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Collision Tumor Detected by Dermoscopy

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To the Editor:

Collision tumors and combination tumors are terms used to refer to the association of various types of tumor in time and space. Although the majority are not of clinical importance, they can sometimes be significant, as they may combine a benign lesion with a malignant tumor. The clinical diagnosis in these cases is usually extremely difficult, particularly if one of the lesions is pigmented. Dermoscopy is a noninvasive diagnostic method that enables us to visualize morphologic structures not visible to the human eye, helping us to establish the diagnosis in this type of tumor.

We present the case of an 80-year-old man with a history of systemic hypertension; he reported occupational exposure to the sun and presented skin phototype III.

He was seen in our outpatient clinic for a long-standing pigmented lesion on the back; the lesion had changed color in the months prior to consultation. On examination, the patient presented an asymmetric, heterochromous pigmented lesion, slightly elevated on palpation, with a maximum diameter of approximately 1.5 cm. There were no other skin lesions and no palpable locoregional lymph nodes. Dermoscopic study revealed an asymmetric pigmented lesion with 4 different colors (light brown, dark brown, pink, and blue-gray). There were no criteria of a melanocytic lesion.[1] A large part of the lesion was occupied by a blue-gray pigment stain, close to which there were large ovoid nests and maple-leaf structures, as well as a small area of ulceration and linear vessels (Figure 1). The rest of the lesion showed a homogeneous, brown pigment stain, in which keratin plugs and milia-like cysts could be seen. Interestingly, localized blue-gray spots could be seen around the borders of this homogeneous stain (Figure 2). Histological study of the surgical specimen revealed 2 types of lesion in continuity. First there were nests of basaloid cells with peripheral palisading and, second, epidermal acanthosis with infundibular cysts. Beneath this epidermal acanthosis there was a band-like infiltrate of lymphocytes

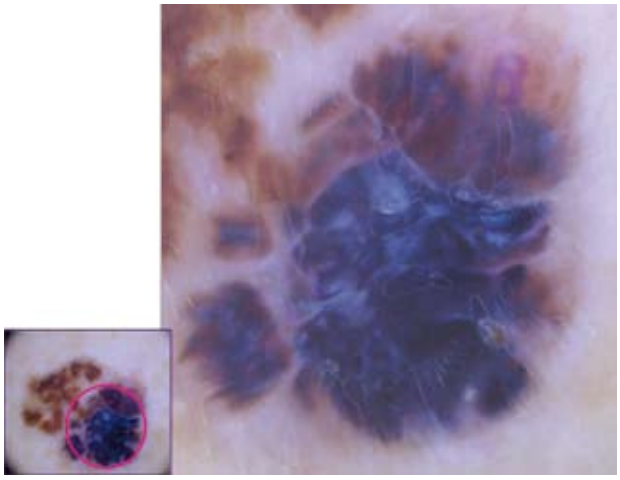

Figure 1. Blue-gray pigment stain, close to which large ovoid nests and maple-leaf structures were observed, as well as a small area of ulceration and linear vessels.

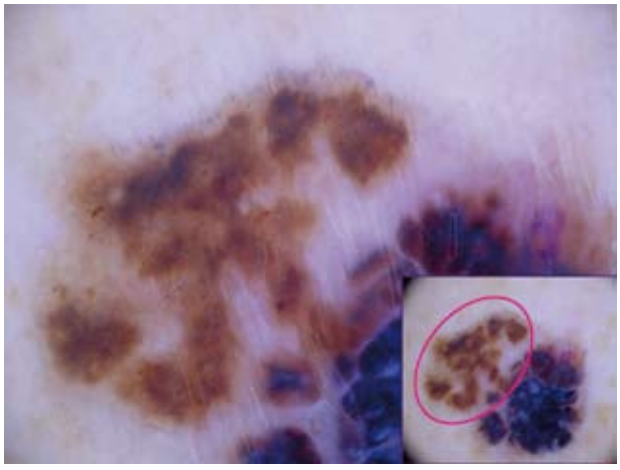

Figure 2. Homogeneous brown pigment stain with keratin plugs, milia-like cysts, and peripheral blue-gray spots.

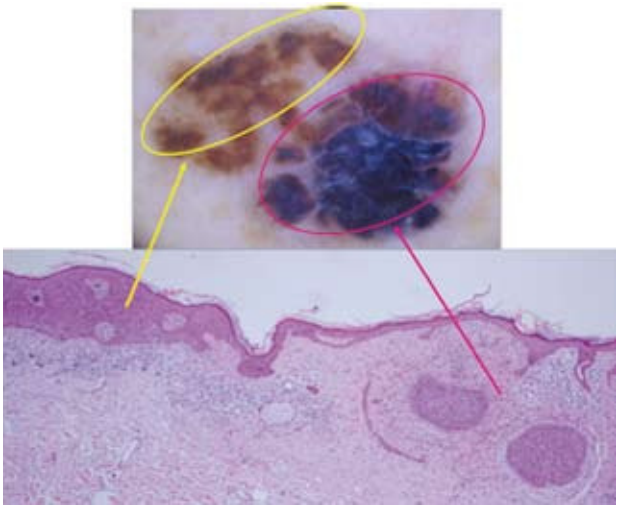

Figure 3. Band-like infiltrate of lymphocytes in the papillary dermis, with occasional melanophages.

in the papillary dermis, with occasional melanophages (Figure 3). Based on these findings, a diagnosis of collision tumor (basal cell carcinoma and seborrheic keratosis with regressive changes) was established.

