

The Elongated Dermatofibroma: A New Dermoscopic Variant?

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PRACTICE POINTS

- The most common features of dermatofibromas are white scarlike patches, brown globulelike structures, vascular structures, and a peripheral fine pigmented network.
- Dermoscopy may be used in the diagnostic workup of pigmented nonmelanocytic lesions.

To the Editor:

Dermatofibroma is a common cutaneous lesion that most frequently affects young or middle-aged adults, especially women.¹ Clinically, it appears as a firm, pink or brown nodule. It may be painful or show a tendency for scarring. The pathognomonic feature of dermatofibroma, regarded as a fibrohistiocytic tumor, is the so-called button sign caused by skin depression following pressure. We present a unique case of elongated dermatofibroma with a linear, white, scarlike patch with a brownish pigmented network and globules.

A 40-year-old woman presented with a linear elongated lesion localized to the right side of the infrascapular region of 10 years' duration. The lesion initially was a small brownish plaque. There was

no history of trauma or scratching. Over the next 10 years, the lesion slowly progressed, finally becoming a linear, atrophic, brownish plaque that was 2.5-cm long (Figure 1). The button sign was positive. On dermoscopy the central, elongated, white patch was visualized not as a typical round patch but as a scarlike white line (Figure 2A) surrounded by a brownish network that was especially pronounced in the distal parts of the lesion. In the upper part of the lesion, multiple marginally disseminated, dark brown dots were present. Brownish globules within



Figure 1. Macroscopic view of a linear white-brown plaque extending along the Blaschko line in the infra-scapular region.

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the linear white patch also were observed in the lower central part. Figure 2B presents a dermoscopic picture of the linear variant of dermatofibroma. For cosmetic reasons, the patient underwent total surgical excision of the lesion. Histopathology revealed distinct characteristics of dermatofibroma (Figures 3A and 3B).

The most common features of dermatofibromas seen in polarized and nonpolarized dermoscopy are central white scarlike patches, brown globule-like structures, vascular structures, and a peripheral fine pigmented network.² Kilinc Karaarslan et al³ described atypical dermatofibromas with linear irregular crypts, which were seen in 26.9% of all studied cases. These irregular crypts were mainly medium

in size (10 lesions), with only 2 lesions being tiny and regularly distributed. Only one lesion had atypical clinical and dermoscopic features occurring as an atrophic plaque with multiple small scarlike areas and peripherally distributed pigment network.³ Based on this typology, we believe our patient represents a case of elongated dermatofibroma that could be an atrophic variant of dermatofibroma. This form would not appear as a small scarlike area with pigment network in a somewhat patchy distribution³ but as a scarlike linear chord with a bipolar pigment network. Zaballos et al¹ described 10 dermoscopic patterns of dermatofibroma (N=412); the most common was a central white patch and peripheral pigment network in approximately 35% of cases.

