, p=0.026). Overall sensitivity and specificity for decision on malignancy went from respectively 91.7% and 84.2% before AI, to 97.6% (difference of 5.9%, 95% CI: 2.9%-8.8%, p<0.001) and 86.7% (difference of 2.5%, 95% CI: 0.0%-5.0%, p=0.054) after AI. Overall accuracy for correct diagnosis went from 74.6% to 81.6% (difference of 7.0%, 95% CI: 3.8%-10.2%, p<0.001). AI was positively associated with choosing the correct management strategy (OR = 1.36, 95% CI: 1.16-1.61, p<0.001). Accuracy for correct management strategy increased significantly from 53.5% to 59.0% (difference of 5.5%, 95%CI: 2.5% - 8.5%, p<0.001).

## **Conclusion:**

AI enhanced experienced dermatologists' decision making, particularly for malignant skin lesions, resulting in a significantly higher sensitivity. This study supports the complementary use of AI in dermatology, highlighting its potential to improve patient outcomes. Future research should focus on prospective evaluations to further explore AI's integration into routine clinical settings.

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## Beyond the Surface: Innovations in Skin Imaging for Diverse Pigmentation

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# **Introduction & Objectives:**

The skin is the human body's largest organ and thus serves a vital protective role. It also exhibits considerable variation among individuals, particularly in skin of color due to melanin content. Melanin influences not only skin appearance, but also influences responses to external stimuli and disease manifestations. Skin imaging has become crucial in dermatology, providing non-invasive methods for diagnosing and monitoring skin conditions. However, higher melanin content in skin of color can affect the efficacy of light-based imaging methods. Therefore, our aim is to evaluate skin imaging technologies with a focus on their application to skin of color, addressing the unique challenges and considerations involved.

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

This review involved a comprehensive analysis of existing literature on skin imaging technologies, including dermatoscopy, confocal laser scanning microscopy, ultrasound imaging, and hybrid techniques. The review also examined studies on the inclusion of diverse skin types in imaging research and assessed the impact of these technologies on the diagnosis and treatment of skin conditions in skin of color.

# Results:

We found that while dermatoscopy and confocal laser scanning microscopy significantly improve the accuracy of melanoma and other skin cancer diagnoses, their efficacy can be compromised in darker skin tones. High-frequency ultrasound and MRI provide detailed images of skin structures and are valuable in evaluating tumors and inflammatory conditions, although their high cost and complexity limit widespread use. Hybrid imaging techniques, such as photoacoustic imaging, show promise in addressing these challenges by combining the strengths of different modalities. Recent efforts to include diverse skin types in imaging studies have begun to address historical disparities in dermatological care.

# **Conclusion:**

Advancements in skin imaging have greatly enhanced the ability to diagnose and monitor skin conditions, yet challenges remain in effectively imaging skin of color. Higher melanin content can affect light-based imaging methods, necessitating the development of technologies tailored to diverse skin tones. Efforts to include varied skin types in research are essential for creating equitable healthcare solutions. Future research should focus on improving imaging resolution and depth penetration, reducing costs, and integrating AI to enhance diagnostic accuracy and personalized treatment. Ensuring inclusive research and technology development is crucial for advancing dermatological care for all skin types.







## Case report: Lupus miliaris disseminatus faciei diagnosed by specific dermoscopic features

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## **Introduction & Objectives:**

Lupus miliaris disseminatus faciei (LMDF) is a rare granulomatous skin disease of unknown etiology characterized by symmetrical, monomorphic, reddish-brown papules clustered around the eyelids and mouth besides involvement of forehead and cheeks. The disease shares overlapping features with rosacea and sarcoidosis [1]. Dermoscopic signs differ according to the stage: in early lesions, dermoscopy shows follicular keratotic plugs and yellow-orange areas. In fully developed lesions, numerous follicular keratotic plugs are seen, associated with widespread yellow-orange areas that later form an erythematous background. In late-stage lesions, when perifollicular fibrosis occurs, white structures appear around the follicular keratotic plugs [2]. Histopathological examination of epithelioid granulomas with caseating necrosis, along with clinical signs, is key for early diagnosis and treatment, leading to better outcomes [3]. LMDF treatment can be quite difficult. Commonly used treatments include tetracycline, isotretinoin, hydroxychloroquine, dapsone, systemic steroids, pulsed dye laser, topical steroids, and topical calcineurin inhibitors [4].

# **Materials & Methods:**

A case report.

#### **Results:**

A 25-year-old woman presented with a two-year history of persistent skin lesions localized to the central part of her face, which initially developed following sunburn. The patient had a prior diagnosis of rosacea and had undergone treatment with azelaic acid 20%, metronidazole gel 0.75%, and oral doxycycline 50 mg, all without significant improvement. On clinical examination, multiple dome-shaped reddish and yellow papules on the cheeks were observed, Dermoscopy revealed follicular keratotic plugs and white structures representing fibrosis on an erythematous and yellow-orange background, raising suspicion for LMDF. A punch biopsy revealed histopathological findings of hypergranulosis, follicular hyperkeratosis, thickening of the basement membrane, and perivascular and perifollicular lymphocytic infiltration in the dermis. Numerous Demodex folliculorum were also identified within the follicles. Based on clinical, dermoscopic and histopathological findings, a diagnosis of LMDF was established. The patient was initiated on isotretinoin 10 mg/day, leading to improvement in her skin condition.

#### **Conclusion:**

This case highlights the importance of dermoscopy as a key diagnostic tool in LMDF, allowing for early recognition and differentiation from other facial dermatoses, especially in patients unresponsive to conventional rosacea treatments. The integration of dermoscopic findings with histopathological analysis ensures an accurate and timely diagnosis.

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# Ultraviolet-induced fluorescence dermoscopy features of basal cell carcinomas in the H- and non-H-zones of the head and neck area

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# **Introduction & Objectives:**

Basal cell carcinoma (BCC) is the most prevalent type of skin cancer, most frequently developing in the head and neck area. The aim of this study was to analyze the ultraviolet-induced fluorescence dermoscopy (UVFD) and polarized dermoscopy (PD) characteristics of BCCs located in specific areas of the head and neck.

## **Materials & Methods:**

BCCs were assessed using Dermlite DL5 dermatoscope under polarized and ultraviolet-induced fluorescent modes. The tumors were divided by their location within the H-zone (ear and periauricular region, temple, eyes and periorbital region, nose and paranasal region, oral region, chin) and non-H-zone (forehead, cheek, rest of the face, scalp, neck). PD findings were documented according to predefined dermoscopic criteria for skin cancer evaluation. UVFD features were established based on personal observations and included dark silhouettes, interrupted follicle pattern, erosions/ulcerations, white-blue scales, arborizing vessels, absence of pink-orange or blue-green fluorescence, blue-fluorescent fibers, pink orange-fluorescence, black globules, white depigmentation, white clods and well-demarcated borders.

