Case Report

'Coral reef' pigmentation in lip Discoid lupus erythematosus

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Abstract

Discoid lupus erythematosus (DLE) is a chronic inflammatory disorder. Histopathology was the method of choice for diagnosis previously. Though histopathology still remains the main mode of diagnosis, with the advent of dermoscopy, it has replaced biopsy in many cases. With new findings coming in, the diagnosis of dermatological diseases, the activity of disease and assessment of treatment response have become much easier. We describe a 32 years old female presented with lip DLE which was clinically and histopathologically confirmed. The dermoscopic findings from the lip were brown-red pigment spots, white structureless areas, scales palisade pigmentation and 'coral reef' pigmentation. In dermoscopy, it is an array of findings that point to a diagnosis rather than a single finding and hence this pattern of pigmentation simulating 'coral reef' can be added to the spectrum of dermoscopic findings noted in lip DLE and thereby can aid in diagnosis.

Key words: Case report, Dermoscopy, DLE, Pigmentation, Coral reef, Mucoscopy

Introduction:

Dermoscopy is a tool that is highly being utilized in the diagnosis of discoid lupus erythematosus (DLE), the commonly noted findings being a loss of follicular ostia, follicular keratotic plugs, branching vessels, honeycomb pigmented networks, dyschromia and variable scaling. It has also been used to determine the activity of the disease. Dermoscopy of mucosal DLE differs from cutaneous DLE in lacking follicular plugs, perifollicular halo, and a reduced number of follicular ostia. [1]

Case description:

We present a 32-year female with multiple lesions on the lower face with a single large lesion on lower lip and scalp for two years. The lesions were slowly increasing in size without any symptoms. On examination, there were well-defined papules and plaques with the centre showing erythema with scaling and periphery showing a hyperpigmented border with no crater (Figure 1). The rest of the mucocutaneous examination revealed a lesion on the scalp also.

A biopsy from the scalp lesion was taken which showed epidermis with hyperkeratosis, loss of rete ridges, hydropic degeneration of basal cells, dyskeratosis, follicular plugging with dermis showing lymphoplasmacytic infiltrate along dermo-epidermal junction, around hair follicles and pilosebaceous units with pigment incontinence, extravasation of RBCs and vasodilatation and increase in collagen layers. Dermoscopy was done using a DERMLITE DL3N dermatoscope in both polarised and non-polarised mode at 10X magnification. There were brown-red pigment

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spots, palisade pigmentation, white structureless areas, scales and peripheral red-brown pigmentation arranged in branching pattern with mottling pigmentation simulating 'coral reef' just along the inner aspect of 'palisade pigmentation' along the periphery (Figure 2A and 2B). Based on clinical, dermoscopic, and histological features, a diagnosis of DLE was made.

Figure 1: Multiple well-defined scaly plaques with central erythema and peripheral hyper-pigmented border

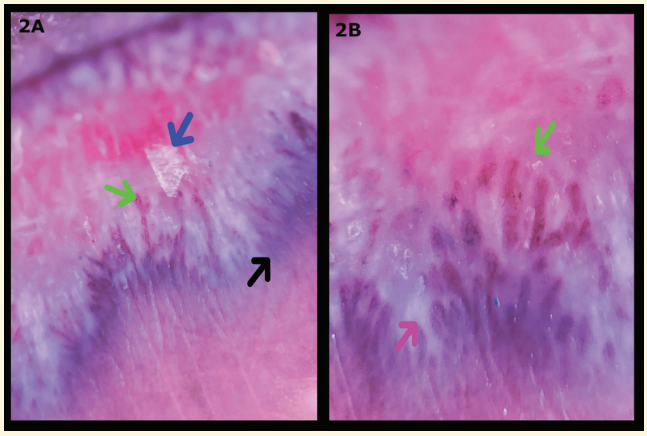

Figure 2: A. Dermoscopy under polarized mode using Dermlite DL3N X10 magnification and showing palisading pigmentation (black arrow) along the periphery, inside of which there is red-brown branching pigmentation with mottling resembling coral reef (green arrow) and scales(blue arrow). B. Dermoscopy under polarized mode using Dermlite DL3N X10.

Figure 3: Coral reef.

Discussion:

Discoid lupus erythematosus of the lip can mimic actinic lichen planus, squamous cell carcinoma and porokeratosis. It is mostly a combination of dermoscopic findings that help in the diagnosis rather than a single finding. Dermoscopy of lip DLE has been reported to show brown pigment spots, telangiectasia, storiform/hairpin vessels, white structure-less areas, ulceration, erosion, bleeding spots and scales.[2] Hyperpigmentation was observed on dermoscopy in 43.6% cases of DLE, 49.1% of the corresponding biopsies showing pigmentary incontinence.[3] Varying patterns of pigmentation have been described in dermoscopy of DLE like honeycomb pigment pattern, blue grey dots and globules, blue-white veil and speckled brown pigmentation.[4] 'Palisade pigmentation' has been described along the periphery in late stage.[5] Our patient demonstrated pigmentation simulating 'coral reef' just along the inner aspect of palisade pigmentation (Figure 3). Unlike palisade pigmentation, this pattern showed branching in acute angles.

Conclusion:

Dermoscopy can be a method of diagnosis in DLE when a biopsy is deferred by the patient and when the site of biopsy is a high-risk site or difficult-to-access

site. This pattern of pigmentation simulating 'coral reef' can be added to the spectrum of dermoscopic findings noted in lip DLE.

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There are no conflicts of interest

References:
1. Jha AK, Sonthalia S, Sarkar R Dermoscopy of discoid lupus erythematosus. Indian Dermatol Online J 2016;7:458.
2. Salah E Clinical and dermoscopic spectrum of discoid lupus erythematosus: Novel 6 observations from lips and oral mucosa. Int J Dermatol. 2018;57:830-6.
3. Lallas A, Apalla Z, Lefaki I, Sotiriou E, Lazaridou E, et al. Dermoscopy of discoid lupus erythematosus. Br J Dermatol. 2013;168:284-8.
4. Żychowska M, Żychowska M Dermoscopy of discoid lupus erythematosus - a systematic review of the literature. Int J Dermatol. 2021 Jul;60(7):818-828.
5. Malakar S, Pal A, Pradhan P. Palisade pigmentation - describing a new dermoscopic finding. Our Dermatol Online. 2018;10:106-107