



Case Report

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Atypical Fibroxanthoma of the Scalp in a Young Woman: A Case Report



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Abstract

Atypical fibroxanthoma, is a uncommon tumor of fibrohistiocytic mesenchymal origin, it occurs on the sun-damaged skin of elderly men. The clinical presentation is a solitary cutaneous nodule. The diagnosis is made by histology and immunohistochemistry. The large excision is the mainstay therapy and the recurrence is possible. We report a case of atypical Fibroxanthoma occurring in the scalp of a young woman.

Keywords: Atypical Fibroxanthoma; Mesenchymatous; Scalp

Abbreviation: AFX: Atypical Fibroxanthoma

Introduction

AFX is a rare parenchymatous tumor; it is considered by some authors as a low-grade sarcoma [1]. This cutaneous neoplasm originates from fibrohistiocytic mesenchymatous tissue [2]. It affects elderly men, in photodamaged area, such are head and neck. This tumor is characterized by a favorable prognosis and a rare risk of metastasis [3].

Case Report

A young woman of 28 years old, was referred for a solitary nodule of the scalp, evolving since 02 months, without pain or pruritus, the dermatological examination showed a nodule of the frontal scalp of 1cm size (Figure 1), erythematous and slightly ulcerated, painless. It was superficial, without subjacent involvement. The rest of the somatic examination did not show any abnormalities. In front of this clinical presentation we evoked a proliferating trichilemmal cyst, a squamous cell carcinoma, an achromic melanoma, our patient benefited from a biopsy that showed a proliferation of pleomorphic atypical spindle-shaped cells (Figure 2). In Immunohistochemistry, the HMB 45 was negative, eliminating a chromic melanoma (Figure 3), the Cytokeratin was negative too eliminating a Squamous cell carcinoma (Figure 4). While the fixation of CD67 (Figure 5) confirmed our diagnostic

of AFX. The patient benefited from cervical ultrasonography that didn't show any ganglionic involvement, then the tumor was excised with 1 cm margins. The first control was without abnormalities, the scars didn't show recurrence signs. A regular follow up is conducted for our patient (Figure 6).

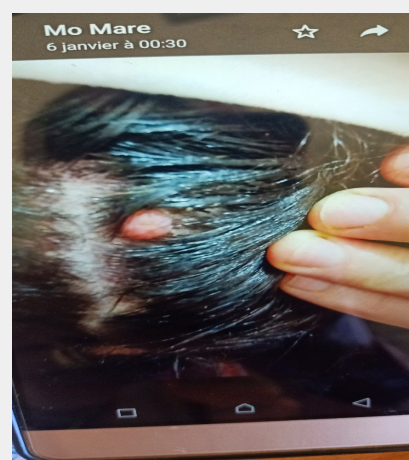


Figure 1: Solitary erythematous superficial nodule of the scalp.

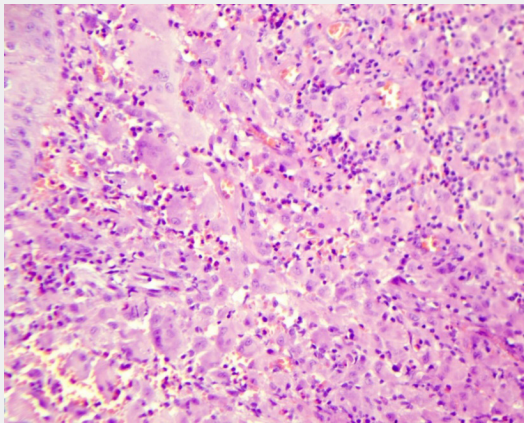


Figure 2: Immunostain HES X200: non epithelial dense proliferation, made by large spindle shaped cells.

