Review

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Review

Dermoscopy of Facial Dermatoses: An Updated Review

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Abstract

Dermoscopy is an essential, non-invasive diagnostic tool that has transformed the evaluation of pigmented skin lesions and is nowadays also increasingly recognized for its utility in general dermatology. Originally developed for the early detection of melanoma, dermoscopy now aids in diagnosing a wide range of non-neoplastic skin disorders—including inflammatory, infectious, and infiltrative conditions—by revealing morphological features invisible to the naked eye. Among these, facial dermatoses represent a diagnostically challenging group of disorders with overlapping clinical presentations. This review provides a comprehensive overview of the latest literature on dermoscopy in general dermatology, with a specific focus on facial dermatoses. Relevant information for this article was obtained through a comprehensive PubMed search using disease names along with the terms 'dermoscopy' and 'dermatoscopy.' Despite its growing relevance, this field remains underexplored, largely due to the lack of standardized dermoscopic criteria and inconsistent terminology, which pose challenges to broader clinical implementation. Nonetheless, current evidence highlights the promising role of dermoscopy as an adjunctive diagnostic method, particularly when used by experienced clinicians in combination with detailed patient history and clinical examination. Dermoscopy of facial dermatoses has the potential to significantly improve diagnostic precision in everyday practice. With continued research, greater standardization, and wider clinician training, dermoscopy is well-positioned to become as integral to the diagnosis of inflammatory and infectious dermatoses as it is to skin cancer detection.

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1. Introduction

Dermoscopy has become an indispensable part of modern dermatological diagnostics. Initially developed to aid in the assessment of melanocytic lesions, particularly for the early detection of melanoma, this non-invasive technique allows visualization of skin structures that are not visible to the naked eye. By providing detailed submacroscopic morphological information, dermoscopy has significantly enhanced the clinical evaluation of pigmented skin tumours. Beyond oncology, dermoscopy is increasingly recognized for its potential in general dermatology—the diagnosis of non-neoplastic dermatoses such as inflammatory, infectious, and infiltrative skin conditions. Numerous studies have demonstrated its value in this broader context, including specific applications like **trichoscopy** (examination of hair and scalp disorders), **onychoscopy** (nail unit dermoscopy), and **entomodermoscopy** (dermoscopic identification of parasitic infestations).

Dermoscopy in general dermatology enhances diagnostic precision by revealing key features such as vascular morphology and arrangement, scaling patterns, colour variations, follicular changes, and the presence of disease-specific structures or patterns. These dermoscopic findings, when interpreted in the context of clinical information—such as lesion distribution, morphology, patient history, and symptomatology—can lead to more accurate and timely diagnoses.

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However, despite its growing potential, dermoscopy in general dermatology has not yet been fully integrated into routine clinical practice. One major barrier is the **lack of standardization** in dermoscopic assessment of non-neoplastic dermatoses. Unlike the well-established criteria used for pigmented lesions, general dermatology lacks unified guidelines on which features to evaluate, how to interpret them, and how to describe them consistently. Another complicating factor is the **complex and inconsistent terminology** used in dermoscopic descriptions. The coexistence of metaphorical terms and purely descriptive language can create confusion, especially among less experienced clinicians.

Technical aspects also influence the diagnostic value of dermoscopy. The choice between **polarized and non-polarized light**, contact versus non-contact methods, and use of immersion fluids can all affect what features are visible. For instance, vascular structures may be less apparent with pressure-based contact dermoscopy, whereas certain superficial features might only be detectable with non-polarized light.

In this article, we provide an updated literature review on the use of dermoscopy in a particularly important area of general dermatology—**facial dermatoses.** These conditions often pose a diagnostic challenge for clinicians due to their broad range of differential diagnoses. By highlighting key dermoscopic features, this review aims to support more accurate and efficient evaluation of facial skin disorders in daily practice. Relevant information for this article was obtained through a comprehensive PubMed search using disease names along with the terms ‘dermoscopy’ and ‘dermatoscopy.’ Additional sources were identified by manually reviewing references from related studies and reviews [1–3].

