Dermoscopic Features of Multinucleate Cell Angiohistiocytoma: A Variant of Dermatofibroma?

Hallazgos dermatoscópicos del angiohistiocitoma de células multinucleadas: ¿una variante de dermatofibroma?

To the Editor:

Multinucleate cell angiohistiocytoma was first described by Smith and Wilson Jones[1] in 1985 and is considered to be a rare, benign vascular proliferation. Fewer than 100 cases have been described in the literature to date, though it is probably an underreported condition. Histologically it is characterized by the presence in the superficial and mid dermis of a proliferation of capillaries and venules with prominent endothelial cells. The inflammatory infiltrate is formed mainly of lymphocytes and plasma cells, accompanied by isolated multinucleate cells with geometric shapes.[2] Thickened collagen fibers are often observed running parallel to the epidermal surface and the overlying epidermis is frequently hyperplastic.[3,4] These findings, along with additional immunohistochemical data, have led several authors to suggest that multinucleate cell angiohistiocytoma is a variant of dermatofibroma that can be included within the group of disorders of fibrohistiocytic origen.[1,2]

We present a new case of multiple, bilateral multinucleate cell angiohistiocytoma, whose clinical and histological findings were consistent with this disorder; we also performed a dermoscopic study of the lesions.

The patient was a 76-year-old woman who had undergone surgery and radiation therapy 5 years earlier for a well-differentiated mucinous adenocarcinoma of the endometrium. She consulted for a 2-year history of persistent, asymptomatic, multiple, reddish-brown, macular-papular lesions located on the medial surface of both thighs (Figure 1). The dimple sign was negative. Dermoscopic analysis of various lesions revealed a common pattern defined by the presence of 3 identifiable structures: diffuse reddish areas with ill-defined borders, irregularly spaced whitish patches, and isolated peripheral areas with a fine reticulated appearance. At least 2 of the aforementioned structures were identifiable in each lesion, the peripheral areas of fine reticulated appearance being the least constant finding (Figure 2). Biopsy of one of the lesions showed mild epidermal acanthosis and a conspicuous proliferation of small to medium-size vessels in the superficial and mid dermis, with prominent endothelial cells. These findings were accompanied by an inflammatory infiltrate composed of mononuclear cells and isolated, angulated multinucleate cells arranged between slightly thickened collagen bundles (Figure 3). Immunohistochemistry showed that the infiltrate was positive for CD68 and factor XIIIa and negative for S100. The final diagnosis of multiple multinucleate cell angiohistiocytoma led us to adopt a wait-and-see approach.

Despite the growing number of reported cases of this disease, we have found no dermoscopic description of multinucleate cell angiohistiocytoma in the literature. The fact that our patient presented multiple lesions gave us the opportunity to analyze several variations in the dermoscopic pattern of this disorder. Without doubt the predominant finding was the presence of ill-defined reddish areas,

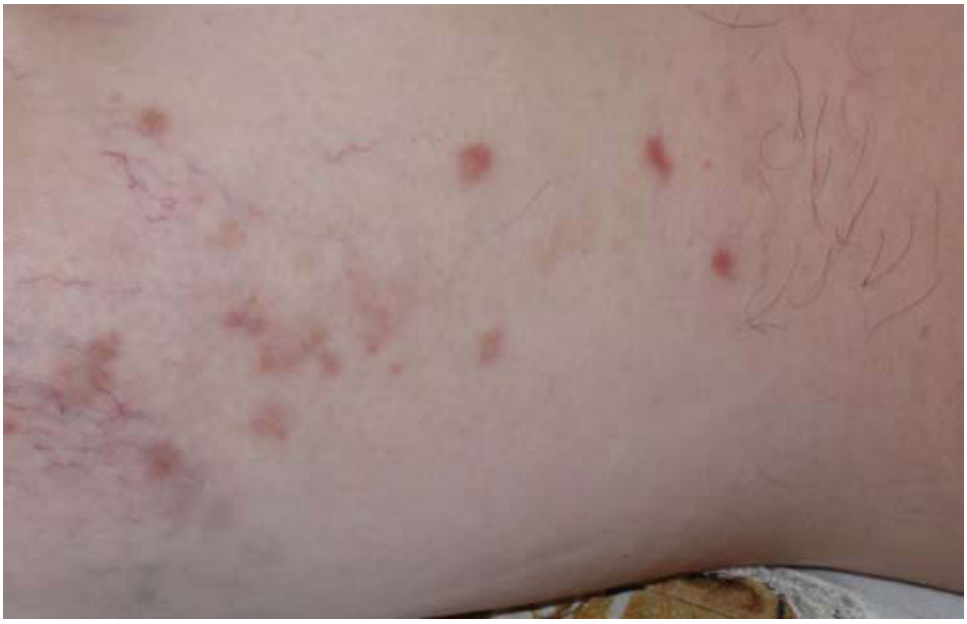

Figure 1 Clinical image of lesions located on the medial surface of the right thigh. Reddish, flattened macular-papular lesions with a tendency to coalesce.