#### **Results:**

151 BCCs were included, of which 61.6% (93/151) were located in the H-zone, with the nose and paranasal region being the most frequently affected area (37.6%, 35/93). BCCs in the H-zone were predominantly nodular (65.6%) and nonpigmented (86%). Under PD, the most frequently observed features were arborizing vessels (52.7%), short fine telangiectasias (46.2%), red-white homogeneous areas (40.9%) and ulcerations/micro-ulcerations (40.9%). Under UVFD, BCCs in the H-zone presented predominantly dark silhouettes (77.4%), interrupted follicle patterns (51.6%), absence of blue-green (51.6%) or pink-orange fluorescence (44%) and well-demarcated borders (43%). BCCs located in the H-zone showed more frequently than the tumors in the non-H zone ulcerations/micro-ulcerations (p=0.021) under PD, and erosions/ulcerations (p=0.019), blue fluorescent fibers (p=0.009) or absence of blue-green fluorescence (p=0.019) under UVFD.

#### Conclusion:

BCCs in the head and neck area show distinct features under UVFD, with some findings more common in tumors in the Hzone. UVFD, when added to PD, can be a valuable, noninvasive complementary tool for early detection of BCC located on the head and neck.







## Trichoscopy of Discoid Lupus: A Report on 11 Cases

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## **Introduction & Objectives:**

The scalp is affected in 60% of cases of discoid lupus erythematosus (DLE), and its involvement can be isolated in approximately 10% of cases. These discoid lesions can also be present in patients with systemic lupus erythematosus. The objective of this study is to evaluate the trichoscopic findings in patients with DLE and assess its diagnostic value in differentiating DLE-related scarring alopecia from other causes.

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

This is a descriptive retrospective study conducted in the Dermatology Department of Mohammed VI University Hospital in Oujda, covering a period of 10 years from December 2014 to July 2024. It includes patients diagnosed with lupus and treated in our department.

## **Results:**

Our study collected data on 29 lupus patients hospitalized during the study period, with 10 patients diagnosed with systemic lupus erythematosus (SLE) and 19 with chronic cutaneous lupus. A marked female predominance was noted, with a female-to-male ratio of 2.6. The average age of our patients was 46 years, ranging from 28 to 63 years. Scalp involvement was present in 11 patients with DLE, accounting for 38% of the cases. Alopecic plaques were found in 54.5% of patients, atrophic hypochromic lesions with hyperpigmented periphery in 27.3%, and erythematous-squamous lesions in 27.3%. Papulonodular erythematous or violaceous lesions with fine scaling or confluent plaques without alopecia were found in 45.5% of cases. The most common lesion locations were parietal (54.5%), occipital (27.3%), frontal (27.3%), temporal (18.2%), and vertex (9.1%). Trichoscopy revealed an erythematous background in 72.8% of cases, a pearly white background in 18.2%, follicular plugs in 27.3%, and perifollicular hyperkeratosis in 18.2%. Broken hairs, some short and others downy, were noted, and the absence of follicular openings was found in 2 cases (18.2%). Polymorphous vascularization (linear, dotted, serpiginous, glomerular) was observed in 3 cases, and telangiectasias were seen in 3 cases.

## **Conclusion:**

Trichoscopy plays a crucial diagnostic role in scarring alopecias, especially in distinguishing DLE from other causes of scarring alopecia.







A Prospective Observational Study Comparing Psoriatic Nail Findings and Nail Involvement Severity Using Clinical Examination, Standard Dermoscopy, and Ultraviolet Fluorescence Dermoscopy

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**Introduction & Objectives:** Nail involvement is a common feature of psoriasis, affecting up to 88% of cases and occasionally serving as the sole manifestation of the disease. Accurate evaluation of nail psoriasis is essential for understanding its clinical and systemic impact. This study aimed to compare the effectiveness of clinical examination, standard dermoscopy, and ultraviolet fluorescence (UVF) dermoscopy in detecting and assessing psoriatic nail changes.

**Materials & Methods:** In this prospective observational study, 35 patients with psoriatic nail changes were evaluated. Disease severity was assessed using the Psoriasis Area Severity Index (PASI), while nail involvement was measured via the Nail Psoriasis Severity Index (NAPSI), dermoscopic NAPSI (dNAPSI), and UV fluorescence NAPSI (UVF NAPSI). Clinical examination, standard dermoscopy, and UVF dermoscopy were performed, and findings were compared.

**Results:** UVF dermoscopy showed statistically significant superiority in detecting matrix-associated NAPSI compared to clinical and standard dermoscopic evaluations (p < 0.05). Both UVF and standard dermoscopy outperformed clinical examination in identifying nail bed-associated changes, though no significant difference was observed between the two methods. UVF dermoscopy enhanced visualization of pitting and leukonychia due to increased fluorescence contrast, providing a sharper distinction of pathological changes. However, standard dermoscopy remained advantageous for evaluating hyperkeratotic plagues and surface irregularities.

**Conclusion:** UVF dermoscopy demonstrated clear diagnostic advantages, particularly in detecting matrix-associated abnormalities and subtle nail changes. This study supports its integration into routine clinical practice for more accurate diagnosis and monitoring. Further studies are needed to validate these findings in larger cohorts and over longer follow-up periods.







## Seborrheic Keratosis or Basal Cell Carcinoma? A Case Series of Two Misleading Lesions

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#### Introduction:

Seborrheic keratosis (SK) is a prevalent benign epidermal tumor composed of immature keratinocytes, primarily affecting middle-aged and elderly individuals. It demonstrates significant morphological variability, ranging from flat, lightly pigmented macules to well-demarcated, brown-to-black, scaly papules or plaques with a characteristic "stuck-on" appearance and slow, progressive growth. Although its distinctive clinical features often enable straightforward diagnosis, dermoscopy serves as a valuable adjunct in uncertain cases, revealing hallmark structures such as comedo-like openings, milia-like cysts, cerebriform patterns, and hairpin vessels, aiding differentiation from other pigmented skin lesions. We present two cases where lesions clinically highly suspected as SK were ultimately diagnosed as basal cell carcinoma (BCC).

## **Case Presentations:**

A 76-year-old female patient presented with a 1×1 cm brownish, scaly, round, risen, papule on the chin, identified during a routine dermatological examination. She reported that the lesion had been present for an extended period but had recently exhibited subtle growth. The lesion was asymptomatic, with no associated discomfort or irritation. Dermoscopy revealed keratin buildup and a brown-to-black crusted surface. Although SK was clinically suspected, the absence of its characteristic dermoscopic features warranted further investigation. A probatory biopsy was performed, and histopathological analysis confirmed the diagnosis of BCC. Similarly, an 83-year-old male patient presented with a 2×2 cm greyish-to-black papule with white scales on the right cheek. The lesion had been present for a prolonged period and remained asymptomatic, raising a strong clinical suspicion for SK. However, dermoscopy revealed white scales but lacked hallmark SK-associated features, such as comedo-like openings or milia-like cysts. Due to the diagnostic uncertainty, a probatory biopsy was performed, revealing BCC upon histopathological analysis.

#### **Conclusion:**

These cases illustrate how SK, despite its typically benign nature, can closely mimic malignant lesions, posing a diagnostic challenge. While clinical evaluation often suffices, the absence of characteristic dermoscopic features should prompt careful reconsideration. Overreliance on clinical impression alone may lead to misdiagnosis and delay appropriate treatment, underscoring the need for a cautious and systematic approach in cases of diagnostic uncertainty.

