Solitary Plaque on the Nose

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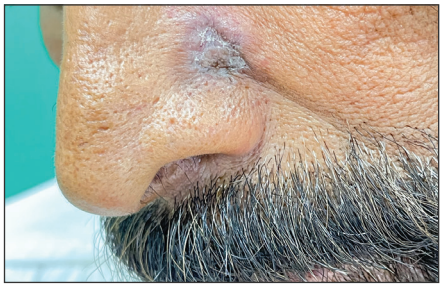

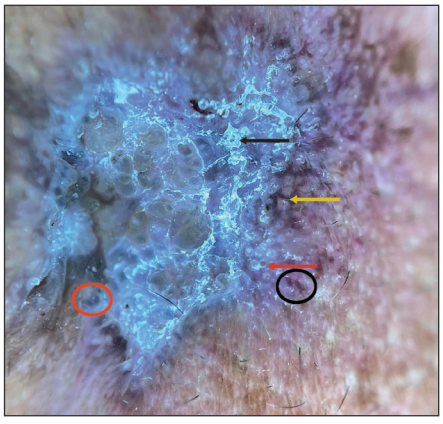

Noncontact polarized mode (original magnification ×10)

A 50-year-old Southeast Asian-Indian man presented to the dermatology clinic with a slightly elevated reddish-purple lesion on the left side of the nose accompanied by intense itching, occasional discharge, and crusting of 5 months' duration. The patient reported applying multiple unknown topical agents initially prescribed to him by a physician; however, he subsequently continued applying these medications without regular follow-up visits. He had a history of smoking 2 packs per day for 25 years. His family history was unremarkable. Physical examination revealed a well-defined, 1.5×1.5-cm, nontender, scaly, erythematous to violaceous plaque with slightly raised margins, peripheral hyperpigmentation, and slight central atrophy on the left side of the nose. Dermoscopy revealed prominent follicles with a perifollicular halo (red arrow), white scales (black arrow), linear curved and dotted vessels (black circle), blue-grey globules (red circle), brown reticular lines (yellow arrow), and background erythema. General and systemic examination and routine laboratory workup were normal. A biopsy of the lesion was performed.

THE BEST **DIAGNOSIS IS:**

a. basal cell carcinoma
b. cutaneous leishmaniasis
c. discoid lupus erythematosus
d. lupus vulgaris
e. squamous cell carcinoma

PLEASE TURN TO PAGE 186 FOR THE DIAGNOSIS

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The eTable is available in the Appendix online at www.mdedge.com/cutis.
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THE **DIAGNOSIS:** Discoid Lupus Erythematosus

The biopsy revealed hyperkeratosis, hypergranulosis, follicular plugging, vacuolar interface dermatitis with apoptotic bodies, dyskeratotic keratinocytes, pigment incontinence, and melanophages. A perivascular, perifollicular, and periadnexal lymphoplasmacytic inflammatory infiltrate was noted in the superficial and deep dermis (Figure). Based on the characteristic clinical morphology, dermoscopic features, and histopathology, a diagnosis of discoid lupus erythematosus (DLE) was established. The patient was started on mometsaone cream 0.1% and tacrolimus ointment 0.1% once daily, with strict recommendations for photoprotection. However, he subsequently was lost to follow-up, and treatment response could not be assessed.

Lupus erythematosus is a multisystemic autoimmune disease with a predilection for skin involvement that is characterized by the production of autoantibodies against nuclear antigens. Discoid lupus erythematosus is the predominant form of the disease, mostly affecting middle-aged women (female-to-male ratio, 4.1:1).[1] Discoid lupus erythematosus usually manifests as well-demarcated, erythematous patches or plaques with partially adherent scales that extend into a patulous follicle. On removal, the scales show horny plugs underneath. This classic finding is known as the carpet tack sign.

As the lesions evolve, they expand with hyperpigmentation at the periphery as well as hypopigmentation, atrophy, scarring, and telangiectasias at the center.[2] In our patient, the history of discharge and crusting of the lesion and the presence of slight central atrophy—all of which could be attributed to chronic application of topical medications such as corticosteroids, which can cause epidermal thinning, maceration, and secondary crust formation—raised clinical suspicion of cutaneous infections (eg, cutaneous leishmaniasis, lupus vulgaris) and squamous cell carcinoma. The presence of slightly raised margins upon clinical examination brought basal cell carcinoma (BCC) into the differential.

Dermoscopic features commonly seen in DLE reflect the pathologic findings. Follicular plugging and perifollicular white halos correspond to follicular hyperkeratosis and perifollicular fibrosis, respectively (eTable). Disease duration has been shown to alter the dermoscopic appearance of DLE with early active disease showing radially arranged arborizing blood vessels between perifollicular white halos along with follicular red dots, whereas lesions of longer duration display structureless white areas secondary to dermal fibrosis.[3] Additionally, background erythema due to neoangiogenesis and dermal inflammation suggests that the disease is in its active state.

