Dermatology Practical & Conceptual

Dermoscopic Changes in Nevi During an Atopic Dermatitis Flare-up

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Case presentation

A 34-year-old male with a personal history of atopic eczema attended his annual digital dermoscopic control with a three-week flare-up of atopic dermatitis. On examination, he had scaly erythematous and eczematous plaques at the back and the flanks. Comparing the dermoscopic images we observed a global attenuation of the reticular pattern, even close to disappearance in some areas, and a pink-reddish coloration background in several nevi (Figure 1). We appreciated these changes in nevi located in areas affected with the atopic dermatitis flare-up but also in nevi in healthy skin.

Teaching point

The Meyerson phenomenon consists of an eczematous halo surrounding a melanocytic lesion [1]. The dermoscopic features in this phenomenon have been reported as the pigmented pattern - reticular and/or globular - encircled by dotted vessels associated with crust, without changes in the dermoscopic features of the involved melanocytic lesions [2]. However, in our patient the dermoscopic changes affected all the surface of the nevi and not all of them had clinical eczema. These changes are not consistent with previous descriptions of the Meyerson nevi.

It is known that in the reticular pattern, the pigmented lines correlate with the inter-papillar ridges and the holes of the network correspond to the dermal papillae. Thus, these dermoscopic findings may be explained by the histopathologic changes found in atopic dermatitis. Acute lesions of dermatitis show epidermal spongiosis and a perivascular infiltrate around vessels in the papillary dermis. These changes may be responsible for the attenuation of the reticular pattern and the pink-reddish background coloration.

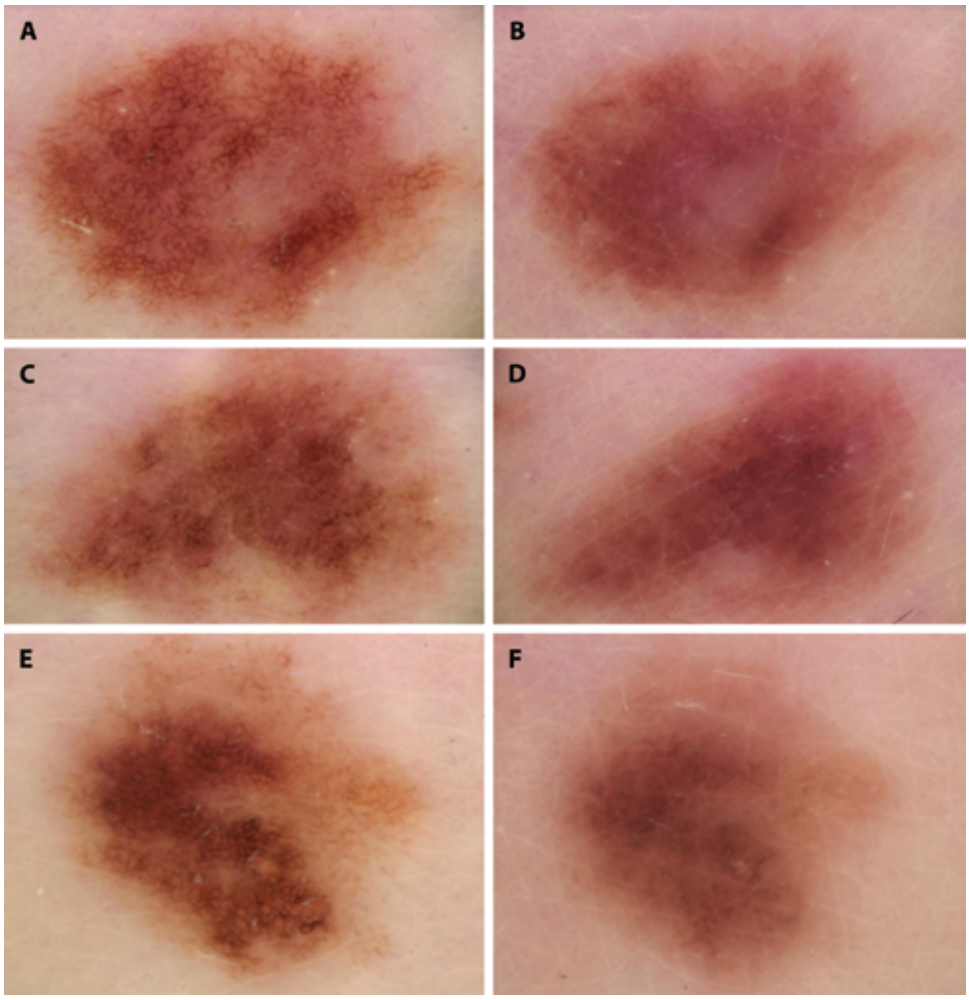

Figure 1. Three examples of the dermoscopic findings in nevi before (A, C, E) and during (B, D, F) the atopic dermatitis episode.

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