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## Milia en plaque in pediatric patients: an overview with dermatoscopic insights.

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# **Introduction & Objectives:**

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

#### **Results:**

Milia en plaque (MEP) are an uncommon variant of primary milia in which small keratin-filled cysts are distributed on a localized plaque. Pediatric presentations are infrequent, with few reported cases in the literature. Lesions often present in children aged 3–12 years, with no significant gender predilection. Common sites include the periorbital area, retroauricular regions, and cheeks. The condition is benign, though its cosmetic impact and potential for misdiagnosis underscore the importance of accurate identification. In children, MEP typically manifests as clusters of small, white or yellowish papules resembling classic milia; erythematous or indurated plaque: surrounding the papules, varying in size and shape; or asymptomatic presentation, although mild itching or irritation may occur. The plaques are often slow-growing and persistent without spontaneous resolution, distinguishing them from transient neonatal or primary milia.

We collected 6 cases of MEP in children. All appeared in healthy individuals after trauma, usually a few months later, as whitish micropapules on an erythematous plaque. The most frequent location was the knee. Dermoscopy in all cases was similar – pearl-white globules located on a pink background. All patients were asymptomatic, hence in two cases only observation was continued, in two salicylic acid was applied, and in two cases topical retinoid was administered.

Key dermatoscopic findings include: white-yellow globules, corresponding to keratin-filled cysts. These are uniform in size and distributed across the plaque; erythematous background, indicative of vascularization or mild inflammation; peripheral scaling reflecting localized skin desquamation; telangiectasias, less pronounced than in adult cases but occasionally visible.

Early recognition is critical to avoid misdiagnosis, especially as pediatric MEP can mimic other dermatoses. Dermoscopy provides a non-invasive, detailed view of lesion morphology, making it an invaluable diagnostic aid in younger populations where invasive procedures may pose challenges.

## **Conclusion:**







## **Meyerson Phenomenon: Clinical and Dermoscopic Features**

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# **Introduction & Objectives:**

Meyerson's phenomenon (MP) is a rare eczematous reaction occurring around pre-existing dermatological lesions, most commonly melanocytic and benign. The aim of this review is to study clinical, dermoscopic, and evolutionary aspects of MP and its association with various lesions.

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

A prospective review was undertaken including all patients presenting MP over a six-year period (January 2018 to June 2024). Clinical, dermoscopic, evolutionary data and the association with other lesions were analyzed.

#### **Results:**

Four patients (a 28-year-old woman, a 2-year-old girl, and two men aged 27 and 70 years) presented with an eczematous reaction around pre-existing skin lesions. Pruritus was noted in three patients. Clinically, the pre-existing lesions were a junctional nevus on the left cheek in the first case, a port-wine stain on the occipital region of the scalp in the second case, an angiokeratoma in the third case, and a keratoacanthoma on the right leg in the last case. The duration of the recent lesion varied between 3 days and 3 months across the four cases. Dermoscopy revealed a central area with a regular brown globular pattern surrounded by a peripheral red area containing dotted vessels and scales (first case); an erythematous plaque with some dotted vessels and multiple whitish-yellow scales (second case); a central area with a vascular pattern consisting of several purplish lacunae surrounded by a yellowish-red area and a peripheral red area containing dotted vessels and some scales (third case); and an amorphous central area surrounded by scales, white circles, and polymorphic vascularization, with a peripheral area composed of symmetrical erythema topped with scales (fourth case). The diagnoses of MP associated with a junctional nevus (first case), a congenital port-wine stain (second case), an angiokeratoma (third case), and a keratoacanthoma (fourth case) were confirmed. The outcome was favorable with topical corticosteroids (TCS) without modification of the initial lesion in the first three patients. The last patient underwent a biopsy-excision without recurrence

#### **Conclusion:**

MP is a rare and transient phenomenon first described by Meyerson in 1971. Clinically, it presents as an eczematous erythematous halo around a pre-existing dermatological lesion, most often melanocytic but also non-melanocytic, as seen in our patients. It is generally asymptomatic, though pruritus may be a presenting symptom. Dermoscopy of MP has been reported by several authors, showing features of eczematous dermatitis, including dotted vessels and whitish-yellow scales. The outcome is favorable, either spontaneously or with TCS.

According to our review, MP is not specific to melanocytic lesions. Clinico-dermoscopic correlation plays a significant role in its diagnosis, its progression, and subsequent monitoring after its resolution.







# **Dermoscopy of melanoma**

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## **Introduction & Objectives:**

Melanoma is a malignant tumor that develops at the expense of melanocytes. It is the most serious form of skin cancer. Although melanomas are generally pigmented, they can also be achromic. Incidence rates are rising steadily, particularly in white populations. The diagnosis of melanoma is based on suspicion through clinical and dermoscopic examination and confirmation by pathological examination.

The aim of our study is to describe the various dermoscopic aspects of histologically confirmed melanomas.

#### Materials & Methods:

This is a retrospective, descriptive, monocentric study, conducted at the Dermatology Department over a period of 9 years and 9 months including all patients hospitalized for the management of histologically confirmed melanoma

#### **Results:**

During the period of our study, we collected 28 cases of melanoma. The average age of patients at diagnosis was  $61.1 \pm 17.48$  years, with extremes ranging from 22 to 89 years. Twelve patients (42.9%) were female and 16 cases (57.1%) male, with an M/F sex ratio of 1.3. All patients underwent biopsy to confirm the diagnosis of melanoma. Anatomopathological findings favoured acro-lentiginous melanoma in 18 cases (64.3%), Dubreuilh melanoma in 5 cases (17.9%), nodular melanoma in 3 cases (10.7%) and extensive superficial melanoma (SSM) in 2 cases (7.1%).

The various dermoscopic signs found in our patients were: An irregular pigmentary network in 22 cases (78.6%), brown globules in 10 cases (35.7%), a rhomboidal appearance in 4 cases (14.3%), a target image in 5 cases (17.9%), radial striae (pseudopodia) in 6 cases (21.4%), a blue-white veil in 17 cases (60.7%), regression structures in 12 cases (42.9%), atypical vascularization in 12 cases (42, 9%), heterogeneous pigmentation in 26 cases (92.9%), a pattern parallel to the ridges in 12 cases (42.9%), invasion of sweat pores in 8 cases (28.6%), asymmetry in 20 cases (71.4%), ulceration in 16 cases (57.1%), a peppery appearance in 3 cases (10.7%) and milky red areas in 7 cases (25%). As for the most frequent dermoscopic aspects according to the histological type of melanoma, irregular pigmentary network and heterogeneous pigmentation were the most frequent dermoscopic aspects for acro-lentiginous melanoma and Dubreuilh melanoma, while blue-white veil, regression structures and asymmetry were the most frequent aspects for extensive superficial melanoma. In nodular menaloma, asymmetric structures and ulceration were the most frequent features.

#### **Conclusion:**

Melanoma is an aggressive tumor with significant metastatic potential, and its incidence is increasing in all developed countries. Dermoscopic examination is an indispensable tool in the treatment of melanoma, enabling the elimination of differential diagnoses, early detection and avoidance of unnecessary excisions.