On dermoscopy, pigmentation structures such as brown dots, brown lines, and grey-brown dots and globules were seen more prominently in our patient with skin of color, making the underlying erythema more subtle than in patients with lighter skin types. Dotted and linear vessels also were seen in our patient, but not as prominently as typically is seen in lighter skin types.[4]

Lupus vulgaris was ruled out in our patient based on the absence of the typical orange to yellowish-orange background with vessels or any histopathologic evidence

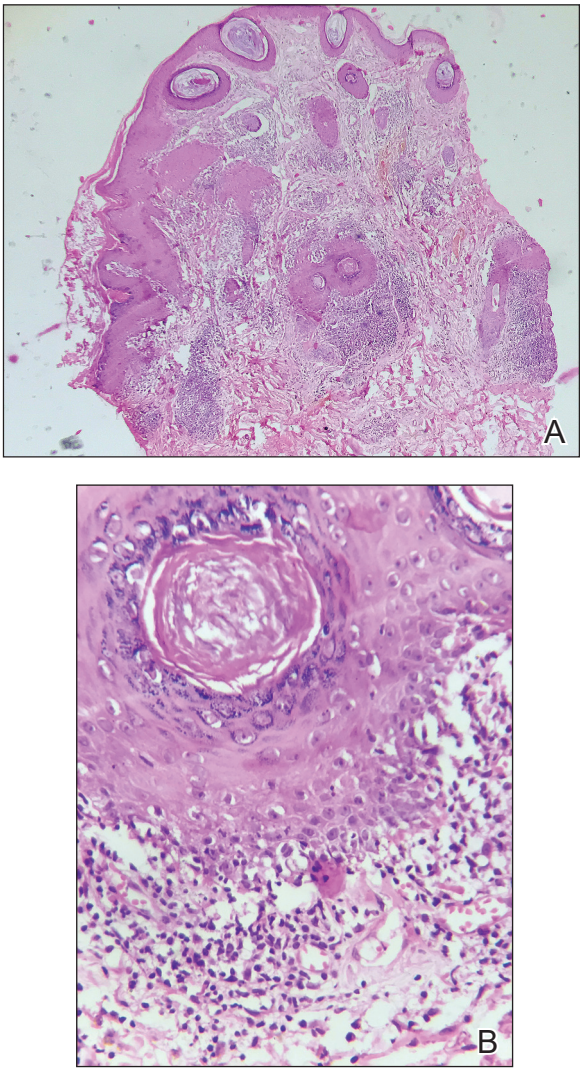

FIGURE. A, Biopsy revealed thinned-out hyperkeratosis, hypergranulosis, and follicular plugging with superficial and deep inflammatory infiltrates arranged predominantly around the follicles and adnexa (H&E, original magnification ×4). B, Basal vacuolar damage with a lymphocytic infiltrate abutting the dermoepidermal junction, apoptotic colloid bodies, and dyskeratotic keratinocytes in the basal layer and pigment incontinence and melanophages were visualized in the dermis (H&E, original magnification ×40).

of epithelioid granulomas.[5] Cutaneous leishmaniasis is characterized by polymorphic vascularization, erythema, follicular plugs, yellow-orange structureless areas with scales, and crusts on dermoscopy.[6] Squamous cell carcinoma tends to show white structureless areas, looped vessels, and central keratin.[7]

Superficial BCC also appears as thin plaques or patches bound by a well-circumscribed, slightly raised, irregular margin. However, on dermoscopy, BCC typically exhibits spoke-wheel areas, arborizing vessels, comma vessels, and concentric structures.[8]

The clinical manifestations of crusting, discharge, and a raised border was atypical, probably owing to the long-term unsupervised application of topical medications, which made the initial diagnosis challenging. Therefore, various differential diagnoses were considered. Dermoscopic evaluation coupled with histology was performed, which ultimately confirmed the diagnosis of DLE.

REFERENCES

1. Gopalan G, Gopinath SR, Kothandaramasamy R, et al. A clinical and epidemiological study on discoid lupus erythematosus. *Int J Res Dermatol* 2018;4:396-402. doi:10.18203/issn.24554529.IntJRes Dermatol20183165
2. McDaniel B, Sukumaran S, Koritala T, et al. Discoid lupus erythematosus. *StatPearls* [Internet]. StatPearls Publishing 2025. Updated August 28, 2023. Accessed October 15, 2025. https://www.ncbi.nlm.nih.gov/books/NBK493145/
3. Fathy H, Ghanim BM, Refat S, et al. Dermoscopic criteria of discoid lupus erythematosus: an observational cross-sectional study of 28 patients. *Indian J Dermatol Venereol Leprol* 2022;88:360-366. doi:10.25259/IJDVL_207_19
4. Ankad BS, Gupta A, Nikam BP, et al. Implications of dermoscopy and histopathological correlation in discoid lupus erythematosus in skin of color. *Indian J Dermatol 2022;67*:5-11. doi:10.4103/ijd.ijd_591_21
5. Jindal R, Chauhan P, Sethi S. Dermoscopy of the diverse spectrum of cutaneous tuberculosis in the skin of color. *Dermatol Pract Concept*. 2022;12:E2022203. doi:10.5826/dpc.1204a203
6. Chauhan P, Adya KA. Dermatoscopy of cutaneous granulomatous disorders. *Indian Dermatol Online J*. 2021;12:34-44. doi:10.4103/idoj.IDOJ_543_20.
7. Rosendahl C, Cameron A, Argenziano G, et al. Dermoscopy of squamous cell carcinoma and keratoacanthoma. *Arch Dermatol*. 2012;148:1386-1392. doi:10.1001/archdermatol.2012.2974.
8. Vinciullo C, Mada V. Basal cell carcinoma. 10th ed. Wiley: Blackwell Science; 2024.

APPENDIX

eTABLE. Correlation Between Dermoscopic Features and Histopathologic Findings in Discoid Lupus Erythematosus

Dermoscopic features	Correlating histopathologic features
Follicular plugging	Follicular hyperkeratosis
Perifollicular white halo	Perifollicular fibrosis
Dotted and linear curved vessels	Tips of vertical and horizontal orientation of dilated tortuous capillaries, respectively
White scales	Hyperkeratosis
Follicular red dots	Extravasated erythrocytes
Brown pigmentation	Basal layer hyperpigmentation
Blue-grey globules	Pigment incontinence, dermal melanin and melanophages
White rosettes	Infundibular hyperkeratosis[3]