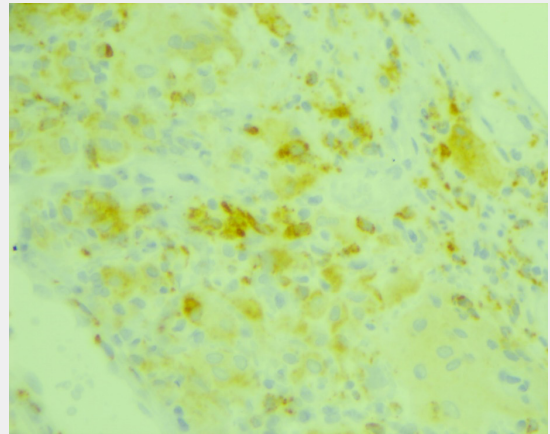


Figure 5: Immunostain X200, positive fixation of CD68 confirming the Diagnosis of atypical Fibroxanthoma.

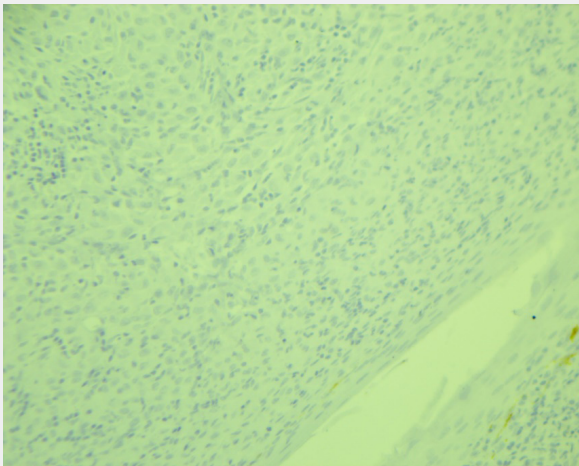


Figure 3: Immunostain X200, negative fixation of HMB 45.

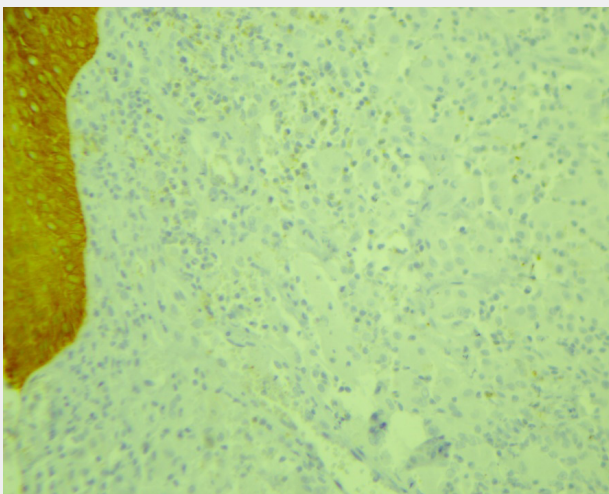


Figure 4: Immunostain X200, negative fixation of Cytokeratin.



Figure 6: First controle after large excision of the tumor.

Discussion

AFX is a rare distinctive cutaneous neoplasm of fibrohistiocytic mesenchymal origin. The oncogenetic background of this tumor demonstrates C-T mutation in P53 and TERT promoter genes [4,5], which explain the location in actinically damaged skin. Moreover, the occurrence of this tumor in patients with Xeroderma Pigmentosum supports this hypothesis. Radiation, burn traumatism and maybe the risk factor of the occurrence of this tumor [6]. Its pathogeny is still unclear, and it may originate from myofibroblasts or apparent fibroblast cells [7]. Although this tumor affects elderly men, there is a small subgroup of affected younger patients [1] as was the case of our patient. Clinically, AFX appears as a solitary ulcerated nodule, of 1,5-2cm size, in a sun-damaged area, mimicking a squamous cell carcinoma or basal cell carcinoma [1] as was the case of our patient. Histological features

of this tumor include the presence of dense cellularity with haphazardly ranged, atypical spindle-shaped cells just beneath the epidermis, extending to the dermis and hypodermis [2]. However, this description is not specific to AFX, it can be found in the other spindle cell tumors, especially the pleomorphic dermal sarcoma which share a clinical, histological and either immunostain characteristics with AFX [8]. The management of this tumor is a total excision, while the margins are still unprecise. The risk of recurrence is variable through the reported cases, and it is ranging from 3 to 20% [9,10].

Conclusion

AFX is a rare neoplasm that may occur in young patients and should be evocated in front of a solitary nodule in the sun-exposed area.

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