# The Prevalence of Dermoscopy Use Among Dermatology Residents in Riyadh, Saudi Arabia: Cross-Sectional Study

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## **Introduction & Objectives:**

Dermoscopy is a noninvasive technology used to examine skin microstructures. It aids in the early detection of skin malignancies and differentiates between various skin conditions. It is also helpful

in diagnosing infections and inflammatory lesions. Despite its global importance, there is a lack of studies on the attitudes and usage of dermoscopy among dermatology residents in Saudi Arabia. This study aimed to assess the prevalence of dermoscopy use among dermatology residents in Riyadh, Saudi Arabia, evaluate its role in improving skin disease diagnosis, and determine the significance of dermoscopy.

## **Materials & Methods:**

A cross-sectional study was conducted in Riyadh in January 2024. The validated and published questionnaire was modified to meet the research needs. It was emailed to all registered dermatology residents in the Dermatology Saudi Board in Riyadh.

#### **Results:**

This study involved 63 dermatology residents in Riyadh, Saudi Arabia, who completed the online questionnaire equivalent to an (87.5%) Response rate. The sample was predominantly female (34; 54.0%). Among participants (34; 54.0%) owned a Dermoscopy. Concerning their practice; majority of participants (23; 36.5%) conducted 21–30 clinics monthly and On average (15; 34.1%) of participants used Dermoscopy at least once per day. Most participants (36; 57.1%), have received dermoscopy training. (21; 33.3%) of participants received dermoscopy training outside the residency program, which was provided as an

academic activity in the residency program. A significant majority used dermoscopy due to influence of their colleagues (12; 27.3%) and mentors (9; 20.5%). Barriers for not using Dermoscopy included unavailability in clinics (8; 42.1%) and lack of training provided (6; 31.6%). Half (22;50.0%) used their Dermoscopy images in medical education at

conferences, lectures, academic activities etc.. The most of participants (17; 38.6%) who used Dermoscopy were practicing at King Saud University Medical City, and (16; 36.4%) had used Dermoscopy for two years, primarily with non-polarized (20; 45.5%) or polarized-light (19; 43.2%) . The ABCD rule is reported to be the most common diagnostic algorithm (23, 52.3%) for pigmented lesions. The study found significant associations between receiving Dermoscopy training with self-confidence in using the technique and owning

Dermoscopy (P = .002) and (P = 0.126) respectively. There was also a significant relationship between the type of training received and the type of dermoscopy used (P = .003).

#### **Conclusion:**

Dermoscopy has been widely adopted by dermatology residents in Saudi Arabia. However, the overall extent of dermoscopy use within the dermatology community remains unclear. The Key factors influencing the Dermoscopy use are the availability of Dermoscopy, practice centers, and the training provided. Therefore, expanding access to Dermoscopy training throughout residency programs is highly recommended.







## Dermoscopy features of non-infectious cutaneous granulomatoses

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# **Introduction & Objectives:**

Non-infectious cutaneous granulomatoses (NICG) represent a heterogeneous group of dermatoses that are reactive to various stimuli through the formation of granulomatous inflammation.

Our objective was to study the dermoscopic features of different NICG through a case series.

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

This was a prospective study including cases of NICG confirmed by histological examination and diagnosed between January 2023, and May 2024. Dermlite DL4 was used for dermoscopic examination.

#### **Results:**

Fourteen patients were included: 10 women and 4 men. The average age was 41.6 years (range: 27-62 years). The types of NICG were: sarcoidosis (7 cases), annular granuloma (AG) (4 cases), necrobiosis lipoidica (NL) (1 case), and granulomatous rosacea (GR) (2 cases). The dermoscopic features observed in the sarcoidosis cases were: a yellow-orange background (7 cases), linear vessels (4 cases), branching linear vessels (6 cases), central white scar-like areas (2 cases), and fine white scales (3 cases). The vessels were diffusely arranged in all cases. Dermoscopy of AG revealed a yellow-orange background in all cases, most visible in the peripheral part. In the center of the lesions, the background was pale pink. Vascular structures observed were branching linear vessels. These vessels were diffusely arranged in recent lesions and peripheral in evolving lesions. In the case of NL, yellowish areas with branching linear vessels were observed. These vessels were mostly visible in the center of the plaque. In cases of GR, yellow-orange granular areas in clumps with polygonal vessels were noted.

# **Conclusion:**

The major and common dermoscopic feature across all NICG is the presence of yellow-orange areas, which are correlated with the presence of granulomas in histology. A more yellowish tint was observed in the case of NL, likely associated with the lipid deposits seen in this condition. The analysis of other structures, particularly vascular ones, helps to guide the diagnosis towards the type of NICG. Vessels are linear or branching linear in most NICGs. A diffuse arrangement is more commonly observed in sarcoidosis. In mature AG lesions, vessels are distributed peripherally, while they are centrally located in NL lesions. A polygonal vessel arrangement suggests granulomatous rosacea (GR).

Our results are consistent with data reported in the literature and highlight the role of dermoscopy in the diagnostic approach to NICG.







## **Dermoscopic Findings of Facial Granuloma**

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**Introduction & Objectives:** Granuloma faciale (GF) is a rare, chronic inflammatory dermatosis characterized by asymptomatic, erythematous to violaceous plaques or nodules, primarily affecting the face. The condition follows a chronic course and predominantly affects middle-aged men. Histopathologically, GF is distinguished by a leukocytoclastic vasculitis pattern with dense dermal infiltration composed of neutrophils, histiocytes, and plasma cells, while the epidermis remains unaffected. The diagnosis is based on clinical features, histopathology, and, more recently, dermoscopy, which has proven to be a valuable non-invasive diagnostic tool. We present a case of GF in a middle-aged woman, highlighting the importance of including GF in the differential diagnosis of facial lesions and emphasizing its dermoscopic features.

**Results:** A 41-year-old woman presented to our dermatology clinic with a persistent, asymptomatic erythematous-violaceous plaque on her right cheek, which had been evolving over one year. The patient reported no significant medical history, systemic symptoms, or previous similar lesions. On physical examination, the lesion appeared as a well-demarcated, slightly infiltrated, erythematous-violaceous plaque measured approximately  $1.5 \times 1$  cm, with a smooth surface and no evidence of scaling, crusting, or ulceration. A punch biopsy was performed and demonstrated a dense dermal infiltration composed predominantly of neutrophils, lymphocytes, histiocytes, and scattered plasma cells, with evidence of leukocytoclastic vasculitis, consistent with facial granuloma.

**Conclusion:** The etiology of GF remains unknown, but possible predisposing factors include actinic exposure, trauma, radiation, and hypersensitivity reactions. The typical clinical presentation is a solitary plaque on the face, as observed in our patient. Dermoscopy serves as a valuable tool in the early diagnosis of GF, distinguishing it from other granulomatous or inflammatory facial dermatoses, such as cutaneous sarcoidosis, discoid lupus erythematosus, and lupus vulgaris. The presence of fine telangiectasias, a reddish homogeneous background, and yellow-orange globules can be considered dermoscopic hallmarks of GF. Recognizing these dermoscopic features could assist dermatologists in the early identification, differentiation, and appropriate management of this rare entity.