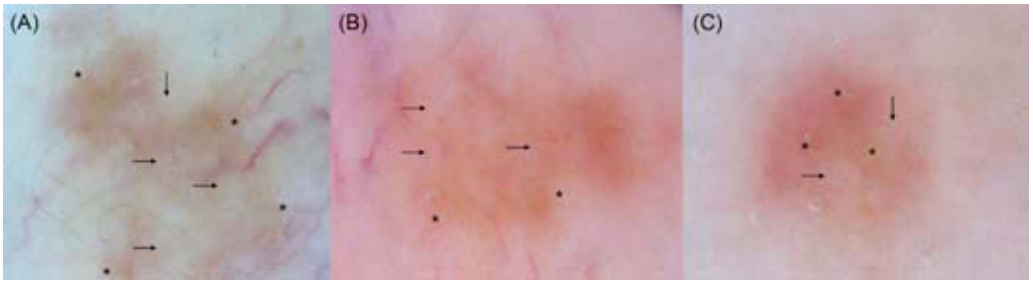

Figure 2 Dermoscopic images of 3 lesions. Diffuse reddish areas, predominantly peripheral areas of fine reticulated appearance (asterisks), and disseminated whitish patches (arrows). A and B, Predominance of whitish patches. C, Greater presence of ill-defined, reddish areas and a more clearly defined lesion. The lesion in C is therefore more recent and A the most evolved.

which we think are connected to the numerous dilated vessels characteristic of this disorder and which, according to some authors, represent the main histopathological feature of multinucleate cell angiohistiocytoma, along with multinucleate cells.[5,6] In our opinion, the variability in the density of the whitish and reddish areas may suggest slight differences in the developmental stage of each lesion, as shown in Figure 2. We equate the whitish areas with regions of thickening of the collagen, similar to the white patches visible in the fibrotic areas of other kinds of lesions. We also believe that the variable presence of areas with a fine reticulated appearance indicates the presence of melanin in the epidermal ridges, as occurs in dermatofibromas. We found a degree of correlation between some of the findings in our multinucleate cell angiohistiocytoma (whitish patches and fine reticulated areas) with those discovered by Zaballos et al[7] in an extensive review of different patterns in dermatofibromas. If we take that study as a reference, we believe that our multinucleate cell angiohistiocytomas show a pattern of multiple white patches similar to those seen in some dermatofibromas. The fact that collagen-fiber thickening and basal hyperpigmentation are less marked in multinucleate cell angiohistiocytoma than in dermatofibroma[8] would explain why the dermoscopic parallels appear to be fainter. From the clinical perspective, the presentation of multinucleate cell angiohistiocytomas in groups, as in our case, has also been observed in dermatofibromas.

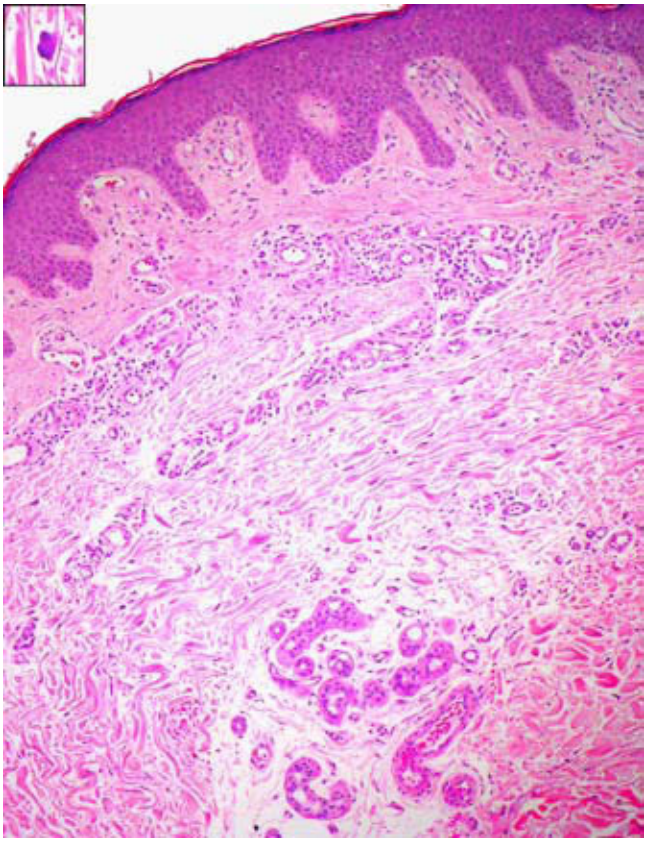

Figure 3 Biopsy of one of the lesions (hematoxylin-eosin, original magnification ×10). Mild acanthosis, proliferation of dermal vessels with prominent endothelial cells, and lymphohistiocytic infiltrate with multinucleate cells. The inset shows a multinucleate cell.