2. Discoid Lupus Erythematosus

Discoid lupus erythematosus (DLE) is the most common chronic form of cutaneous lupus, presenting as well-circumscribed, erythematous to purplish macules or papules with follicular plugging and adherent scales which gradually develop into indurated discoid plaques [4,5]. DLE predominantly affects sun-exposed areas, most frequently the face, scalp, ears, neck, as well as the upper body and extremities [4,6]. Skin lesions characteristically gradually develop into atrophy, hyperpigmentations, hypopigmentations, and permanent scarring, while scalp involvement may cause irreversible cicatricial alopecia [7]. Patients may report pruritus or mild pain within the active plaques, while systemic symptoms are usually absent, which helps distinguish DLE from systemic lupus erythematosus (SLE). Although rare in classical DLE, mucosal involvement may present as erythematous patches on the oral or gingival mucosa in a subset of patients [8,9].

Dermoscopy of DLE reveals a wide range of morphologic features, with considerable variability depending on the location of the lesion [10]. The most frequently observed dermoscopic features in DLE lesions located outside the scalp are follicular plugs, perifollicular white areas, and white scaling [11]. Certain dermoscopic patterns, such as follicular red dots, mottled brown pigmentation, and white rosettes, occur with similar frequency in both scalp and non-scalp lesions. In contrast, some findings are predominantly confined to the scalp, including reduced or absent follicular openings, fibrotic white dots, yellow dots, a “red spider on yellow dot” pattern, perifollicular erythema, and blue-grey dots or globules (Table 1.). Moreover, some dermoscopic features occur in both regions but differ significantly in prevalence, e.g., follicular keratotic plugs are more common in lesions outside the scalp, whereas white structureless areas and white scales are more typical of scalp involvement [10].

Table 1. Dermoscopic features of DLE.

Location	Common Dermoscopic Features
Non-scalp lesions	- Follicular plugs - Perifollicular white areas - White scaling
Both scalp and non-scalp	- Follicular red dots

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Location	Common Dermoscopic Features
Scalp lesions	- Mottled brown pigmentation - White rosettes - Reduced or absent follicular openings - Fibrotic white dots - Yellow dots - "Red spider on yellow dot" pattern - Perifollicular erythema - Blue-grey dots or globules

In a study conducted by Al-Refu et al., it was shown that dermoscopic features of DLE differ depending on the location of the lesion but also on the stage of the disease, with lesions on the scalp showing distinctive patterns compared to those on the body [12]. Early and active lesions commonly exhibited scaling, follicular plugs, telangiectasia, arborizing vessels, follicular red dots, and perifollicular scaling, while pigmentary changes, white rosettes, and pinpoint white dots were less frequent. Inactive, older lesions were marked by perifollicular whitish halos, hypopigmented patches, and white structureless areas [12].

Trichoscopy of alopecia associated with DLE reveals a spectrum of features that reflect both the activity and chronicity of the disease [13]. Common findings include structureless white areas consistent with fibrosis, absence of follicular openings, follicular keratotic plugs, perifollicular scaling, telangiectatic or arborizing vessels, and pigmentary changes such as blue-grey dots and globules. Shiny white structures are often observed in long-standing lesions, representing stromal remodelling and fibrotic changes. These features may serve as valuable diagnostic markers for chronic alopecia caused by DLE, helping to differentiate it from other causes of scarring hair loss and to assess irreversible follicular damage [13,14].

In DLE, arborizing vessels are often identified as the predominant dermoscopic vascular pattern seen in both scalp and non-scalp lesions [10,15]. However, some studies have reported a higher prevalence of polymorphic, linear, and tortuous linear vessels, particularly in lesions located outside the scalp area [11,16]. Integrating these findings suggests that, although arborizing vessels are generally common, linear vascular patterns tend to predominate in non-scalp DLE lesions.

The study conducted by Ürün et al. evaluated dermoscopic features of DLE and lupus erythematosus tumidus (LET) in relation to lesion duration, CLASI scores, and lesion location [11]. Follicular keratotic plugs and white scales were the most common findings in non-scalp DLE lesions, while scalp lesions frequently showed absent follicular openings, white structureless areas, and perifollicular scaling. LET lesions were characterized by a pink-white background with linear vessels. Dermoscopic features such as follicular plugs, peripheral pigmentation, and polymorphous vessels were more prominent in patients with moderate disease activity. Peripheral pigmentation was more commonly observed in early-stage lesions, while blue-grey dots and globules were indicative of chronicity. These results indicate that dermoscopy can assist in differentiating DLE from LET and provide useful information on disease activity and chronicity [11].