Correlation of dermoscopy and histopathological findings as a significant factor in the classification of subtypes of Basal Cell Carcinoma

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**Introduction & Objectives:** The correlation of dermatoscopy and histopathological data leads to early diagnosis of subtypes of basal cell carcinoma, allowing the right choice for treatment. Dermatoscopy is a tool that allows us to see the key vascular structures and can increase the diagnostic accuracy of the classification of different subtypes of basal cell carcinoma. The purpose of this paper is to establish an early diagnosis through data obtained from dermoscopically and pathological correlation, as well as treatment and clinical management, with a better aesthetic outcome.

**Materials & Methods:** We retrospectively analyzed the dermoscopically images of 134 patients skin lesion, for more than 2 years. Inclusion criteria will be to definite histopathologic diagnosis of BCC, including subtype classification, the availability of clinical, dermatoscopically and the availability of histopathology findings. The exclusion criteria:\*\* any diagnostic entity other than BCC was excluded. Clinical data were obtained for each patient, including age and sex, location, size, depth, presence of other similar lesion, skin type, and demographic data will also include. Each case was evaluated by the presence of the following dermoscopically features: vascular pattern, ulceration, and additional dermoscopically criteria. Cases with complete wide incision, as well as histopathological (HP) examination were the result of skin punch biopsy or surgery. HP was applied weekly to confirm the diagnosis given by the dermoscopically examination.

**Results:** Among the 134 lesions were collected, with 60 histopathological proven of basal cell carcinoma. All lesions included in this study showed more than one of dermoscopically features of basal cell carcinoma. According to the anatomical distribution of the 60 BCCs: 18 of the lesions were located mainly on the face with predilection nose (8 of 60; 13,3%), followed neck (11 of 60; 18.3%) upper arm, deltoid and shoulders (22 of 60; 36.6%), and trunk (14.8%). We conducted a retro-prospective study to evaluate the presence of dermoscopically features in superficial, nodular, pigmented and infiltrative basal cell carcinoma.

**Conclusion:** The results of this study elucidate the specific dermatoscopy criteria associated with different subtypes of basal cell carcinoma, based on data obtained from dermoscopically and pathological correlation. Early detection contributes to the evaluation of preoperative dermatoscopy as a great value in the accuracy of the preoperative diagnosis of subtypes of basal cell carcinoma.







# Acral nevi with clinical and dermoscopic features of acral lentiginous melanomas: rapid onset during BRAF inhibitor therapy

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**Introduction & Objectives:** It is well known that treatment with BRAF inhibitors (BRAFi) can lead to eruptive nevi or new melanomas. To our knowledge, only one case (Orlowski et al.) has been reported in the literature of acral nevi arising during BRAFi therapy with dermoscopic features suggestive of acral lentiginous melanoma (ALM). We report four volar nevi induced by BRAFi with dermoscopic features suspicious for ALM. The histopathological results of one of them revealed a junctional melanocytic proliferation, considered compatible with an atypical nevus.

**Materials & Methods:** The case concerns a 73-year-old woman receiving encorafenib and cetuximab for colonic metastases of mucinous adenocarcinoma with signet ring cells of unknown origin. Within weeks of therapy initiation, she developed multiple nevi, including four on the palms and soles. These nevi showed a dermoscopic pigment distribution pattern on both ridges and furrows, raising suspicion of ALM.

**Results:** An excisional biopsy was performed on one palmar nevus. Histopathology revealed a junctional acral melanocytic nevus with mild to moderate atypia, organized in relatively homogeneous nests at the rete ridge tips, along with numerous single cells discontinuously arranged along the basal epidermis, with focal pagetoid spread. Immunohistochemistry for p16 showed heterogeneous positivity, suggesting benignity. BRAF was wild-type.

**Conclusion:** Given the increasing use of BRAFi, understanding the genetic and histopathological factors associated with these nevi is crucial for proper management. We adopted an approach similar to Orlowski et al., performing an excisional biopsy of one lesion and monitoring the others. These cases suggest that close dermoscopic follow-up may be a reasonable first approach, reducing unnecessary biopsies and intervening only if clinical or dermoscopic changes occur during therapy.







## Melanonychia: Clinical and Dermoscopic Analysis of 205 Patients From One Center

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## **Introduction and Objectives**

Melanonychia refers to the brownish-black discoloration of the nail plate, which may result from more common benign or less common malignant conditions. Both local and systemic factors such as trauma, drugs and infections can cause melanonychia. It may involve one or multiple nails, both in fingernails and toenails. Dermoscopy serves as a valuable diagnostic tool in distinguishing benign from malignant causes and prevents unnecessary invasive intervention. The aim of this study is to reveal the dermoscopic features of melanonychia in correlation with clinical findings.

## **Materials and Methods**

A retrospective analysis was conducted on 273 nail lesions from 205 patients who presented with melanonychia in our clinic, using digital dermoscopy and electronic medical records. The dermoscopic features such as longitudinality, background and line color, pigmentation and border regularity, parallelism, spacing, width, proximal extension, Hutchinson's and pseudo-Hutchinson's signs, subungual keratosis, hemorrhage, vascularity, and globules were analyzed. The clinical features such as gender, age, localization, detailed history, and follow-ups were also analyzed. Subsequently, the correlation between the diagnosis and dermoscopic findings was assessed. Statistical analyses were conducted using SPSS v27, through chi-square and Kramer tests.

## **Results**

The mean age at diagnosis was  $39.81 \pm 20.89$  years, with no significant gender differences. The right foot was the most commonly affected extremity (27.5%). The most frequent diagnoses were benign melanocytic lesion(BML) (49%), onychomycosis (19%), and subungual hemorrhage (16%), respectively. There was only one melanoma case. Brown (82.8%) and skin colored (64.6%) background with gray-brown (84.3%) and black (57.8%) line color were most commonly observed in BML while black-yellow (62.5%) and yellow (37.3%) background with yellow-brown (35.5%) line color were most commonly seen in onychomycosis. Longitudinal and regular pigmentation, parallelism, regular borders and space, proximal extension (p < 0.001), wide band and pseudo-Hutchinson's (p = 0.002) sign were frequently observed in BML. Additional dermoscopic features and colors are presented in *Table 1-2*. There was only one melanoma case which showed a black-yellow background (12.5%) with mixed-colored lines (1.6%). Similarly, the Hutchinson sign was detected in only one case, that of melanoma (p < 0.001). Of the 273 lesions, the majority (99.9%, n = 272) were classified as benign, while only one lesion (0.01%) was confirmed to be malignant.

# **Conclusion**

This study analyzed the dermoscopic features of 273 nail lesions with melanonychia, revealing significant associations between clinical diagnoses and dermoscopic features. There was only one melanoma, emphasizing the rarity of subungual melanoma. Dermoscopy plays a key role in the diagnosis of challenging melanonychia cases. The dermoscopic features analyzed in this study may assist in the evaluation of melanonychia and in distinguishing benign from malignant patterns.

