

# A Rare Neoplastic Growth on the Ear Lobe

## Neobvyklá nádorová infiltrace ušního lalůčku

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### Summary

We report a case of an 83-year-old previously healthy female patient presenting with a swiftly evolving erythematous violaceous, infiltrative, ulcerated onion-like mass with hyperkeratotic surface on the left ear lobe. The lesion was excised and resulted as an atypical fibroxanthoma, an extremely rare neoplastic growth, being a superficial variant of pleomorphic malignant fibrous histiocytoma. A brief review of diagnosis, treatment and prognosis is discussed.

### Key words

skin – clear cell atypical fibroxanthoma – immunohistochemistry – differential diagnosis – head and neck neoplasms – neoplasms – prognosis

### Souhrn

Prezentujeme případ 83leté ženy, dosud bez závažných onemocnění, u které byla zjištěna rychle rostoucí, zarudlá nafialovělá infiltrace levého ušního lalůčku, s hyperkeratotickým povrchem cibulovitého vzhledu a ojedinělou ulcerací. Po odstranění byla léze diagnostikována jako atypický fibroxanthom – zcela ojedinělý tumor představující kožní variantu maligního fibrózního histiocytomu. Článek v krátkosti popisuje diagnostiku, terapii a prognózu onemocnění.

### Klíčová slova

kůže – světbuněčný atypický fibroxanthom – imunohistochemie – diferenciální diagnóza – nádory hlavy a krku – novotvary – prognóza

### Case report

An 83-year-old previously healthy female patient, agriculturist, presents with a history of an erythematous violaceous infiltrative, ulcerated onion-like mass with hyperkeratotic surface on the left ear lobe (Fig. 1–4). As the patient had a long history of chronic sun exposure and lived in one of the highest melanoma rates areas in the world [1], it was initially thought to be a metastatic melanoma by the surgeon.

The lesion was then completely excised and sent for pathological analysis, with the result coming as a malignant ulcerated fusocellular neoplasia with negative margins. Further, an immuno-

histochemical analysis was performed and was negative for all markers, including protein S 100, all the cytokeratins, Melan A/MART 1, protein p53, CD 23 and desmin, compatible with an atypical fibroxanthoma, a very rare form of skin cancer. The atypical fibroxanthoma is a superficial variant of pleomorphic malignant fibrous histiocytoma [2]. Our case has followed the classic presentation as a head and neck tumor in an elderly individual, and to the best of our knowledge just one case in medical literature has been reported in a different topography-on the dorsum of the hand, described almost three decades ago [3].

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Autoři deklarují, že v souvislosti s předmětem studie nemají žádné komerční zájmy.

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In a retrospective analysis of Mohs surgery, only 0.2% of the malignant findings were fibroxanthomas out of 42,279 patients [4].

### Conclusion

Atypical fibroxanthoma normally appears as a swiftly growing nodular or nodulo-ulcerative lesion. It may be composed predominantly of either pleomorphic, spindle, epithelioid cells, or a mixture of these cells. The differential diagnosis includes pleomorphic dermal sarcoma, squamous cell carcinoma, malignant melanoma and leiomyosarcoma [5].

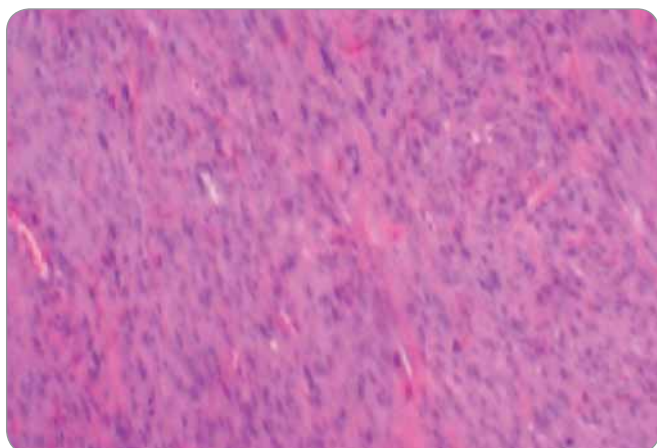
It occurs mostly in older adults and in sun exposed areas [6], with male pre-



