

Plaque with pearly raised borders on the forearm

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A 29-year-old male presented with an annular plaque on his arm for 7 months. Physical examination revealed 6 mm annular plaque with raised borders and a shiny stellate-purple center (Fig. 1). Dermoscopic evaluation revealed a ring of white spiked structurless areas at the periphery; an

intense structurless steel purple area was observed at the center of the lesion (Fig. 2). Hystopathological examination showed a band-like infiltrate of lymphocytes, pigment incontinence, saw tooth rete ridges, hypergranulosis and hypekeratosis (Figs. 3 and 4).



Figure 1: Annular plaque with raised borders and a shiny stellate-purple center.

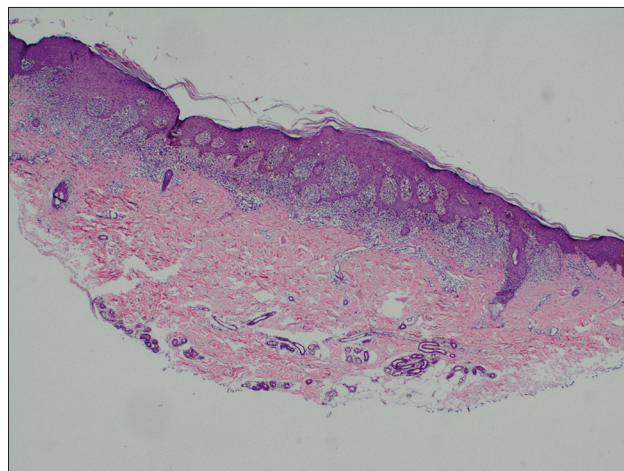


Figure 3: Band-like infiltrate of lymphocytes, pigment incontinence, saw tooth rete ridges hypergranulosis.

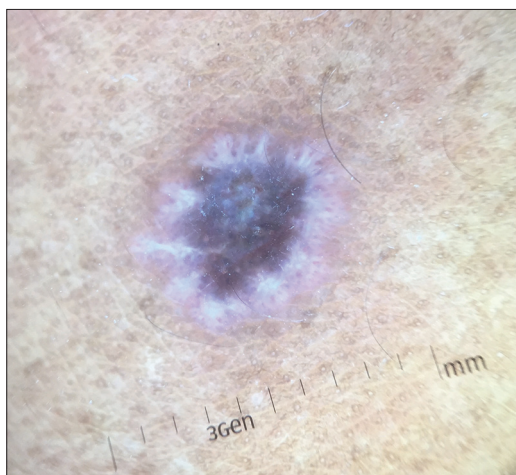


Figure 2: Ring of white spiked structurless area at the periphery; with an intense structurless steel purple area at the center.

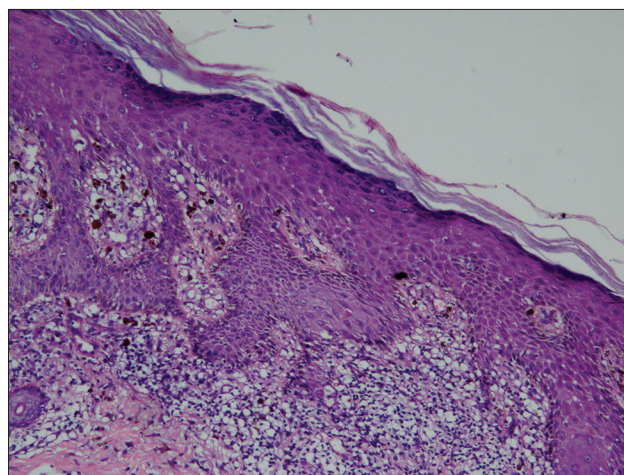


Figure 4: Band-like infiltrate of lymphocytes, pigment incontinence, saw tooth rete ridges hypekeratosis.

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Lichen planus annularis (LPA) is a rare variant of lichen planus; it might comprise less than 7% of LP cases [1,2]. Most frequently described locations include the genital and intertriginous areas, however, lesions on the trunk, extremities, eyelids and neck have been reported as well [3].

The pathogenesis of LPA has not been clearly elucidated nevertheless published data has revealed that the lichenoid tissue reaction might be triggered by a sequential activation of Langerhans cells, ultimately triggering the release of activated T cells which in turn migrate to the dermis and release several cytokines such as interleukins 1 and 2, and interferon gamma [4].

Interesting dermoscopic findings were the spiked white structurless areas in a circular disposition corresponding to Wickham striae; histopathologically it may correlate to the overall hyperplastic epidermis. Pigmentation at the center of the lesion is better appreciated dermoscopically showing a structurless steel purple area, corresponding histopathologically to areas of pigment incontinence in the papillary and reticular dermis. The black color of melanin is perceived as steel purple due to a Tyndall effect. Long

wavelengths are not reflected to the open air whereas shorter wavelengths are reflected and perceived by the eye as violet or blue [5].

In conclusion, interpretation of dermoscopic findings may help to infer histopathological changes to render an accurate diagnosis.

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