Table-1

	BML	Onychomycosis	Subungual hemorrhage	Benign nail neoplasms	Other benign conditions	Pseudomonal infection	Melanoma	P value
Background colour								<0,001
Skin color	64,6%	9,3%	15,5%	5%	5,6%	0%	0%	
Yellow	8%	37,3%	25,4%	4%	20%	5,3%	0%	
Brown	82,8%	13,8%	0%	0%	3,4%	0%	0%	
Black-yellow	0%	62,5%	0%	0%	0%	24,5	12,5%	
Line colour								<0,001
Black	57,8%	24,4%	4,4%	2,2%	8,9%	2,3%	0%	
Brown	80%	12,5%	0%	2,5%	5%	0%	0%	
Gray-Brown	84,3%	10,9%	0%	1,2%	3,6%	0%	0%	
Red	0%	42,9%	0%	42,9%	0%	14,2%	0%	
Green	0%	0%	33,3%	0%	0%	66,7%	0%	
Yellow-Brown	12,9%	35,5%	0%	9,7%	38,7%	3,2%	0%	
Mixed	3,1%	20,3%	64,1%	3,1%	6,3%	1,5%	1,6%	

Mixed color:purple-based colorz mixed with red or black
Benign nail neoplasms:onychopapilloma, onychomatricoma, mixoma, subungual fibroma, fibroheratoma
Other benign conditions: Onychogryphosis, onychotillomania, progenic granuloma, wart, mucinous cyst, darier disease, lichen planus, paronychia, chronic inflammation

Table-2

Dermoscopic features	BML	Onychomycosis	Subungual hemorrhage	Benign nail neoplasm	Other benign conditions	Pseudomonal infection	Melanoma	P value
Longitudinality	66,3%	16,8%	5,6%	5,6%	5,6%	0%	0%	< 0.001
Pigmentation regularity	90,2%	8,7%	0%	0%	1,1%	0%	0%	<0.001
Width(>1/3)	39,1%	25,8%	15,6%	2,3%	11,7%	4,7%	0,8%	0.002
Parallellism	71,7%	16,1%	4,5%	3,9%	3,9%	0%	0%	< 0.001
Spacing regularity	88,9%	9,3%	0%	0%	1,9%	0%%	0%	< 0.001
Border regularity	85,3%	8,3%	1,8%	1,8%	2,8%	0%	0%	< 0.001
Proximal extension	55,6%	18,6%	8,6%	3,6%	10%	2,3%	0,5%	<0.001
Hutchinson's sign	0%	0%	0%	0%	0%	0%	100%	< 0.001
Pseudo- Hutchinson's sign	72,1%	17,6%	7,4%	0%	2,9%	0%	0%	0.002
Subungual keratosis	10,3%	42,5%	13,7%	10,3%	16,1%	5,7%	1,1%	<0.001
Hemorrhagic appearance	1,3%	22,5%	52,5%	7,5%	12,5%	2,6%	1,3%	<0.001
Natl dystrophy	1,9%	40,4%	9,6%	9,6%	28,8%	7,7%	1,9%	< 0.001
Globules	47.4%	10,5%	10.5%	10,5%	15,8%	0%	5,3%	0.019







# Differentiating active and stable vitiligo: Role of dermoscopic findings

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## **Introduction & Objectives:**

Vitiligo, a chronic skin disorder characterized by the loss of melanocytes, affects 0.5%–2% of the global population. Accurate assessment of vitiligo stability is crucial for effective treatment planning, particularly for surgical interventions. Current methods, including the Vitiligo Disease Activity Score (VIDA) and clinical examination, have limitations in confirming stability. Dermoscopy offers a non-invasive alternative to evaluate vitiligo, with various patterns linked to disease activity and stability. Distinguishing vitiligo activity/stability status is pivotal in the management of patients with vitiligo.

This study aimed to assess the role of dermoscopy in detecting active and stable vitiligo by comparing the dermoscopic signs in vitiligo with Vitiligo Disease Activity Score (VIDA) and clinical activity.

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

84 patients with vitiligo were enrolled in this cross-sectional study. Vitiligo activity/stability was assessed using VIDA scores, clinical examination and dermoscopy. Dermoscopic scores were calculated using BPLeFoSK score.

## **Results:**

The dermoscopic score was concordant with the VIDA score in 81% of patients (n = 68), clinical assessment in 94% (n = 77). Dermoscopic signs of ill-defined border, satellite lesions, and micro-Koebner and starburst appearance were more common in active vitiligo, while a well-defined border was more common in stable lesions.

## **Conclusion:**

Dermoscopic features such as satellite lesions, micro-Koebner, starburst appearance, and ill-defined borders suggest vitiligo activity, while well-defined borders indicate stability. The BPLeFoSK dermoscopic score can be reliably used alongside VIDA and clinical signs for comprehensive vitiligo assessment.







Vulvar Dermatoses: A Cross-Sectional Study of Etiology, Dermoscopic Findings, and Impact on the Quality of Life [D1] [D1] Title of the manuscript

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# **Introduction & Objectives:**

Vulvar dermatoses encompass a broad spectrum of inflammatory, infectious, pigmentary, and vascular conditions that present significant diagnostic challenges. Due to the unique anatomical and physiological characteristics of the vulvar region, clinical manifestations may be modified by friction, moisture, and occlusion. Accurate diagnosis is essential for improving patient outcomes and quality of life.

**Objective:** This study aimed to evaluate the clinical, demographic, and dermoscopic features of common vulvar dermatoses and correlate them with clinical diagnoses. Additionally, the study assessed the impact of various etiologies on quality of life using the Vulvar Disease Quality of Life (VDQoL) index.

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

A cross-sectional, descriptive study was conducted on 100 female patients with vulvar dermatoses attending the dermatology outpatient clinic over six months. Dermoscopic evaluation was performed using Dermlite 4, and findings were analyzed for background color, scaling, vasculature, pigment network, perifollicular changes, and other unique patterns. Statistical analysis was carried out using SPSS software, with a p-value of <0.05 considered significant.

#### **Results:**

The study included patients aged 5–70 years, with a mean age of 36.9 years. The most common symptom was pruritus (43%). Infections (73%) were the predominant etiology, followed by inflammatory disorders (17%). Vulvovaginal candidiasis was the most frequently observed infectious cause. Lichen sclerosus et atrophicus (LSEA) was the most common inflammatory disorder (7%). Dermoscopy revealed condition-specific patterns such as white perifollicular scaling in tinea cruris, cauliflower-like lesions in genital warts, and Wickham striae in lichen planus. VDQoL analysis showed mild-to-moderate impairment in most cases, with severe impact in patients with LSEA.

## **Conclusion:**

Dermoscopy serves as a valuable non-invasive tool for diagnosing vulvar dermatoses, providing insights into distinct patterns that may not be clinically evident. Incorporating dermoscopy into routine vulvar dermatology practice can aid in early detection and improve patient outcomes. The study underscores the need for increased awareness, better hygiene practices, and enhanced education on genital dermatological health.