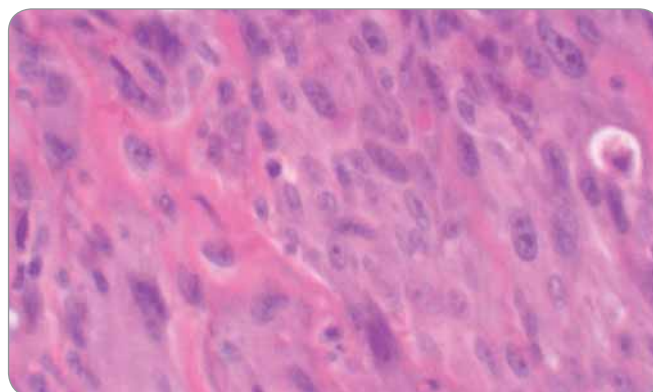
**Fig 1.** A solitary erythematous nodule with hyperkeratotic and ulcerated surface on the left ear lobe (front view).



**Fig. 2.** A solitary erythematous nodule with prominent vessels, hyperkeratotic and ulcerated surface on the left ear lobe (side view).



**Fig. 3.** Fusocellular proliferation in multi-directional bundles (100x).



**Fig. 4.** Proliferation of elongated cells with poorly defined limits, dense eosinophilic cytoplasm, vesiculous or dense nuclei, irregular nuclear membrane and small to moderate diameter variation (400x).

dominance [7] and is a diagnosis of exclusion. The treatment is surgical and the preferred method is the aforementioned Mohs surgery [8]. Even though fibroxanthoma may be locally aggressive [9], the prognosis is usually very good if margins are adequate and these tumors rarely metastasise [7,10].

**References**

1. Naser N. Cutaneous melanoma: a 30-year-long epidemiological study conducted in a city in southern Brazil, from 1980–2009. *An Bras Dermatol* 2011; 86(5): 932–941.

2. Bedir R, Agirbas S, Sehitoglu I et al. Clear cell atypical fibroxanthoma: a rare variant of atypical fibroxanthoma and review of the literature. *J Clin Diagn Res* 2014; 8(6): FD09–FD11. doi: 10.7860/JCDR/2014/8798.4466.  
 3. Patterson JW, Konerding H, Kramer WM. „Clear cell” atypical fibroxanthoma. *J Dermatol Surg Oncol* 1987; 13(10): 1109–1114.  
 4. Anderson HL, Joseph AK. A pilot feasibility study of a rare skin tumor database. *Dermatol Surg* 2007; 33(6): 693–696.  
 5. Hussein MR. Atypical fibroxanthoma: new insights. *Expert Rev Anticancer Ther* 2014; 14(9): 1075–1088.  
 6. Hammerschmidt M, Azevedo LM, Ruaro A et al. Case for diagnosis. Atypical fibroxanthoma. *An Bras Dermatol* 2012; 87(4): 647–648.

7. Wollina U, Schonlebe J, Ziemer M et al. Atypical fibroxanthoma: a series of 56 tumors and an unexplained uneven distribution of cases in southeast Germany. *Head Neck*. In press 2014. doi: 10.1002/hed.23673.  
 8. McCoppin HH, Christiansen D, Stasko T et al. Clinical spectrum of atypical fibroxanthoma and undifferentiated pleomorphic sarcoma in solid organ transplant recipients: a collective experience. *Dermatol Surg* 2012; 38(2): 230–239. doi: 10.1111/j.1524-4725.2011.02180.x  
 9. Inskip M, Magee J, Weedon D et al. Atypical fibroxanthoma of the cheek-case report with dermatoscopy and dermatopathology. *Dermatol Pract Concept* 2014; 4(2): 77–80. doi: 10.5826/dpc.0402a16.  
 10. Cooper JZ, Newman SR, Scott GA et al. Metastasizing atypical fibroxanthoma (cutaneous malignant histiocytoma): report of five cases. *Dermatol Surg* 2005; 31(2): 221–225.