We therefore believe that multinucleate cell angiohistiocytoma presents identifiable dermoscopic findings that are very similar to those of certain dermatofibromas, thus supporting the idea that this condition is a disorder of fibrohistiocytic origin. Given the intrinsic limitations of dermoscopy, however, more evidence is required to corroborate this association. Similarly, we believe that the dermoscopic structures we have described enable multinucleate cell angiohistiocytoma to be differentiated from other vascular or inflammatory disorders included in the differential diagnosis and that have their own specific patterns. This is the case with Kaposi sarcoma (characteristic rainbow pattern)[9] and lichen ruber planus (Wickham striae).[10]

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Keloid Development on Skin Lesions After the Application of a Cream Purchased Over the Internet

Desarrollo de queloides sobre lesiones cutáneas tras la aplicación de una crema adquirida en Internet

To the Editor:

The widespread use of the Internet by patients has made it easier for them to obtain information on their disorders. However, the Internet frequently provides unverified information and access to treatments of doubtful safety. We describe the case of a patient who developed keloid scarring after applying a cream purchased over the Internet to several skin lesions, probably melanocytic nevi.

The 23-year-old man came to our clinic with 4 slightly pruritic lesions, 3 on the back and 1 on the arm. The growths, pink in color and with a firm consistency, were clinically suggestive of keloids (Figure). One of the lesions showed mild brown pigmentation in its center. The patient's description of his previous lesions was highly suggestive of melanocytic nevi. He had treated these lesions over the previous year with a cream—recommended in an online forum—called Wart & Mole Vanish, which he had purchased over the Internet. Skin biopsy was performed to confirm the clinical diagnosis of keloids. After discussing possible options with the patient, the lesions were treated with an intralesional infiltration of triamcinolone acetonide, 20 mg/mL. There was a marked cosmetic improvement in the lesions 6 weeks after the infiltration, and the pruritus had decreased.

Wart & Mole Vanish, as announced in its website, is "the world's only, 20-minute, single-application…mole, wart, skintag and syringoma removal product". The patient is instructed to scratch (roughen) the surface of the growth before applying the product, and is informed that the lesion will darken within about 20 minutes and eventually form a scab that will fall off in 7 to 10 days. The website states that Wart & Mole Vanish has won several awards at fairs and conventions,[1] and also that it has been tested in extensive clinical studies conducted in Asia, although no details of the nature and scope of these studies are provided. The

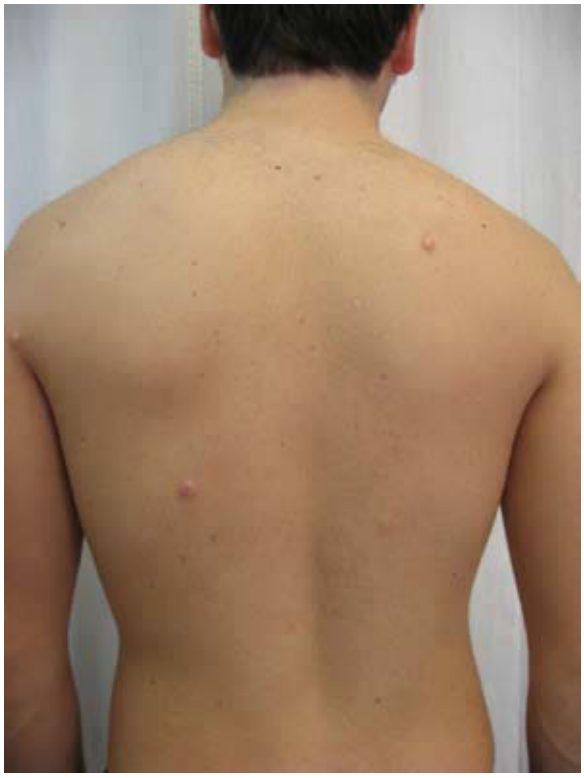

Figure 1 Pink growths, suggestive of keloids, in locations where the patient previously had melanocytic nevi.