## Clinical and Dermoscopic Predictors of Cutaneous Metastases: A Systematic Review

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## **Introduction & Objectives:**

Cutaneous metastases (CMs) of primary tumors typically indicate advanced disease and poor prognosis. The identification of these lesions can be a challenging diagnosis, since CMs can clinically appear with heterogeneity presentations. Dermoscopy is a useful, noninvasive tool for early detection of skin cancers; however, there is limited standardized data on its usage in diagnosing CMs. This study aims to analyze dermoscopic patterns associated with skin metastases.

## **Materials & Methods:**

MEDLINE, EMBASE and Web of Science databases were searched up to February 2025. Literature selection was conducted by two independent authors, using Rayyan Systems' software tool (Cambridge, MA, USA). Eligibility criteria included observational and case series reporting clinical and dermoscopic features of CMs. This systematic review followed PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) guidelines.

## Results:

A total of 14 studies were included, involving 867 patients and 1,975 CMs. Metastases were located in the limbs (37.6%), trunk (31.2%), head and neck (24.6%), acral areas (3.6%), and scalp (2.2%). Background colors of the lesions were mainly pink-reddish (50.8%), blue (32.5%) and brown-to-grey (14.25%). Regarding classic patterns, the most commonly observed were homogenous (30.7%), followed by saccular/multicomponent (25.9%), amelanotic (25.9%), vascular (13.9%), and polymorphic (3.36%). Among tumor-like patterns, the most frequent was blue-nevus-like (52.3%), followed by angiomalike (12.3%), vascular (10.8%), nevus-like (10.4%), and unspecific (14.04%). Overall, dermoscopy revealed a predominantly polymorphic vascular distribution (69.5%), characterized by serpentine (62.5%), dotted (12%), hairpin (7.8%), comma (5.7%), and arborizing (4.5%) vessels. Additionally, specific features of CMs included light brown halo (35.8%), peripheral gray spots (29%), perilesional erythema (14.5%), ulceration (14.3%), and pigmented globules (7.2%).

#### **Conclusion:**

Dermoscopy of skin metastases revealed a significant prevalence of polymorphic vascular structures, primarily composed of serpentine vessels. Furthermore, lesions frequently exhibited homogeneous and blue-nevus-like patterns. Additionally observed features were light brown halo and peripheral gray spots. This review provides valuable guidance for CMs detection using key dermoscopic characteristics. Patients' survival rates can be significantly enhanced by early metastasis recognition.

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## Dermoscopic features of facial lichen planus pigmentosus

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# Dermoscopic features of facial lichen planus pigmentosus

## **Introduction & Objectives:**

Lichen planus pigmentosus (LPPig) is a rare form of lichen planus, characterised by macular hyperpigmentation of sunexposed areas or folds, and by lichenoid interface dermatitis with pigment incontinence on histology. This is a frequent cause of facial hyperpigmentation in dark phototypes. To date, few studies have examined the dermoscopic features of LPPig.

## **Materials & Methods:**

We conducted a retrospective study to describe the dermoscopic aspects of LPPig of the face. We included all histologically confirmed cases who consulted during the period January 2022 to February 2024 and underwent dermoscopic examination. All dermoscopic images were taken using the Dermlite 4®, in non-polarised and polarised light modes, without immersion.

#### **Results:**

We included 10 patients. The mean age was 58 years, the sex ratio M/F was 0.1 and the mean duration of evolution was 10 months. All cases were Fitzpatrick phototype IV. Pruritus was reported by 3 patients. The distribution of pigmentation was diffuse in 4 cases, reticular in 4 cases and patchy in 2 cases. The forehead (7 cases), cheeks (7 cases) and perioral region (5 cases) were the most affected areas. We found an association with oral lichen planus (one case) and frontal fibrosing alopecia (one case). Dermoscopic examination revealed brown globules and spots in all cases. They were distributed in a pseudo-network in 5 cases, in a discontinuous linear pattern in 5 cases and in an arcuate pattern in 2 cases. Increased perifollicular pigmentation was noted in 7 cases. "Owl's eye" structures were present in 5 cases. We also noted follicular keratotic plugs (2 cases), white scales (2 cases) and erythema (one case). Histologically, pigment incontinence was present in all cases, a dermal lymphocytic infiltrate in 6 cases, epidermal atrophy in 2 cases, vacuolization of the basal layer and orthokeratosis in one case each.

#### **Conclusion:**

The dermoscopic aspects of LPPig have mainly been described in two studies in the literature. In the first study, Pirmez et al distinguished four dermoscopic patterns of pigmentation: 'pseudo-network' or incomplete reticulation (64%), speckled irregular dots (35%), regular dots (22%) and dotted circles (19%). Erythema, telangiectasia, rhomboidal structures, increased perifollicular pigmentation and decreased downy appearance were also reported.

In the second study, Sharma et al described brown dots and globules in 86% of cases, with incomplete reticular pattern (39%), discontinuous linear or 'hem-like' pattern (20%), arciform (18%), complete reticular (7%) or non-specific (14%). Owl's eye' structures defined by a dark brown dot surrounded by a light halo were also described, but less frequently. In both studies, the authors suggested that the arrangement of dots and globules in different patterns appeared to be specific to LPPig.

In conclusion, our results are in line with the literature. However, larger studies are needed to establish conclusive diagnostic aspects and clinico-dermoscopic correlations. In conclusion, our results are in line with the literature. However,

larger studies are needed to establish conclusive diagnostic aspects and clinico-dermoscopic correlations.







## A case of acral melanoma in situ with a parallel furrow pattern

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**Introduction & Objectives:** Melanoma, a malignant tumor of melanocytes, has been showing a progressive increase in incidence, making its timely diagnosis extremely important. Acral melanoma in situ is difficult to distinguish from an acral nevus. Through timely dermoscopic examinations, it is possible to identify dermoscopic characteristics suggestive of melanoma and to excise suspicious lesions. We present the case of a man with a pigmented lesion on the skin on the dorsal side of the right big toe - periungual, which was dermoscopically examined and histopathologically confirmed as acral lentiginous melanoma in situ.

**Materials & Methods:** A 71-year-old man was referred to a dermatologist because of a pigmentary change on the skin on the distal part of the right big toe, which has been present for approximately 5-6 years. His personal and family history was negative for melanoma and non-melanoma skin cancers.

**Results:** During the clinical examination, a multicolored melanocytic lesion was observed on the skin on the distal part of the right big toe - periungual. The lesion had been present for about 5-6 years and had not changed. Dermoscopy revealed a parallel furrow pattern, a combination of colors, and asymmetry. The BRAAFF algorithm indicated that the presence of asymmetry in colors and structures raised suspicion of acral melanoma. Considering the anamnestic information and dermoscopic presentation, a biopsy was performed for histopsthological verification. The pathohistological examination revealed acanthosis of the epidermis, elongated rete ridges, and an atypical proliferation of melanocytes without invasion of the dermis, consistent with acral melanoma in situ. The patient was referred to a plastic surgeon for excision of the lesion.

**Conclusion:** In acral pigmented lesions that exhibit a parallel furrows pattern, typically indicative of an acral nevus, the presence of color asymmetry and the application of the BRAAFF algorithm necessitate a biopsy to avoid missing acral lentiginous melanoma in situ.

