Dermatology Practical & Conceptual

Disseminated Superficial Actinic Porokeratosis Treated with Topical Simvastatin: Evaluation of Therapeutic Response with Dermoscopy

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Case Presentation

A 66-year-old woman presented since 2016 with lesions on both legs, with clinical, dermoscopic, and histopathologic diagnosis of disseminated superficial actinic porokeratosis (DSAP). She was treated with different local treatments without good response.

Teaching Point

Lovastatin, an HMG-CoA receptor inhibitor, has been found to stop progression and promote regression of porokeratosis lesions. Lovastatin 2% cream has been shown to improve DSAP, alone or with the addition of 2% cholesterol [1]. We treated this patient with simvastatin 2% cream once a day for 15 days (Figure 1). The number of lesions, erythema, and scales improved, but they did not disappear completely after six months of follow-up. Simvastatin inhibition of HMG-CoA reductase in the mevalonate pathway blocks the accumulation of toxic intermediate metabolite formation in mutated cells. Simvastatin as monotherapy could be an alternative treatment for DASP, while dermoscopy represents a reliable approach to assess the therapeutic response.

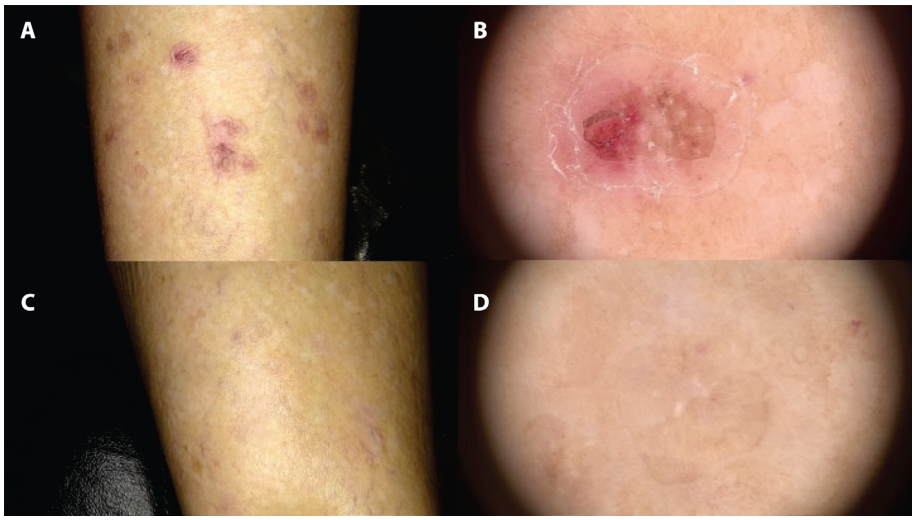

Figure 1. Before treatment: (A) clinical image with many irritated DSAP lesions; (B) dermoscopic image with the typical double keratin rim [2]. After treatment: (C) clinical view where DSAP lesions are less visible and without inflammation; (D) dermoscopic image showing much less inflammation and very subtle dermoscopic features. (Clinical and dermoscopy images with high-definition Medicam 1000 Fotofinder System).

References

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