

Aneurysmal dermatofibroma: dermatoscopic aspects

Abstract

Aneurysmal DF is considered a benign tumor of origin in the dermis and represents less than 2% of dermatofibromas,¹⁻⁵ its etiology is unknown, it is more prevalent in women over 30 years old. Histopathology gives the definitive diagnosis. The DF is generally larger than the classic DF, has an erythematous-brown or violet color, and can be painful if the lesion grows rapidly. With dermoscopy, we can identify any of the patterns already known to classical DF, but what will suggest that it is an aneurysmal DF are the linear white structures, vascular structures and delicate pigmented network on the periphery.

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Case report

Case 1: A healthy, 25-year-old male patient presented with a hyperchromic, violaceous nodule, measuring an inch and a half, painful and with progressive growth, which had appeared for 3 years and had a positive sign of sunkenness. Dermoscopy identifies a delicate peripheral pigmented network, central wine red area and bright white areas Case 2: the patient was also male, healthy and of similar age, complaining of an arm injury, with progressive increase and starting 2 years ago. On examination, he had a pigmented nodular lesion, measuring 1cm in the right forearm and dermoscopy showed delicate peripheral pigment network, central erythematous brownish amorphous area and pinkish branched vessels Histopathology of both cases showed acanthotic epidermis and hypercellularity in the center of the lesion, occupying the entire dermis, up to the subcutaneous, forming a fibrohistiocitoid neoplasm, with the presence of giant cells containing brownish pigmentation suggestive of hemosiderin. It also showed cracks without vascular endothelium containing red blood cells in its interior and on the periphery of the lesion, we observed the incarceration of pre-existing collagen fibers, by newly formed collagen.

Discussion and conclusion

The variants of the DFs are: cellular, epithelioid, hemangiopericytoid, atrophic, fibrocollagenous, pseudo-sarcomatous and aneurysmal.^{4,5} Aneurysmal DF is a benign tumor of origin in the dermis and represents less than 2% of DFs.¹⁻⁵ Its etiology is unknown, although some authors suggest that the onset is triggered by local trauma. It is more prevalent in women over 30 and has a recurrence rate of 19% when excised. Histopathology is essential for the definitive diagnosis, and may show neof ormation composed of spindle-shaped cells that preclude new fibrillar collagen, acanthosis, elongation of epidermal cones, multinucleated cells and cracks containing red blood cells inside⁶. In the most doubtful cases, immunohistochemistry can help to differentiate: aneurysmal DF is negative for S100 and HMD45 and CD34.^{7,8} Clinically, aneurysmal dermatofibroma is generally larger than classic dermatofibroma, has an erythematous-brown or violet color and can be painful if the lesion grows rapidly.⁸ As a differential clinical diagnosis, Kaposi's sarcoma,⁷ vascular tumors and melanoma can be highlighted. Dermoscopy can identify white linear structures, vascular structures and a delicate pigmented network on the periphery, so this subtype can have any of the patterns already

known to classical DFs, such as pigmented network, white area, vascular structures, homogeneous area, white network, structures globule-like and irregular crypts; but what suggests aneurysmal DF is the central erythematous-wine color.⁸⁻¹² Therefore, we can conclude that dermoscopy is a helping tool for the dermatologist to differentiate aneurysmal dermatofibroma from its possible differential diagnoses, especially with malignant tumors. (Figure 1-6).

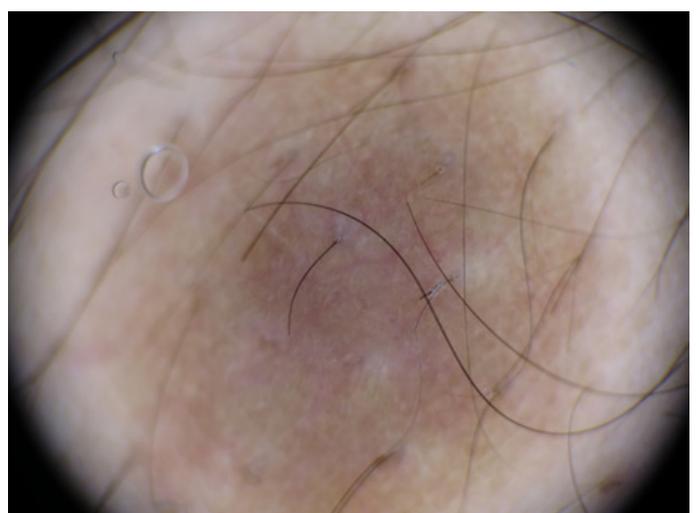


Figure 1 & 2 Case 1: 1 cm brownish nodule. dermoscopy: delicate peripheral pigment network, central erythematous brownish amorphous area and branched pinkish vessels.