Dermoscopy of DLE involving the lips in individuals with darker skin types reveals a specific combination of features. The dominant patterns include homogeneous zones ranging from purplish-white and ivory-white to reddish white, sometimes interspersed with brown to blue-grey dots and globules. Brown to blue-grey radial lines and peripheral purple-white radial streaks may also be seen. These areas are often accompanied by a polymorphic vascular pattern, reflecting underlying inflammatory and vascular changes [17].

3. Rosacea

Rosacea is a chronic inflammatory skin disease that primarily affects the centrofacial area and is predominantly seen in middle-aged women [18]. It is clinically characterized by persistent erythema, telangiectasias, episodes of flushing, and inflammatory papules and pustules [19]. The disease often progresses in stages, with an initial transient erythema developing into more permanent vascular and

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inflammatory changes. Rosacea is classified into several subtypes, including erythematotelangiectatic, papulopustular, phymatous, and ocular rosacea, which may coexist in the same patient [20,21]. Ocular involvement, including conjunctivitis and blepharitis, occurs in a significant number of patients [22]. Rhinophyma, a phymatous thickening of the skin of the nose, may develop in severe, long-standing cases, especially in men [23]. The pathophysiology of the disease remains incompletely understood but is believed to involve vascular dysregulation, activation of the immune system, and microbial factors such as *Demodex folliculorum* [24]. Symptoms are often exacerbated by environmental triggers, including ultraviolet light, extreme temperatures, exercise, feelings of anger or embarrassment, and certain foods or beverages, such as spicy food and alcohol [25,26]. The clinical presentation can vary widely, and the differential diagnosis should include acne vulgaris, seborrheic dermatitis, *tinea faciei,* periorificial dermatitis and lupus erythematosus [27,28]. Accurate assessment of the clinical presentation is essential for effective treatment and prevention of disease progression.

Dermoscopy has recently emerged as a valuable non-invasive diagnostic tool for the evaluation of rosacea, providing improved visualization of vascular and follicular features that are often not fully visible to the naked eye. The predominant dermoscopic sign of rosacea is a recognizable vascular pattern characterized by linear vessels arranged in a reticular or polygonal network [29–31].

In the erythematotelangiectatic form, dermoscopy usually reveals linear reticular vessels distributed in a regular pattern throughout the affected skin area, often accompanied by a diffuse background erythema [32]. These vascular structures reflect the underlying vascular dysregulation and persistent vasodilation that characterize this rosacea subtype.

In contrast, the papulopustular subtype shows a more heterogeneous dermoscopic pattern. While linear and branched vessels distributed in a reticular pattern remain important features, follicular abnormalities become more prominent. Follicular plugs and pustules are consistently observed, highlighting the inflammatory involvement of the hair follicles in this phenotype. The distribution of vascular patterns in papulopustular rosacea can vary, presenting as either patchy or regular networks [30,32].

Phymatous rosacea, characterized by distinct morphological changes, exhibits significant variability in vascular patterns. Branching vessels, linear vessels, and dotted vessels are seen in a reticular pattern, although their distribution may be regular, clustered, or patchy. Dermoscopy additionally reveals characteristic follicular changes, such as yellow follicular clods and plugs, reflecting the hypertrophic sebaceous gland involvement and follicular hyperplasia that are hallmarks of this phenotype [30]. Granulomatous rosacea, although less common, also exhibits unique dermoscopic features. Linear or linear branching vessels are seen in a reticular pattern, often accompanied by focal orange, structureless areas and perifollicular orange staining consistent with dermal granulomatous inflammation visible through the skin [30,32].

Another condition that is frequently considered in the differential diagnosis of rosacea is *lupus miliaris disseminatus faciei* (LMDF), which shares some overlapping features [33]. Dermoscopically, LMDF is characterized primarily by follicular criteria, including plugs, perifollicular orange coloration, and pustules. Its vascular pattern is variable, with dotted and linear branching vessels appearing without the consistent reticular arrangement seen in rosacea, which often aids in clinical differentiation [30].

