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*).

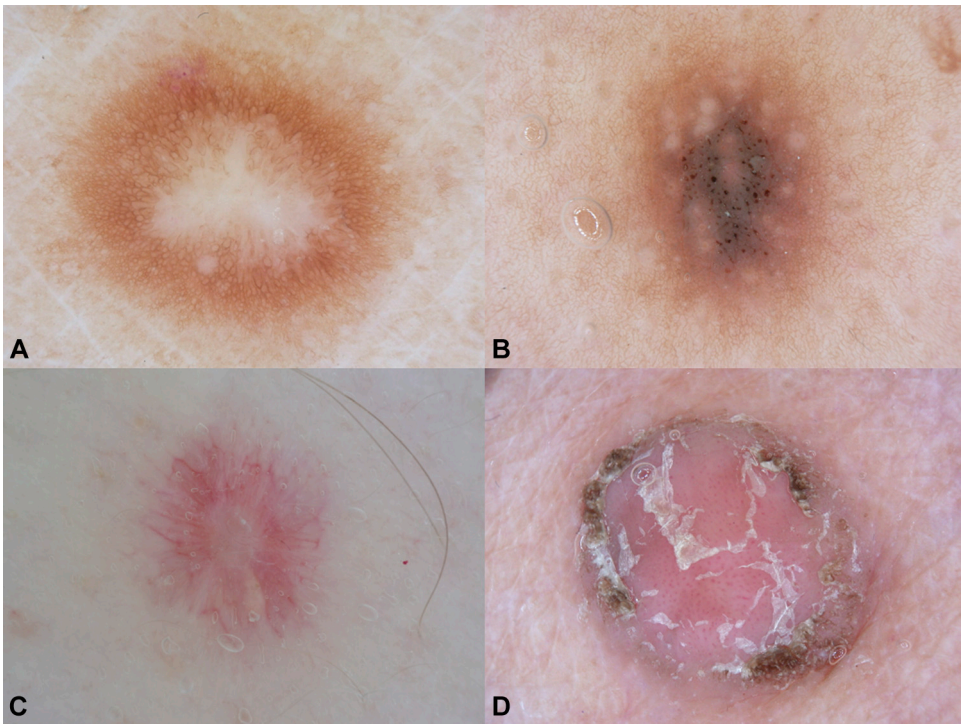

Fig 1. A, Dermoscopy of a classical dermatofibroma, revealing a central white patch surrounded by a thin brown network. **B**, Lesion shows comedo-like openings mimicking a seborrheic keratosis. Dermatofibroma in early stages typically displays prominent linear vessels in a radial arrangement (**C**)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

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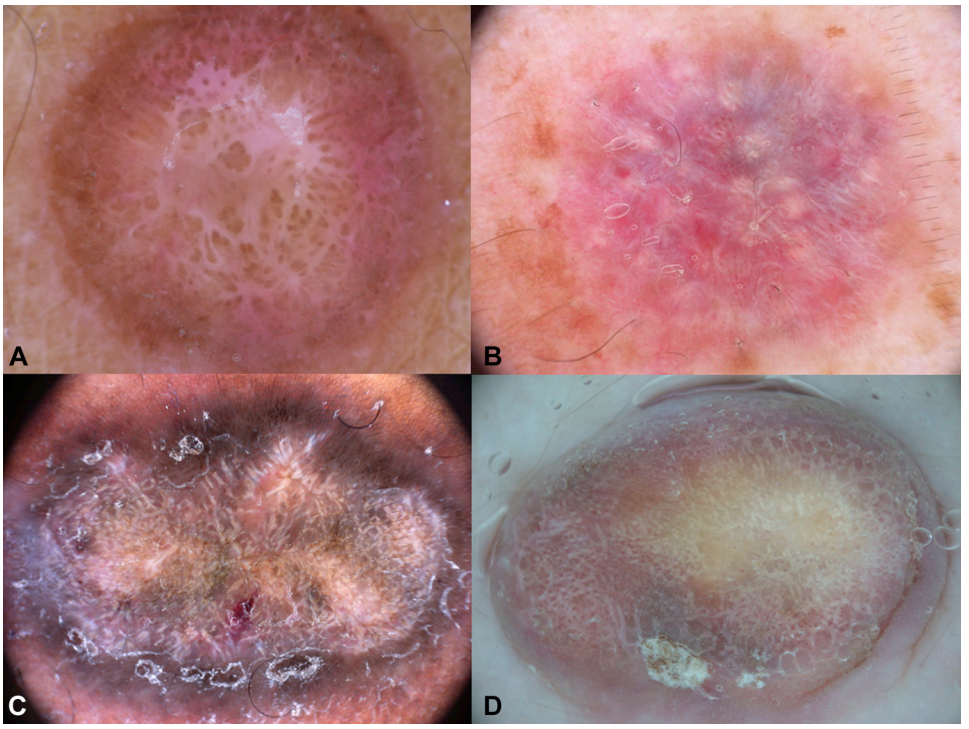