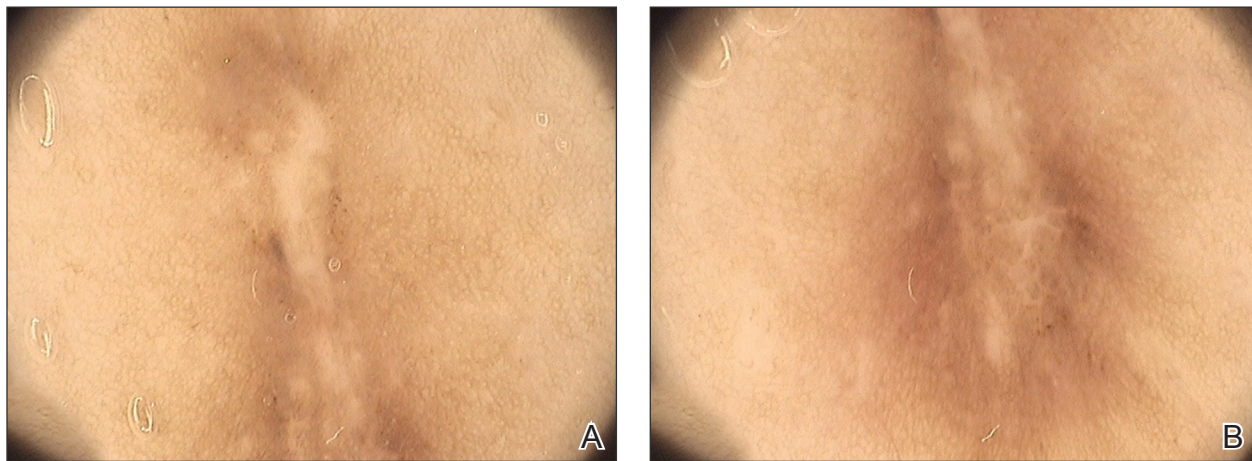


Figure 2. Dermoscopy of the elongated dermatofibroma revealed a linear scarlike structure in the upper part (A). Brownish globules within the linear white patch area also were observed in the lower central part of the lesion on dermoscopy (B).

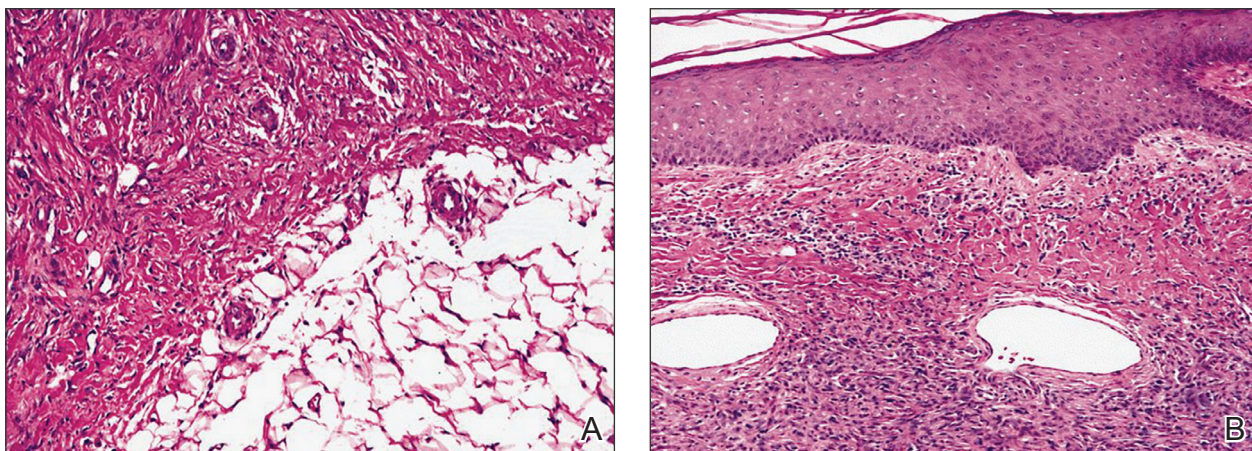


Figure 3. Histopathology revealed dermatofibroma (A and B)(both H&E, original magnifications $\times 40$ and $\times 100$). A storiform pattern of spindled and bland fibroblasts and histiocytelike cells in the mid dermis and subcutaneous tissue were seen with infiltrative margins but sparing the epidermis. Spindle cells had scant cytoplasm and thin elongated nuclei with pointed ends. Nuclei almost touched each other, unlike smooth muscle lesions.

A white scarlike patch was observed in 57.0% of dermatofibromas in 4 variants: (1) a solitary structure located in the center; (2) multiple white scarlike patches; (3) white scarlike patch extending throughout the lesion or irregularly distributed; and (4) white network (central, total, or irregular).¹ Agero et al² first described the new feature as a central white patch characterized by shiny white streaks. The most frequent dermoscopic pattern associated with dermatofibromas is the central white scarlike patch and peripheral delicate pigment network.^{1,4} Arpaia et al⁴ observed that dermoscopic patterns may correspond to distinct sequential stages of the formation of dermatofibroma. The linear character we described may be related to a variant of scarring keloid dermatofibroma.⁵

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