The pathogenesis of such collision tumors is unknown, although there are 2 hypotheses: the first suggests that different tumors can arise at the same site in an area of damaged skin, a process known as field cancerization[2]; the second maintains that these collision tumors develop due to an interaction between the different parts of the tumor, in a way that one of the tumors stimulates the development of a second tumor through a paracrine effect.[1] Clinical diagnosis is usually extremely difficult. The development of dermoscopy has helped to improve diagnostic accuracy,[3-5] as it incorporates a series of distinctive dermoscopic features that, in the case of seborrheic keratosis, includes milia-like cysts, keratin plugs, fissures and crests, fingerprint-like structures, hairpin vessels, pigment network-like structures, and a sharp border.[6] According to Menzies,[6,7] the dermoscopic features of basal cell carcinoma are the absence of a pigmented network and the presence of at least one of the following: large blue-gray ovoid nests, multiple blue-gray globules, maple leaf-like areas, spoke-wheel areas, branching telangiectasias, and ulceration.

Our case presented large ovoid nests, maple leaf-like structures, ulceration, and telangiectasias specific to basal cell carcinoma, and also keratin plugs and milia-like cysts characteristic of seborrheic keratosis. In addition, at the border of the seborrheic keratosis, there was a coarsely granular blue-gray pattern characteristic of lichenoid keratosis. For some authors, lichenoid keratosis represents an immunological or regressive response of a pre-existing epidermal lesion, usually solar lentigo or, less commonly, seborrheic keratosis.[8] Lichenoid keratosis also has certain dermoscopic features, such as localized or diffuse, coarse, bluish-gray granules without the features of a melanocytic lesion.[6,9]

From a histological point of view, the large tumor masses of basal cell carcinoma correspond to the large, blue-gray, ovoid nests, the infundibular cysts to the keratin plugs of seborrheic keratosis, and the inflammatory infiltrate in the papillary dermis with melanophages to the coarse blue-gray granules of lichenoid keratosis.

There is no doubt that dermoscopy made it possible to reach the correct diagnosis in this case. In addition, it enabled us to alert the pathologists so that the histological sections of the excision biopsy could be orientated in such a way as to establish the most accurate diagnosis possible.

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Conflicts of Interest
The authors declare no conflicts of interest.

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Eccrine Spiradenoma in a Zosteriform Distribution: Presentation of a Case

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To the Editor:

Eccrine spiradenoma is a rare benign adnexal tumor of the eccrine sweat glands; very rarely it can undergo malignant change.[1] It usually presents as a solitary nodule and, less commonly, as multiple lesions with a zosteriform distribution.[1,2] The clinical diagnosis is often confused with neuromas, leiomyomas, neurilemmoma, neurofibroma, leiomyosarcoma, endometrioma, hidradenocarcinoma of the sweat glands, glomus tumors, lipoma, angiolipoma, dermatofibroma, hemangioma, angioleiomyoma, cavernous hemangioma, or lymphangioma.[2,3]

There has been a significant increase in the number of cases reported in the literature in recent years,[2-5] leading to the suggestion that this diagnosis is suspected more often; this will also lead to greater knowledge of its clinical features.

The patient was a 17-year-old woman with no past history of interest until 7 years earlier, when she started to develop tender, slightly bluish and mildly erythematous nodular lesions, that were round and had very clear margins. They were soft, with a smooth surface, and were about the size of a lentil (3-5 mm). The lesions were in a linear distribution that started in the left popliteal fossa and extended along the dorsal aspect of the thigh up to the inferior part of the ipsilateral gluteal region; 8 lesions were found on dermatologic examination (Figure 1). During the 7-year course of the disorder, the patient had been seen in various hospitals, though the diagnosis had not been reached. The patient therefore came to our hospital where, from a clinical point of view, we considered the following diagnoses: neuromas, neurilemmoma, and neurofibroma. Surgical excision of a nodule was performed for histological study. The histological diagnosis was benign eccrine spiradenoma (Figures 2 and 3); other disorders that could have caused clinical diagnostic confusion were excluded. All the lesions were removed surgically.

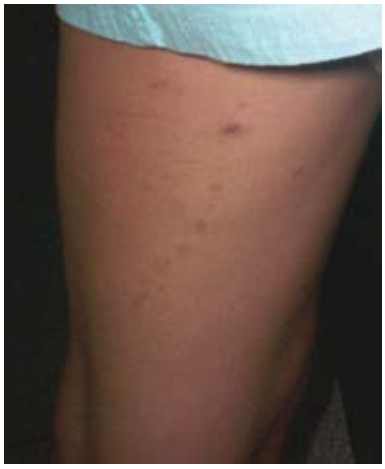

Figure 1. Linear topography of the lesions.

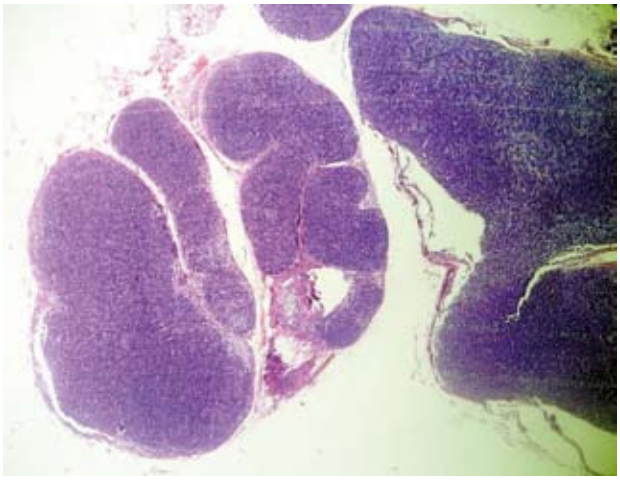

Figure 2. Histology (hematoxylin-eosin, low magnification). Tumor separated from the epidermis by a band of normal collagen.