4. Seborrheic Dermatitis

Seborrheic dermatitis (SD) is a chronic, relapsing inflammatory skin condition marked by erythematous, scaly lesions primarily affecting sebaceous-rich areas. Its multifactorial pathogenesis involves increased sebaceous gland activity, colonization by *Malassezia* species, individual susceptibility, and associated inflammatory responses [34–36]. Clinically, SD manifests as well-circumscribed, erythematous plaques covered with greasy, yellowish scales [37]. It most commonly affects the scalp, retroauricular region, eyebrows, nasolabial folds, mid-chest, and sometimes axillae and groins. The scalp involvement, which represents the most common form, ranges from mild

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scaling (dandruff) to extensive, pruritic scaling, and in more severe cases extends to the face and trunk [38–40]. Infantile SD ("cradle cap") typically presents as thick, yellow crusts on the scalp and is usually self-limiting, whereas adult forms tend to be chronic with seasonal exacerbations, especially in the colder months [38,41,42].

The differential diagnosis includes several skin conditions with overlapping features [43]. Psoriasis often presents with thicker, silvery-white scales, a wider distribution outside of seborrheic areas, and pitting nail changes [44]. Atopic dermatitis is more common in flexural areas, is associated with a history of atopy, and presents with less greasy, more lichenified lesions [45]. Tinea capitis and tinea faciei may mimic SD but are characterized by brittle hair, patchy alopecia, and positive microscopy of scalp and face scrapings and culture [46,47]. Rosacea, especially on the face, may resemble SD but usually has papulopustular lesions and telangiectasias, unlike SD [25,48]. Contact dermatitis is suggested by a history of exposure to allergens or irritants and is confirmed by a positive skin patch test [49].

Accurate differentiation requires a comprehensive patient history, a careful physical examination, and, when indicated, laboratory or mycological testing to ensure appropriate treatment.

In the context of SD, dermoscopy facilitates the identification of distinct vascular and scaly patterns that, when interpreted in a clinical setting, can support diagnostic accuracy, and help differentiate SD from clinically similar conditions such as psoriasis and rosacea. Upon dermoscopic examination, the background colour of SD is most often pink or yellowish, reflecting the combination of superficial inflammation, dilated dermal capillaries, and the lipid-rich environment characteristic of seborrheic skin [50]. Vascular structures are a key diagnostic element: dotted vessels, representing dilated capillaries in dermal papillae, are frequently observed. They are usually arranged in a patchy or irregular pattern, consistent with the multifocal distribution of inflammation within the affected skin [50,51]. Curved vessels, sometimes described as comma vessels, are also encountered, and may coexist with fine arborizing vessels. A patchy arrangement of vessels, as opposed to a homogeneous distribution usually seen in psoriasis, is an important dermoscopic clue to SD [51].

Scaling is another characteristic feature of seborrheic dermatitis; it represents one of the most visually prominent dermoscopic elements and often serves as a decisive clue in the differential diagnosis. In SD, these scales typically appear thin, loosely adherent, and are often yellow and greasy, correlating histologically with hyperkeratosis interspersed with sebum. They may occur alone or in association with white scales and are generally distributed in a patchy pattern [50,51]. This contrasts with the diffuse and thick white scales typical of psoriasis. Follicular changes, although less consistent, may be seen and include follicular plugs and intrafollicular fatty material. Structureless orange-yellow areas, reflecting increased lipid content, and occasional whitish structureless zones may also be detected [51].

In addition to established dermoscopic features, three novel trichoscopic signs have been described: the "dandelion" vascular conglomerate, the "cherry blossom" vascular pattern, and intrafollicular oily material. The "dandelion" vascular conglomerate, in particular, is associated with *Malassezia* colonization, linking vascular changes to fungal presence [52].