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## eccrine porocarcinoma with unusual localisation: a case report

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## **Introduction & Objectives:**

Eccrine porocarcinoma is a rare malignant tumor arising from the intraepidermal portion of the eccrine sweat gland duct. It carries a high risk of lymphatic and distant metastases, making early diagnosis crucial. EPC may arise de novo or from a preexisting benign poroma, with malignancy indicators including ulceration, spontaneous bleeding, pruritus, pain, and rapid growth. Histologically, EPC exhibits intraepidermal and dermal invasion, with potential for satellite lesions and lymphovascular dissemination. The recurrence and regional metastasis rates are around 20%, with distant metastases occurring in 12% of cases. Prognosis worsens significantly when regional lymph nodes are involved, with a mortality rate exceeding 65%.

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

We present a 72-year-old chronic smoker with a history of sun exposure, presenting a progressively enlarging, asymptomatic, non-pruritic supramammary lesion for five months. Clinical examination revealed a 1.5 cm<sup>2</sup> brownish-violaceous plaque with a 0.5 cm<sup>2</sup> nodular component. Dermoscopy showed whitish strands with polymorphic vascularization. A biopsy confirmed trabecular eccrine porocarcinoma. Staging investigations, including a thoracoabdominopelvic CT scan and lymph node ultrasound, were unremarkable.

#### **Results:**

EPC accounts for only 0.005%–0.01% of cutaneous malignancies, predominantly affecting elderly patients (mean age 67–77 years). It frequently arises on the lower extremities but can also appear on the trunk and head. Risk factors include sun exposure, chronic radiation, prior benign poroma, immunosuppression, and genetic mutations, notably TP53, RB1, and PTEN. Clinically, EPC presents as an erythematous nodule but can mimic other cutaneous tumors, necessitating histopathological and immunohistochemical analysis for accurate diagnosis. Dermoscopy may reveal milky-red globules with an irregular vascular pattern.

EPC can display three histopathological growth patterns: infiltrative, pagetoid, and pushing. Key prognostic factors include high mitotic index (>14 mitoses per HPF), lymphovascular invasion, and tumor thickness >7 mm. Poorly defined tumor margins correlate with higher recurrence risk.

Wide local excision remains the standard treatment, with Mohs micrographic surgery offering superior margin control. Systemic therapies, including chemotherapy (taxanes, platinum-based agents), radiotherapy, and targeted therapies, have shown limited efficacy. Recent reports suggest a potential role for anti-PD1 immunotherapy in metastatic cases. Despite aggressive treatment, metastatic EPC has a poor prognosis, with survival ranging from 5 to 24 months.

#### **Conclusion:**

EPC is an aggressive cutaneous malignancy with a high recurrence and metastatic potential. Due to its clinical variability, early diagnosis through dermoscopy, histopathology, and immunohistochemistry is essential. Surgical excision remains the gold standard, but novel therapeutic approaches, including immunotherapy, warrant further investigation.







# demodicidosis dermoscopy

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# **Introduction & Objectives:**

Human demodicosis (DD) is a skin disease of the pilosebaceous units associated with human Demodex, a widely known ectoparasitic mite, involving mainly the face and head. Symptoms may develop when the follicles become heavily infested, or when the mites penetrate the dermal tissue. This condition presents with various clinical manifestations and may pose diagnostic challenges, particularly in differentiating it from other dermatoses. The aim of our study was to describe the clinical and dermoscopic characteristics of facial demodicosis.

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

This is a prospective descriptive study including patients presenting with a facial dermatosis, in whom the diagnosis of facial demodicosis was confirmed by dermoscopic examination using polarized and ultraviolet light.

#### **Results:**

A total of 60 cases of facial DD were identified. The patients' ages ranged from 18 to 80 years (mean age = 41 years), with a sex ratio F/H of 2,33. The lesions were localized to the cheeks in 87% (52 cases), nose in 66% (40 cases), the chin and the forehead in 47% (28 cases) and and eyelash in 63%.

Dermoscopic examination revealed the presence of *Demodex* tails whith light-blue fluorescence under high-resolution ultraviolet dermoscopy in all patients (100%), follicular opening dilation in 22 patients (36%) and follicular plugs in 46 patients (76%), an erythematous background in 52 patients (86%) with linear vessels in 34 patients (56%), and curved vessels in 7 patients (17.64%). White scales were noted in 10 patients (58.8%) and fine vellus hair in 6 patients (11%).

## **Conclusion:**

This study highlights the importance of clinical evaluation and dermoscopy in diagnosing facial demodicosis to avoid diagnostic pitfalls.







# A Mimicker of Amelanotic Melanoma - Can Dermoscopy Mislead Us?

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**Introduction & Objectives:** Dermoscopy is a valuable tool for diagnosing pigmented and non-pigmented skin lesions. However, certain inflammatory conditions can mimic malignancy, leading to diagnostic uncertainty. We present a case of a new nodular pink lesion suspected to be amelanotic melanoma but ultimately diagnosed as a benign inflammatory condition.

**Materials & Methods:** A 35-year-old male presented with a new  $15 \times 15$  mm firm, nodular pink lesion at the site of a prior atheroma excision in the left inguinal region, which had been removed two years earlier without histopathological evaluation. Dermoscopy revealed a pink-white homogeneous background with thick linear and irregular vessels, as well as white chrysalis structures, raising suspicion for malignancy. Ultrasound imaging demonstrated an underlying cystic lesion with fluid content and two reactive lymph nodes. Given the clinical suspicion, the patient was started on a 10-day course of oral cefalexin (500 mg, 2+0+2) and referred to a plastic surgeon for prompt excision. However, at his one-month follow-up, the lesion had clinically regressed, leading the surgeon to postpone the procedure. Follow-up dermoscopy showed only a purpuric background, with no remaining white chrysalis structures or vascular irregularities. Despite the apparent resolution, considering the differential diagnosis of amelanotic melanoma and other types of malignant tumors, surgical excision was performed, and histopathological analysis was obtained.

**Results:** Histopathological examination revealed a foreign-body giant cell reaction with no evidence of malignancy. The spontaneous resolution of the lesion, along with histopathological findings, confirmed an inflammatory rather than neoplastic etiology. The patient remains under clinical, dermoscopic, and ultrasound surveillance.

Conclusion: While dermoscopy is an essential diagnostic tool, it is crucial to recognize inflammatory conditions that can closely mimic malignancy. This case highlights the necessity of histopathological confirmation in suspicious lesions, even when regression occurs. A multidisciplinary approach—integrating imaging, clinical judgment, and pathology—is essential to avoid misdiagnosis while ensuring timely intervention when needed. Spontaneous regression of malignant melanoma is defined by the disappearance of melanocytic neoplastic cells, either partially or completely. Unlike partial regression, complete spontaneous regression of primary malignant melanoma is an extremely rare phenomenon, with only few cases reported in the literature. This underscores the importance of maintaining clinical suspicion even in cases of lesion resolution, as spontaneous disappearance does not exclude malignancy. Persistent monitoring and appropriate biopsy remain crucial for ensuring accurate diagnosis and optimal patient outcomes.

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