Case Report

Dermatofibroma simulating seborrheic keratosis dermoscopically*

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Abstract: Dermatofibroma is a frequent benign tumor of easy clinical diagnosis in most cases, but that can mimic other dermatoses. Dermoscopy may help to define the diagnosis and its classical pattern is a central white area, similar to a scar, surrounded by a discrete pigment network. However, dermoscopic findings are not always typical. We describe here a case of dermatofibroma exhibiting ridges, furrows and pseudocomedos, a pattern which is typical of seborrheic keratosis, in dermoscopy.
Keywords: Dermoscopy; Histiocytoma, benign fibrous; Keratosis, seborrheic

INTRODUCTION

Dermatofibroma is a frequent benign cutaneous neoplasm that fits the group of fibrohistiocytic skin tumors.[1] Most of the time the diagnosis is clinical, although it may simulate other dermatoses.[1]

Dermoscopy is an auxiliary method with diagnostic criteria described for several skin lesions.[2] In its classical forms, the dermoscopic differentiation between seborrheic keratosis and dermatofibroma is not difficult: the former shows the pattern of ridges and furrows[3] and the latter, the white scar surrounded by discrete pigment network.[2,3] Nevertheless, the findings may also be atypical and, in these cases, histopathological confirmation is required.[1] A case of dermatofibroma simulating seborrheic keratosis dermoscopically is here presented.

CASE REPORT

A female patient mentioned a pruritic lesion on right calf. On physical examination, a hardened tumor measuring 1.5 x 1 cm with hyperchromic surface was found (Figure 1). Clinically, the hypotheses of simple chronic lichen and dermatofibroma were suggested. The dermoscopy revealed a pattern of ridges and furrows accompanied by pseudocomedos, compatible with seborrheic keratosis (Figure 2). Histopathologic examination showed a dermal tumor composed of fusiform cells, blood vessels and foamy histiocytes. The upper dermis was not affected by cellular proliferation (Figures 3 and 4). The epidermis was acanthotic, hyperkeratotic and with keratin-filled invaginations (Figure 3).

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Figure 1: Elevated lesion measuring 1.5 x 1 cm on right calf

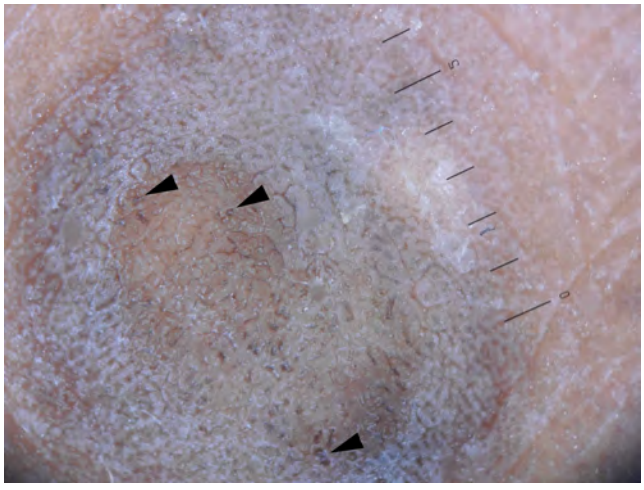

Figure 2: Dermoscopy showing pattern of ridges, furrows and pseudocomedos (arrow points)

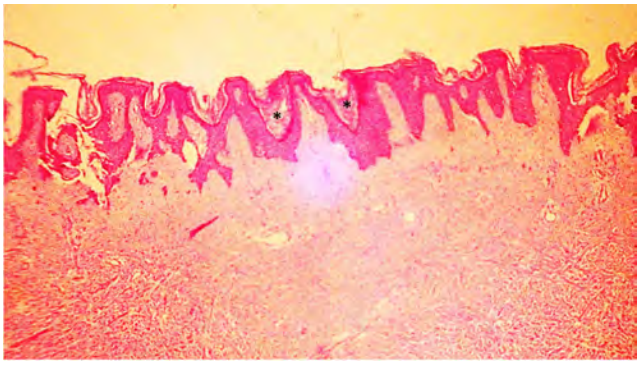

Figure 3: Presence of fusocelular skin tumor sparing the upper dermis. The epidermis shows acanthosis, hyperkeratosis and keratin-filled invaginations (asterisk) (hematoxylin-eosin, x40)

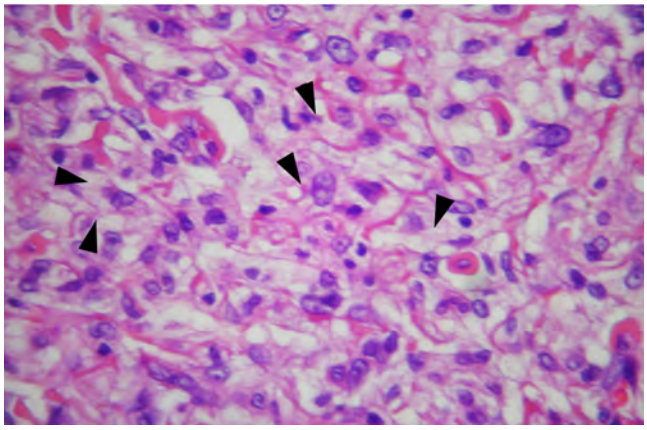

Figure 4: Many of the neoplastic cells present cytoplasm of foamy aspect (arrow points). Hematoxylin-eosin, x400

DISCUSSION

Typically, the dermatofibroma is an erythematous-brownish tumor of less than 1 cm and, most of the time, with a clinical diagnosis.[1] However, it may be confused with Spitz nevus, melanocytic composed nevus, melanoma and hemangioma.[1] In the described case, after macroscopic evaluation, the diagnoses of dermatofibroma and simple chronic lichen were suggested.

Even with the use of dermoscopy, diagnosis of dermatofibroma may be a challenge. Its classical dermoscopic appearance is that of a white area similar to a scar surrounded by a discrete pigment network.[2] Zaballos et al., in a large series of cases, described ten dermoscopic patterns associated with this diagnosis.[4] The classical pattern is the most common, present in 34% of the cases.[4] Other common patterns are the discrete pigment network in all the lesion (14%) and the discrete pigment network with a white central area (9%). Nevertheless, in 6% of the cases, the dermatofibroma presents an atypical pattern[4] and may simulate lentigo, blue nevus, melanoma and non-melanocytic lesions.[2]

Dermoscopy of the lesion presented a pattern of ridges and furrows, classical of pigmented seborrheic keratosis[2], despite its low specificity (43%)[3]; it may be observed in other dermatoses, like dermatofibroma.[2] In addition, pseudocomedos could be found, which have 91% specificity for the diagnosis of seborrheic keratosis.[3] Such dermoscopic findings associated with the absence of a classical dermatofibroma pattern would be sufficient to define the diagnosis of seborrheic keratosis. However, from a clinical point of view, the lesion was not compatible with this diagnosis and consequently our option was to withdraw it.

The histopathologic examination revealed a dermal tumor of fusiform cells and histiocytes, consistent with dermatofibroma.[1] The epidermis was acanthotic, hyperkeratotic and with keratin-filled invag-

inations. These findings of epidermis hyperplasia may also be found in dermatofibroma, and their presence may explain the dermoscopic aspect of ridges and furrows.[1,4] This association between dermoscopic and pathologic findings is corroborated by the case herein described. Although dermoscopy is an important tool in the diagnosis of melanocytic and non-melanocytic skin lesions, the histopathologic examination is important when there is disagreement between clinical and dermoscopic diagnosis.❑

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