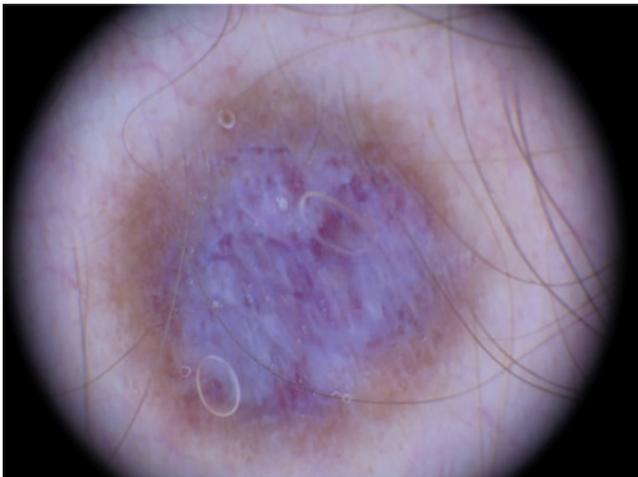
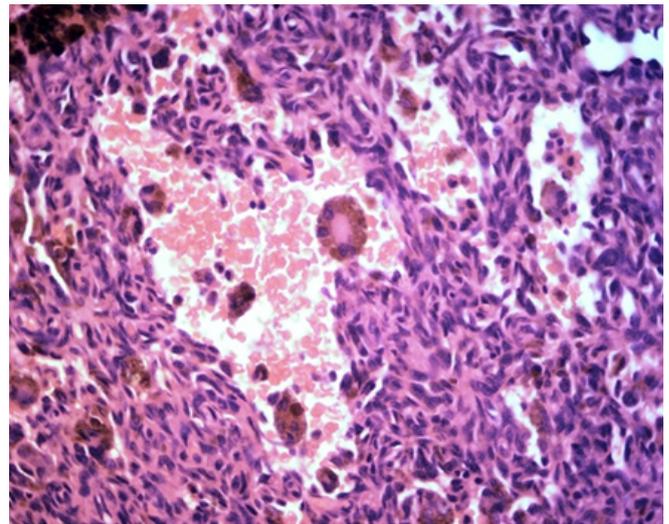
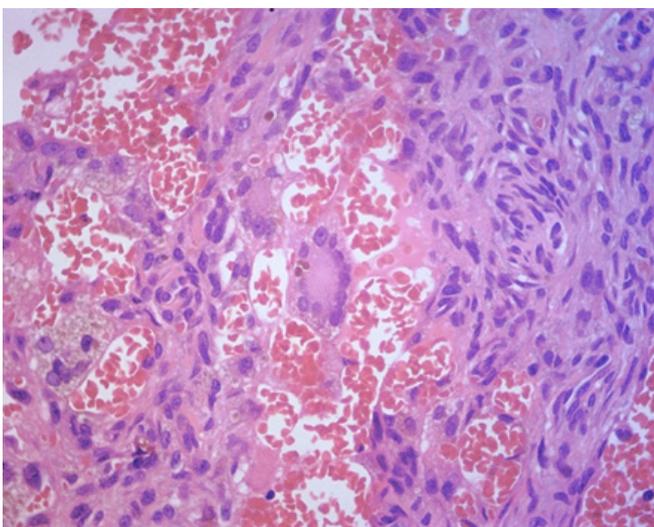


Figure 3 & 4 Case 2: 1.5cm brownish nodule. dermoscopy: delicate peripheral pigment network, central wine red area and bright white areas.



Figures 5 & 6 fibrohistiocytoid neoplasia, with giant cells containing brownish pigmentation suggestive of hemosiderin, cracks without vascular endothelium, containing red blood cells inside.

Acknowledgments

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Conflicts of Interest

There are no conflicts of interest.

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