The dermoscopic variability of dermatofibromas

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CLINICAL PRESENTATION

Twelve patients (6 male) aged 11 to 75 years presented with solitary dermatofibromas (DFs). Seven lesions were located on the lower limbs (Fig 1, A and D, Fig 2, A and C, and Fig 3, A, B, and D), 3 lesions on the trunk (see Fig 1, B, and Fig 2, B and D), and 2 lesions on the upper limbs (see Fig 1, C, and Fig 3, C).

Fig 1. A, Dermoscopy of a classical dermatofibroma, revealing a central white patch surrounded by a thin brown network. B, Lesion shows comedo-like openings mimicking a seborrheic keratosis. Dermatofibroma in early stages typically displays prominent linear vessels in a radial arrangement (C) and dotted vessels (D). D, Lesion shows a peripheral collarette and a scaly surface.

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Fig 2. A. Nodular dermatofibroma (DF) dermoscopically exhibiting a central white area combined with globular-like structures. B, C, and D. Lesions are characterized by evident crystalline structures. B is an example of atrophic DF. In C, dark brown peripheral pigmented streaks were detected in conjunction with crystalline structures in the center. The lesion was excised in a patient with skin type IV.

Fig 3. Aneurysmal dermatofibromas (DFs) (A and B) exhibiting globular blue areas (A) or a blue homogeneous pigmentation (B). Yellow globular structures surrounded by a brownish homogeneous pigmentation were observed in a DF with sebaceous component (C). D. Lesion with a multicomponent pattern with atypical pigment network, a central white scarlike area, and linear irregular vessels. The lesion was excised in order to rule out melanoma.
DERMOSCOPIC APPEARANCE

On dermoscopy, the case in Fig 1, A, presented a central white patch surrounded by a thin brown network, namely, the classic presentation of DF. The remaining cases displayed a nonclassic pattern. The case in Fig 1, B, mimicked a seborrheic keratosis; the cases in Fig 1, C and D, presented a prominent vascular pattern as seen in the early phases of DF. The case in Fig 2, A, was a nodular lesion with a globular pattern and in Fig 2, B, was an atrophic DF. The case in Fig 2, C, was detected in a dark-skinned person, and the case in Fig 2, D, showed evident crystalline structures. The cases in Fig 3, A and B, are examples of aneurysmatic DF; the case in Fig 3, C, presented yellow globular structures due to a sebaceous component. The case in Fig 3, D, displayed a melanoma-like pattern.

HISTOLOGIC DIAGNOSIS

Histopathologic examination was suggestive of DF in all cases.

KEY MESSAGE

The stereotypical dermoscopic pattern of DF consists of a central white patch surrounded by a thin brown network.1,2 However, DF often deviates the latter typical pattern and mimics other benign and malignant skin tumors.1,2 The knowledge of the dermoscopic variability of DF, coupled with a careful clinical examination that usually reveals the characteristic dimple sign, usually allows the recognition of atypical variants of DF. However, a skin biopsy might be necessary in doubtful cases in order to rule out malignant tumors.

REFERENCES