

Dermoscopy of a solitary storiform collagenoma

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ABSTRACT The dermoscopic features of solitary storiform collagenomas (sclerotic fibromas) have not been described previously, as these are rare cutaneous soft tissue tumors. The presence of multiple lesions is considered a marker of Cowden syndrome. They can also present as single firm cutaneous nodules. We present an unusual single nodule with distinct dermoscopic and histologic features.

Case Presentation

A 44-year-old fair-skinned male presented with a several-year history of a slowly enlarging asymptomatic nodule on his right forearm. He had an extensive sun exposure history and prior history of basal cell carcinomas but was otherwise in good general health. There was no family history of cancer.

The physical examination revealed a 1 x 1 cm solid, well-circumscribed, white, firm nodule on the extensor aspect of his right forearm (Figure 1).

Dermoscopy showed a homogeneous white background with some peripheral arborizing vessels and mild erythematous halo (Figure 2). A complete excisional biopsy was performed. Histology revealed a well-circumscribed polypoid lesion covered by an atrophic epidermis. The dermis contained sclerotic bundles of collagen with a storiform pattern and scattered fibroblasts; no collagen bundles with plywood-like or concentrically lamellar pattern were identified. No depressed surface, dermal atrophy, infiltrative edges, vascular proliferation, dermal spindle-shaped or dendritic melanocytes were seen (Figure 3).

Diagnosis

Solitary storiform collagenoma (sclerotic fibroma)

Discussion

The solitary storiform collagenoma (sclerotic fibroma) is a rare benign soft tissue tumor presenting as a slowly enlarging well-circumscribed solid, fibrous, pink, white or flesh-colored papule or nodule in young and middle-aged adults of both sexes [1]. It is more commonly found on the face and limbs but has also been described on the scalp, trunk, oral mucosa and nail bed [2]. The presence of multiple storiform collagenomas is considered as a cutaneous marker of Cowden syndrome [3]. Histology of sclerotic fibromas reveals a well-circumscribed non-encapsulated dermal nodule with hypocellular storiform collagen bundles showing prominent clefts [4], sometimes with accumulation of collagen bundles in biphasic growth and arranged in a plywood-like or concentrically lamellar patterns [5].



Figure 1. Well-circumscribed, white, firm nodule with erythematous halo and superficial vascularization. [Copyright: ©2018 Ebadian et al.]

We present an unusual solid, single nodule in a fair-skinned patient with prior history of basal cell carcinomas. Dermoscopy showed a homogeneous white background

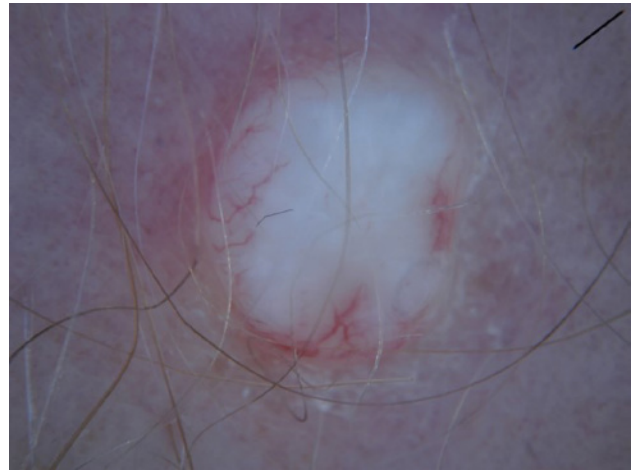


Figure 2. Dermoscopy shows a homogeneous structureless white lesion with erythema and arborizing vessels in peripheral distribution (polarized contact dermoscopy, x10). [Copyright: ©2018 Ebadian et al.]

with peripheral arborizing vessels; this pattern has not been described previously. Some atypical forms of dermatofibromas [6], late stages of sclerotic dermatofibromas and amelanotic blue nevi, may occasionally present with similar dermoscopic features [7]. A sclerotic fibroma-like dermatofibroma has also been described as an uncommon variant of dermatofibroma [8]. It is unclear if storiform collagenomas represent