The dermoscopic distinction between SD and psoriasis is of particular clinical importance, as both conditions can present with scaly erythematous patches on the scalp and face and are very common. The vascular pattern in psoriasis is predominantly characterized by red dots and globules or coiled red loops, homogeneously distributed throughout the lesion. This uniformity contrasts sharply with the patchy vascular distribution in SD [53]. Psoriatic scales are characteristically thick, white, and silvery, correlating with compact orthokeratosis and parakeratosis without significant lipid inclusions [54]. In addition, featureless areas without recognizable vascular structures are more frequently encountered in SD than in psoriasis, where vascular patterns are usually more consistently visible (Table 2.) [55].

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Table 2. Dermoscopy-Based Differences Between Seborrheic Dermatitis (SD) and Psoriasis.

Feature	Psoriasis	Seborrheic Dermatitis (SD)
Lesion location	Scalp and face (often outside seborrheic areas)	Scalp and face
Vascular pattern	Dotted or glomerular (coiled) vessels, **homogeneously distributed**	Dotted vessels in a **patchy distribution**, often comma vessels and fine arborized vessels
Scale characteristics	**Thick, white, silvery** scales (linked to compact orthokeratosis and parakeratosis)	**Thin, loosely adherent, often yellow and greasy**
Lipid content in scales	**Absent** or minimal lipid inclusions	Usually **present**
Featureless areas	Less frequent; vascular structures usually **consistently visible**	**More frequent**; areas without recognizable vascular structures are **common**

Dermoscopic differentiation of SD from rosacea requires careful assessment of the background colour, vascular morphology, and follicular findings. In rosacea, the background often appears darker red, reflecting a more prominent and persistent vascular component [56]. Arborizing vessels are the dominant feature, usually arranged in a reticular pattern rather than in patchy clusters. Follicular changes are more prominent in rosacea, with frequent visualization of follicular plugs, Demodex tails, and Demodex follicular openings. Although both conditions may present with scaling, the scales of rosacea are usually fine, white, and scattered, whereas SD shows greasy yellow scales, more often in an uneven distribution. The presence of yellow scales together with punctate or curved vessels on a pink-yellow background is therefore more suggestive of SD, whereas the combination of reticular arborizing vessels, follicular changes, and a dark red background supports the diagnosis of rosacea (Table 3.) [51,56].

Table 3. Dermoscopy-Based Differences Between Rosacea and Seborrheic Dermatitis (SD).

Feature	Rosacea	Seborrheic Dermatitis (SD)
Background color	Dark red	Pink-yellow
Vascular pattern	Arborizing vessels in **reticular pattern**	Punctate or curved vessels in **patchy clusters**
Follicular changes	**Prominent:** follicular plugs, **Demodex tails, Demodex follicular openings**	Less prominent
Scaling	Fine, white, **scattered** scales	**Greasy**, yellow, **unevenly distributed** scales
Key diagnostic clue	Combination of **reticular arborizing vessels**, **follicular changes**, and **dark red background**	Presence of **yellow scales** with **punctate/curved vessels** on **pink-yellow background**

5. Cutaneous Sarcoidosis

Sarcoidosis is a chronic, multisystemic, granulomatous disease of unknown etiology, most commonly affecting the lungs and lymphatic system, but with cutaneous manifestations seen in approximately 25–30% of patients [57,58]. Histologically, cutaneous sarcoidosis is characterized by well-defined, non-caseating granulomas composed primarily of closely aggregated epithelioid histiocytes and multinucleated giant cells. These granulomas are typically accompanied by minimal or absent lymphocytic infiltrate and do not exhibit central necrosis, which helps distinguish them from granulomas of infectious origin [59,60].

Although the precise etiology of the disease remains unclear, it is believed to result from an exaggerated immune response to unidentified antigens in genetically predisposed individuals [61]. This immune dysregulation leads to granuloma formation and subsequent involvement of various tissues and organs, with clinical presentation that can be highly variable.

Cutaneous sarcoidosis is often referred to as the "great imitator" due to the wide spectrum of its cutaneous manifestations. These range from papules, plaques, and nodules to more specific forms such as lupus pernio—a chronic, violaceous facial lesion that often correlates with more severe systemic disease, or scar sarcoidosis - a specific form where sarcoid granulomas develop within pre-existing scars [62,63]. In many cases, skin findings may serve as the initial clinical clue and can be biopsied to confirm the presence of granulomatous inflammation.