Fig 2. A, Nodular dermatofibroma (DF) dermoscopically exhibiting a central white area combined with globular-like structures. **B**, **C**, and **D**, Lesions are characterized by evident crystalline structures. **B** is an example of atrophic DF. In **C**, dark brown peripheral pigmented streaks were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

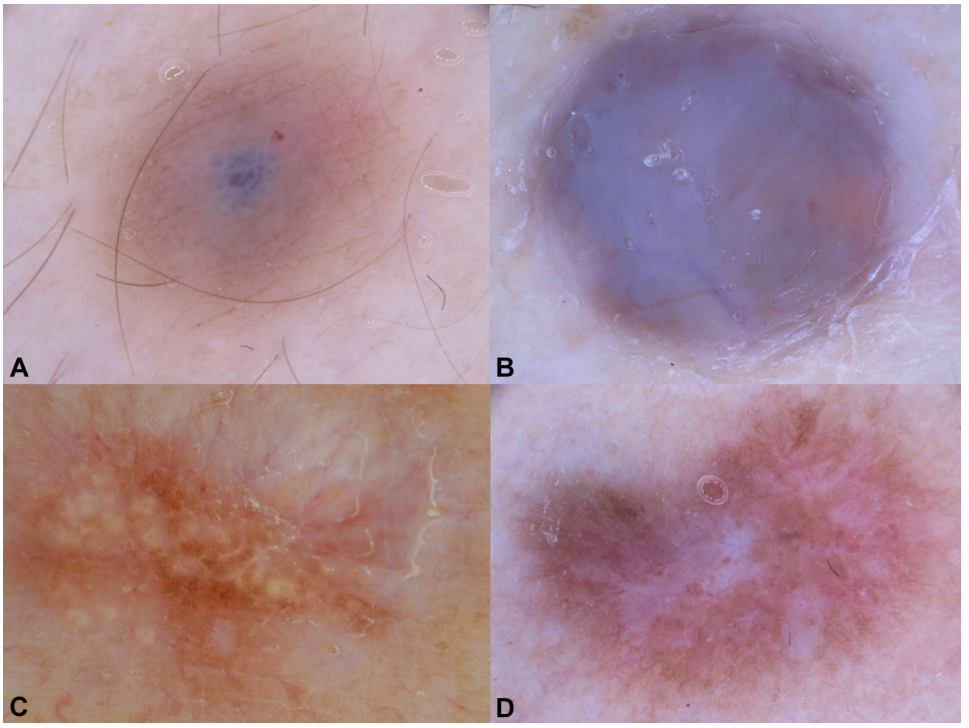

Fig 3. Aneurysmal dermatofibromas (DFs) (**A** and **B**) exhibiting globular blue areas (**A**) or a blue homogeneous pigmentation (**B**). Yellow globular structures surrounded by a brownish homogeneous pigmentation were observed in a DF with sebaceous component (**C**). **D**, Lesion with a multicomponent 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.

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