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Therapeutic Pearls

The importance of dermoscopy in subclinical lichen planus in skin of color

In Young Chung MBBS (Hons), BBMED [a,*], Celestine C. Wong MBBS, BMedSci, FACD [b,c], Michelle A. Rodrigues MBBS (Hons), FACD [c,d]

[a] Royal Victorian Eye and Ear Hospital, East Melbourne, Victoria, Australia
[b] Department of Dermatology, Monash Medical Centre, Clayton, Victoria, Australia
[c] Chroma Dermatology, Pigment and Skin of Colour Centre, Melbourne, Victoria, Australia
[d] Department of Dermatology, Royal Children's Hospital, Parkville, Victoria, Australia

Dear Editors,

Lichen planus (LP) can affect all skin types, and its morphology can vary (Lehman and Tollefson, 2009). The diagnosis of LP in skin of color (SoC) can be challenging because of the potential dermoscopic variations in those population. A lack of confidence in managing the SoC population has been reported (Conforti et al., 2019; García-García et al., 2019; Mohamed et al., 2016; Rodrigues et al., 2018), which can be a challenge, especially when diagnosing the condition in a predominantly non-SoC population. Despite such challenges, there is a lack of dermoscopic studies in the diagnosis of LP in SoC.

A 19-year-old female patient without medical or family history was referred to our dermatology clinic by her primary care physician for a pruritic pigmented lesion on the back. The lesion was slate-gray to brown in color and started forming 5 months prior but became more noticeable recently. There was no evidence of oral LP. The patient has Indian heritage (Fitzpatrick skin type IV), and there was concurrent mild acne with old scarring on the back.

Macroscopic examination of the back revealed an approximately 7 × 8 cm pruritic, hyperpigmented plaque on otherwise normal-appearing skin. Dermoscopic examination demonstrated discrete, polygonal, pigmented papules. Subsequently, LP was diagnosed and a 7-day course of topical Betamethasone dipropionate ointment 0.1% nocte was prescribed for the pigmented plaque. A skin punch biopsy later confirmed the clinical diagnosis.

Eight weeks after the initial visit, there was ongoing pruritus surrounding the pigmented plaque despite the prescribed topical treatment. Dermoscopy was performed again but this time also extended inferiorly to observe the enduring area of pruritus. The examined skin appeared normal macroscopically, but the dermoscopy examination showed discrete, violaceous papules with mild Wickham striae consistent with subclinical extension of Blaschkoidal LP pigmentosus (Fig. 1). The dermoscopically proven extension of subclinical LP pigmentosus was marked on the back, which revealed the area of affected skin to be greater than the originally considered pigmented plaque (Fig. 2).

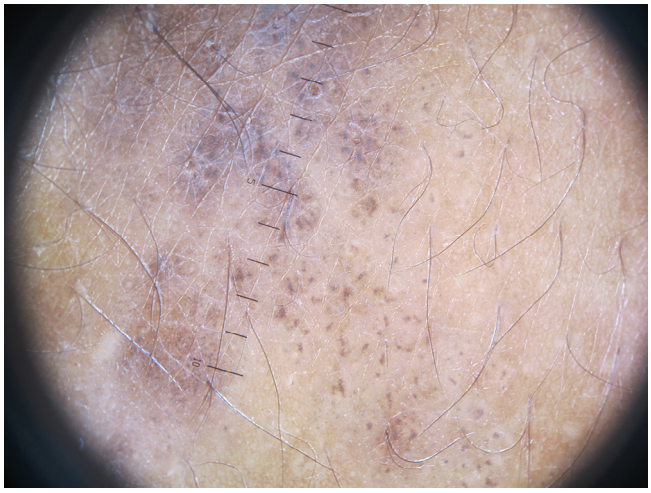

Fig. 1. Dermoscopic imaging of discrete, violaceous, subclinical extension of Blaschkoidal lichen planus pigmentosus with mild Wickham striae from previously diagnosed lichen planus pigmentosus plaque.

LP is an inflammatory condition of the skin and mucous membranes that is often characterized by pigmented, pruritic, flat-topped papules. Such visual cues are not only useful in clinically diagnosing LP, but provide topographical information about the affected skin area on gross examination. However, using only macroscopic information to determine the area of affected skin without a careful dermoscopic examination can omit a critical diagnosis of subclinical LP. Hence, dermoscopic examination is always indicated on the skin and surrounding skin even it appears normal if there is a high suspicion of the disease. Such finding is not limited to but may be more relevant in patients with SoC because the subtler morphology of subclinical LP may be harder to distinguished against skin with higher pigmentation without the assistance of a dermoscope.

* Corresponding author.
E-mail address: inyoung.chung@eyeandear.org.au (I.Y. Chung).

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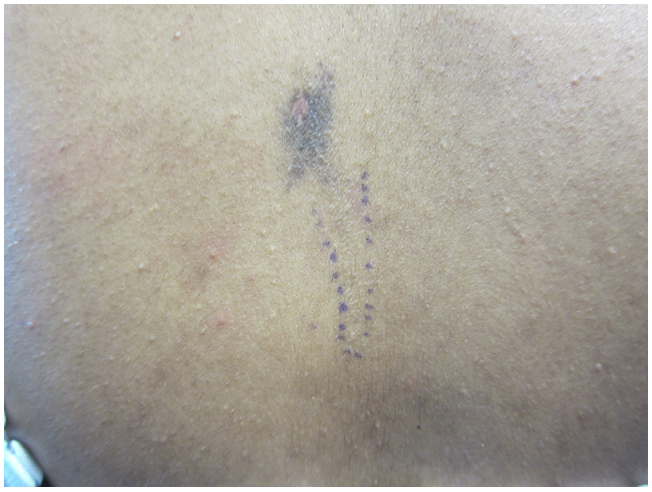

Fig. 2. Clinical imaging of subclinical Blaschkoidal lichen planus pigmentosus extending inferiorly on otherwise normal-appearing skin. The area of subclinical lichen planus pigmentosus marked with a marker.

In conclusion, careful dermoscopy and comprehensive history taking, including specific questioning about pruritus, are imperative to avoid overlooking subclinical LP in individuals with a high suspicion of the condition despite normal-appearing skin.

Conflicts of interest

None.

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Study approval

N/A.

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