In recent years, dermoscopy has become an increasingly valuable non-invasive diagnostic tool in the evaluation of granulomatous skin diseases, including cutaneous sarcoidosis. Although

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histopathologic confirmation remains essential, dermoscopy provides valuable visual clues that may support clinical diagnosis and guide biopsy site selection.

The most consistent dermoscopic feature of cutaneous sarcoidosis is the presence of structureless yellow-orange areas, which may appear diffuse or localized [64–67]. These areas, visible under both polarized and non-polarized light, correspond histologically to dermal granulomatous infiltrates [66]. They are often translucent and may present as ovoid or globular structures. This yellowish-orange hue is reported in 84–100% of cases and is considered a shared dermoscopic hallmark among granulomatous dermatoses such as lupus vulgaris and cutaneous leishmaniasis [67]. However, the visibility of this coloration may vary, particularly in subcutaneous or hyperkeratotic lesions, or in early-stage disease with shallow granulomas, where the orange hue can be faint or absent.

Vascular features are another important dermoscopic characteristic of cutaneous sarcoidosis. Well-focused linear, linear-irregular, and branching vessels are commonly observed and are typically sharply demarcated due to the upward displacement of dermal vasculature by granulomatous infiltrates [64,65,68,69]. Arborizing or tree-like vascular patterns have also been described and may be more suggestive of sarcoidosis compared to other granulomatous conditions [70,71]. Although less frequently encountered, dotted and glomerular vessels have occasionally be reported but are not characteristic of this condition [67].

In addition to these primary features, several less specific dermoscopic findings may further support the diagnosis when considered within the appropriate clinical context. These include shiny white lines (also referred to as crystalline structures), central scar-like depigmented areas, white or yellowish scaling, dilated follicular openings, follicular plugs, and milia-like cysts (Table 4.) [70,72]. In patients with darker skin phototypes, additional pigmentation patterns may also be noted [67].

Table 4. Dermoscopy Features of Cutaneous Sarcoidosis.

Feature Category	Description
Most consistent feature	**- Structureless yellow-orange areas** (diffuse or localized)
Vascular features	- Well-focused **linear, linear-irregular, and branching vessels** - **Arborizing (tree-like) vessels**
Less common vessels	**- Dotted** and **glomerular vessels**
Additional dermoscopic clues	- Shiny white lines (crystalline structures) - Central scar-like depigmented areas - White or yellowish scaling - Dilated follicular openings - Follicular plugs - Milia-like cysts

Despite its diagnostic value, dermoscopy does not offer definitive diagnostic specificity in cutaneous sarcoidosis. Many of its key features—particularly the yellow-orange areas and linear or branching vessels—are also observed in other granulomatous skin diseases. Lupus vulgaris, for example, may display yellow-orange "grains of sand," while cutaneous leishmaniasis often presents with teardrop-shaped orange structures [70]. Although certain vascular patterns such as arborizing vessels may lean toward sarcoidosis, they are not exclusive to it and cannot be used in isolation for diagnosis. Histology is particularly important for distinguishing sarcoidosis from other granulomatous, infectious, neoplastic, or inflammatory skin conditions, including granuloma annulare, mycobacterial infections, leprosy, syphilis, cutaneous lymphomas, and foreign body reactions [67].

Given this significant overlap, dermoscopy should be used as a complementary tool rather than a primary diagnostic method. The integration of dermoscopic findings with clinical presentation and histopathologic confirmation remains essential.

6. Granuloma Faciale

Granuloma faciale is a rare, benign, and chronic inflammatory skin disorder characterized with one or more well-demarcated, reddish-brown to violaceous papules, plaques, or nodules [73,74]. Lesions most often appear on facial regions exposed to sunlight, particularly the forehead, nose, and

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cheeks [74,75]. It most commonly affects middle-aged white men, though cases have been observed across all age groups and sexes, including rare instances in children [76].

The pathogenesis remains poorly defined. Proposed contributing factors include ultraviolet exposure, local trauma, hypersensitivity reactions, and prior radiation therapy. Histologically, granuloma faciale displays a characteristic "Grenz zone"—a clear layer separating the epidermis from a dense dermal infiltrate composed of neutrophils, eosinophils, lymphocytes, plasma cells, and evidence of small vessel involvement [77,78]. Features of leukocytoclastic vasculitis are frequently present [79].[81–83

The disease typically runs a slow, relapsing course while spontaneous resolution is rare [80]. Management is often challenging, as the condition is resistant to many therapies.