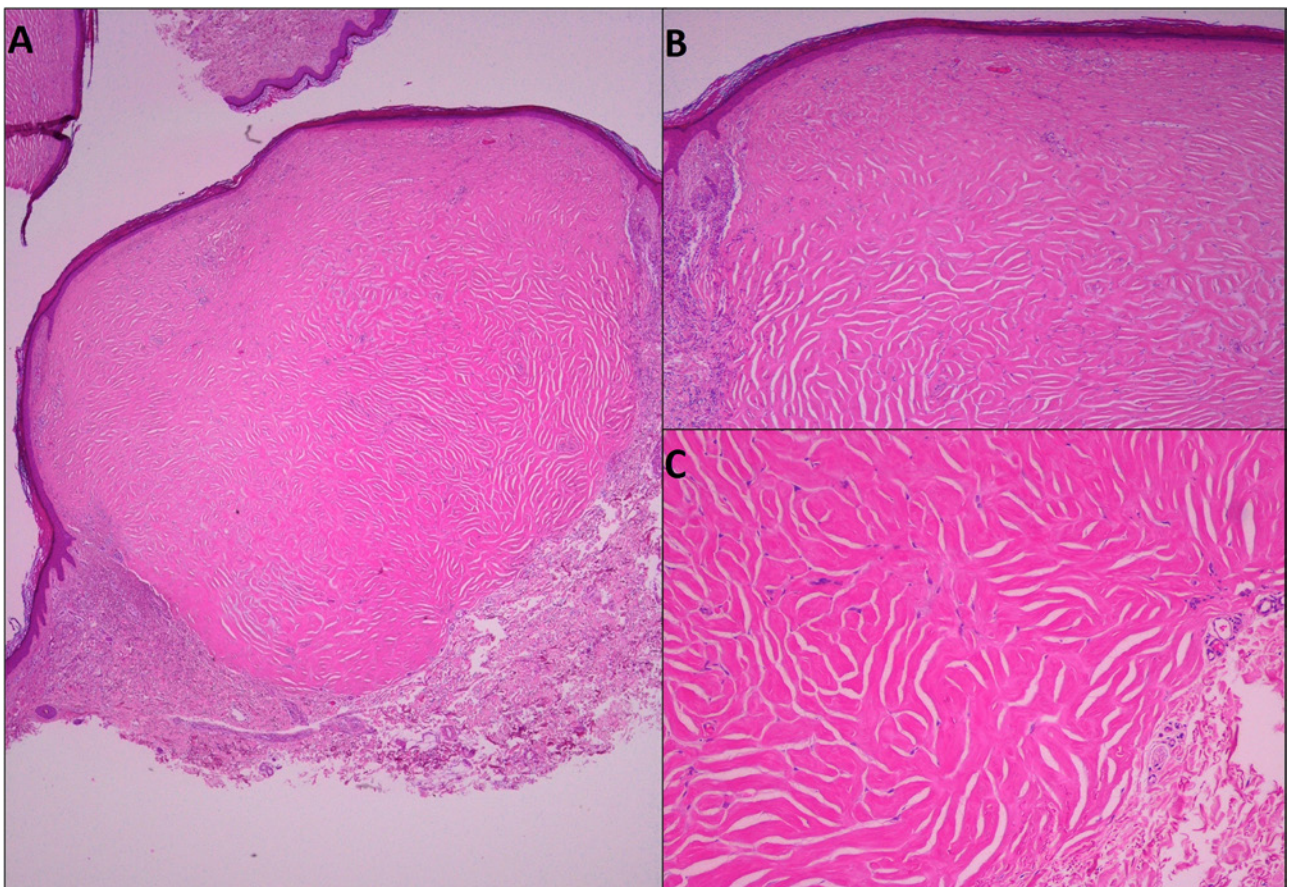


Figure 3. Well-circumscribed polypoid lesion contained collagen bundles separated by prominent clefts with scattered fibroblasts. Hematoxylin-eosin stained sections (A. 40x, B. 100x, C. 200x). [Copyright: ©2018 Ebadian et al.]

a fibrous tissue hamartoma or a genuinely fibrohistiocytic neoplasm; some storiform collagenomas may correspond to involuting dermatofibromas [9]. Storiform collagenomas should be considered in the differential diagnosis of acquired white firm papules or nodules. Histology is needed to confirm the diagnosis.

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