A Persistent Dark Macule on the Hand of a Hispanic Patient

A 38-year-old Hispanic man without comorbidities presented to our dermatology clinic for the evaluation of an asymptomatic dark macule on his left hand, which had gradually grown since he was a child.

The hyperpigmentation involved the dorsum and palm (Figure 1). The patient was right-handed and denied previous trauma, inflammation, occupational exposure to chemicals, or using any medications. During physical examination, no other similar pigmentation was found on the rest of his body.

An incisional biopsy of the left palm was performed (Figure 2). The histopathology revealed the presence of spindle-shaped cells with melanin granules in the superficial and middle dermis, surrounding the blood vessels, and between collagen bundles, which are findings compatible with acquired dermal melanocytosis (1,2).

On dermoscopy, we found a pattern of regular pigment with a gray-brown tone and whitish spots within. We discussed the benignity of this rare entity with the patient, and he decided not to pursue treatment.

Acquired dermal melanocytosis (ADM) is a rare condition, with isolated presentation on the hand and with less than 10 cases reported (1).

Dermal melanocytosis includes several benign pigmented lesions histologically characterized by the presence of melanocytes in the dermis, which are spindle-shaped dendritic cells containing brown melanin pigment. Melanocytes can also be identified with immunoperoxidase staining for S100 and Fontana-Masson melanin stain (2).

The physiopathology of ADM remains unclear, but it has been proposed that it involves reactivation of latent dermal melanocytes due to external factors such as trauma, inflammation, chemical exposure, sunlight, drugs, and hormonal treatment with estrogen and/or progesterone (3). ADM with hand involvement usually appears in the Asian population without sex predilection. The lesions develop in adolescence or young adulthood and tend to affect both hands and other body areas such as the face or the legs; there have also been two reported cases in the Hispanic population (both by Fitzpatrick III) (3,4).

ADM must be differentiated from ectopic Mongolian spots, plaque-type blue nevi, *tinea nigra*, or other pigmented neoplasms. A biopsy is mandatory to establish a proper diagnosis. Ectopic Mongolian spots and plaque-type blue nevi are both congenital dermal melanocytoses that may present as bluish macules on the hand. However, these lesions show deep and more widely scattered distribution of melanocytes (1). There have also been some reports of malignant melanoma and acquired dermal melanocytosis that appeared on congenital nevus spilus (5).

ADM is a benign condition, and reassurance should be offered to these patients.

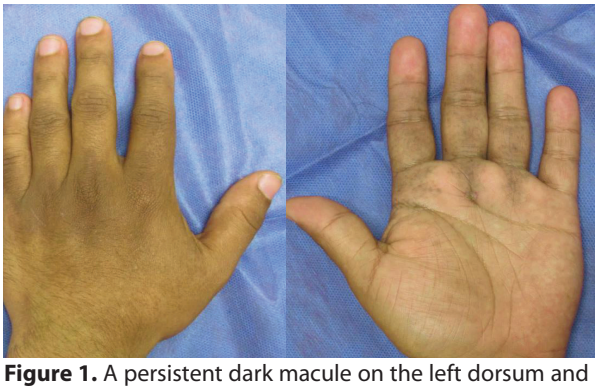

Figure 1. A persistent dark macule on the left dorsum and palm.

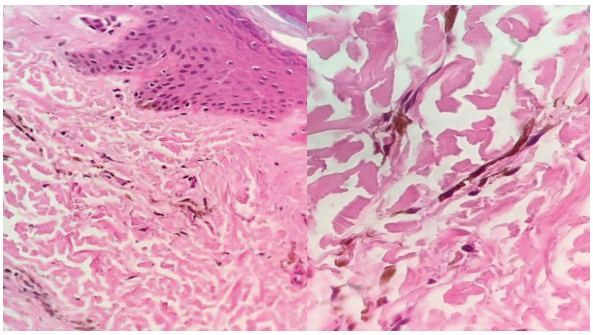

Figure 2. Histopathology of the left palm demonstrating spindle-shaped cells with melanin granules in the superficial and middle dermis; hematoxylin-eosin, original magnifications ×40 (a) and ×100 (b).

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