It often mimics other conditions such as sarcoidosis, lupus erythematosus, lupus vulgaris, cutaneous lymphoma, and basal cell carcinoma, which makes dermoscopy a valuable tool for diagnosis [81,82].

The dermoscopic hallmark of granuloma faciale is the presence of dilated follicular openings—often appearing as yellow dots, together with linear branching vessels, which may present as focused or elongated telangiectasias over a pink to reddish-orange background [81–83].

The vascular patterns may include slightly arborizing vessels arranged in a parallel pattern across the surface of the lesion, or thicker branching vessels toward the periphery [84–86]. While arborizing vessels are classically associated with basal cell carcinoma, in granuloma faciale they tend to be larger and more numerous, with less obvious secondary branching [84].

The background color can vary from pink to red, orange, or yellow-brown [83]. Yellow or yellow-brown amorphous areas are frequently linked to hemosiderin deposition, which is a common histological finding in granuloma faciale. Brown dots or globules, when present, are also thought to correspond to hemosiderin [86]. The reddish-orange background is believed to result from a dense dermal inflammatory infiltrate [82].

Other dermoscopic features include perifollicular whitish halos, follicular keratotic plugs, shiny white streaks, and whitish-grey structureless areas [2]. Rosettes—tiny four-dot structures seen under polarized light—have been reported rarely and may represent an optical effect caused by keratin or fibrous material within hair follicles [83].

Although well-focused vessels over an orangish background can also be seen in other conditions, the simultaneous presence of marked follicular openings, perifollicular white halos, and yellow-brown areas should raise the suspicion of granuloma faciale. Dermoscopy helps in detecting subtle diagnostic clues not visible during clinical examination and plays a significant role in differentiating granuloma faciale from its clinical mimics, guiding the decision for confirmatory histopathological evaluation.

7. Cutaneous Leishmaniasis

Cutaneous leishmaniasis is a parasitic disease caused by protozoa of the genus *Leishmania*, transmitted to humans through the bite of infected female sandflies—*Phlebotomus* spp. in the Old World and *Lutzomyia* spp. in the New World. Clinically, leishmaniasis is categorized into three main forms: cutaneous, mucocutaneous, and visceral [87,88]. The cutaneous form is primarily associated with *Leishmania major*, *L. tropica*, *L. infantum*, and *L. aethiopica* in the Old World, and the *L. mexicana* complex, *L. amazonensis*, and *L. braziliensis* complex in the New World [89].

Clinically, cutaneous leishmaniasis presents as painless, chronic skin lesions ranging from small papules or nodules to large ulcerations. These lesions can persist for several months to years and often heal with atrophic scarring. The incubation period typically ranges from a few weeks to several month. Although endemic to tropical and subtropical regions, the disease is increasingly reported in non-endemic areas due to globalization, climate change, and increased human migration [90].

Diagnosis is based on clinical presentation accompanied by laboratory confirmation. The presence of characteristic lesions in patients with appropriate travel or exposure history is suggestive of the diagnosis. Wide range of diagnostic techniques are available, varying significantly in

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sensitivity and specificity. These include direct parasitological methods such as microscopy, histopathology, and culture, as well as indirect approaches like serological assays and molecular diagnostics [87,91].

Dermoscopy has gained recognition for its utility in identifying characteristic features of cutaneous leishmaniasis, thereby facilitating early diagnosis and monitoring. The predominant dermoscopic feature of cutaneous leishmaniasis is diffuse erythema, documented in nearly all cases, reflecting the underlying inflammatory infiltrate [92–94]. Polymorphic vascular structures are consistently observed, encompassing diverse morphologies such as irregular linear, arborizing, hairpin, dotted, comma-shaped, glomerular, corkscrew, and crown-like vessels [93–97]. These vascular patterns frequently coexist within lesions, and their distribution varies by lesion location and disease duration [98,99].

Epidermal alterations including hyperkeratosis, central erosion, ulceration, and crusting are common and serve as distinguishing features of cutaneous leishmaniasis compared to other granulomatous conditions [92,94,97]. Hyperkeratosis is observed in approximately one third to seventy percent of lesions, often masking dermal granulomatous infiltrates, which appear as orange or salmon-colored ovoid areas with lower frequency [99,100].

Notable dermoscopic signs include “yellow tears,” which are yellowish follicular plugs resulting from follicular ostium compression and seen predominantly in facial and neck lesions [94,100]. Additionally, the “white starburst-like pattern,” characterized by peripheral white radiating striae indicative of parakeratotic hyperkeratosis, is observed particularly in advanced or extremity lesions [92,93,97].

Although dermoscopy significantly aids clinical diagnosis and reduces reliance on invasive procedures, histopathological examination remains essential for definitive diagnosis due to overlapping features with other granulomatous diseases.

8. Demodicidosis

Demodicidosis is a parasitic skin infestation caused by an abnormal overgrowth of Demodex mites, predominantly *Demodex folliculorum* and *Demodex brevis*, which are normally present as harmless commensals on human skin [101]. Under physiological conditions, these mites inhabit hair follicles and sebaceous glands, especially on facial skin, without causing symptoms. However, an increase in their population, frequently observed in individuals with compromised immune systems or disrupted skin barrier integrity, can provoke inflammatory skin responses [102].

Clinically, demodicidosis can mimic or coexist with other dermatological disorders such as rosacea, perioral dermatitis, or blepharitis [103,104]. The condition commonly manifests with erythema, follicular scaling, papulopustular lesions, itching, and burning sensations, primarily affecting sebaceous-rich regions including the face, eyelids, and, less frequently, the scalp or upper trunk [101,102].

Diagnosis is established through direct identification of mites via methods such as skin scrapings, standardized skin surface biopsies, or dermoscopic examination [105]. A mite density surpassing a specific diagnostic threshold—typically five or more mites per low-power microscopic field—is indicative of the condition [101].

Dermoscopy serves as an additional diagnostic tool in both diagnosis and management of demodicidosis. The most distinctive dermoscopic features are the so-called “Demodex tails” and “Demodex follicular openings” [106,107]. “Demodex tails” appear as creamy or whitish gelatinous filaments protruding from follicular orifices, representing the mites themselves under magnification [108,109]. Meanwhile, “Demodex follicular openings” are identified as round, coarse follicular pores containing light brown to greyish plugs, often surrounded by an erythematous halo [108,110]. These markers are particularly pronounced in primary demodicidosis and, to a lesser extent, in rosacea [110].

Additional non-specific dermoscopic findings frequently include diffuse erythema, scaling, pustules, and reticular dilated vessels, with their prevalence varying according to the demodicidosis

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subtype [106]. Dermoscopy also shows promise as a tool for monitoring therapeutic efficacy; a reduction in the white-yellow follicular plugs, which represent keratotic material intermixed with mites, correlates strongly with clinical improvement [106].

In summary, dermoscopy provides valuable visual clues facilitating accurate diagnosis of demodicidosis and supports treatment monitoring. Although some dermoscopic findings suggest Demodex infestation, standardized skin scrapings and skin surface biopsy remains the gold standard for definitive diagnosis by quantifying mite density.

9. Conclusions

In this updated review, we have summarized the most recent literature regarding the use of dermoscopy in general dermatology, with a particular focus on facial dermatoses. This is a broad and fascinating field that remains relatively underexplored, as reflected by the lack of standardized dermoscopic criteria—unlike in the well-established assessment of melanocytic lesions. Nevertheless, the growing body of evidence highlights the promising role of dermoscopy as a valuable adjunctive diagnostic tool, especially in the hands of skilled clinicians in its application. When combined with a thorough patient history and clinical examination, dermoscopy can significantly enhance diagnostic accuracy and support better clinical decision-making in the evaluation of facial skin diseases.

In conclusion, dermoscopy holds considerable promise as a diagnostic tool in general dermatology. With continued research, better standardization, refined terminology, and broader clinician training, this technique is well-positioned to become as central to diagnosing inflammatory and infectious dermatoses as it already is for skin cancers.

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