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Tarsal Fibroma

Fibroma de Tarso

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Abstract

The objective of the authors is to report the case of a tarsal fibroma, a tumoration on the superotemporal side of the right orbit with slow growth over the years. Analysis of the anatomical specimen obtained from the tarsal region showed a well-defined lesion, consisting of deposition of dense collagen fibers, with fusiform cells without atypia, with coating conjunctival cells, featuring fibroma of the tarsal plate.

Keywords: *Fibroma; Orbital diseases; Eyelids; Eyelid neoplasms; Case reports*

Resumo

O objetivo dos autores é relatar um caso de fibroma de tarso, uma tumoração na reborda orbitária súpero-temporal direita com crescimento lento ao longo de anos. A análise da peça obtida da região tarsal mostrou uma lesão bem delimitada, constituída por deposição de fibras colágenas densas, com proliferação de células fusiformes, sem atipias, com revestimento de células conjuntivais, caracterizando fibroma da placa tarsal.

Descritores: Fibroma; Doenças orbitárias; Pálpebras; Neoplasias palpebrais; Relatos de casos

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Introduction

Despite the ubiquity of fibroblasts and its role in inflammatory response, true neoplasms originated from fibroblasts like fibroma and fibrosarcoma are rare as primary ocular neoplasia.[1] In the few cases reported, eye fibromas are described mostly in the orbit, secondary to the expansion of alveolar and paranasal sinuses tumors.[2-5] They are also described in the periorbit, tendons, sclera and eyelids.[6-9] Reports of fibromas originated in tarsus are very rare , having been found only one case in the extensive literature review.[10]

The histopathological diagnosis of fibroma is made by the presence of well-differentiated fibroblasts, immersed in dense collagen content, without presence of atypia or mitosis.[1]

Case report

J.F.U., female, 44 years old, attended at the ophthalmology service of Hospital Governador Celso Ramos - Florianópolis, complaining of slow-growth tumor in the upper-right temporal orbital reborda. The patient related to the onset of the condition to prior blunt trauma, a fall from height, which occurred at two years of age. At the time, the injury was stable, with no recent growth and without ophthalmic symptoms. The eye examination showed bone tumor consistency, very adhered to the upper-right temporal orbital reborda and measuring about 1cm in height by 2cm in width. It also presented at the ipsilateral upper tarsus adjacent to the injury other hardened, plate-shaped injury measuring about 2cm in width and 1cm in height that almost replaced the tarsal plate, keeping only the conjunctiva. The patient did not complain about this injury. (Figure 1)

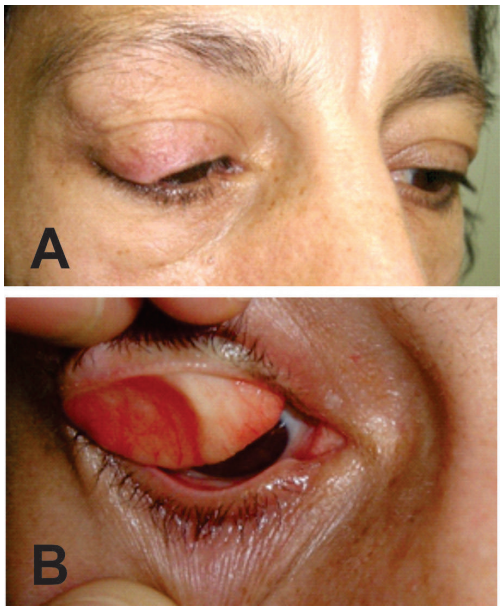

Figure1: A: aspect of the orbit tumor and tarsus to ectoscopy. **B:** aspect of the tarsus tumor at eversion of the upper eyelid.

A tomografia computadorizada de órbita revelou lesão hipeComputed tomography of the orbit revealed hyperdense lesion with density similar to bone, sharp contours, continuing to the frontal bone, located in the upper-right temporal orbital reborda; and in the region of the right upper eyelid, medium-density, well-outlined lesion. (Figure 2)

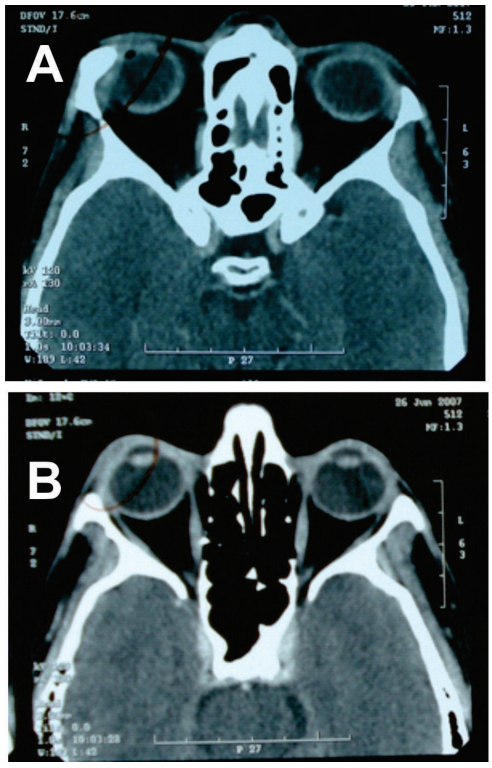

Figure 2: Left: Orbit tomography showing lesion in the upper-right temporal orbital reborda. **Right:** Tomographic section showing lesion in the pre-bulbar region, in the eyelid region.

The patient underwent excision of tumors, with removal of orbit tumor fragments and complete removal of the lesion of upper eyelid. (Figure 3) Eyelid repair was made by direct approach..

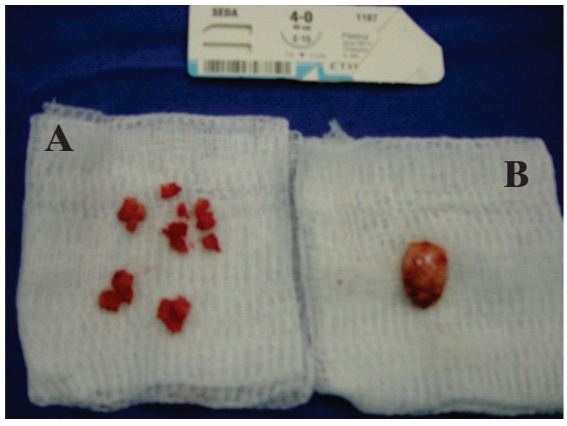

Figure 3: Macroscopic aspect of surgical parts. **Left:** bone fragments of orbital tumor. **Right:** excision tumor of upper right eyelid.

Histological analysis revealed that the fragments obtained from orbital reborda were of bone material. The piece obtained from the tarsal region was a well-defined lesion, formed by deposition of dense collagen fibers, with proliferation of fusiform

cells without atypia, with coating of conjunctival cells, featuring fibroma of the tarsal plate. (Figure 4)

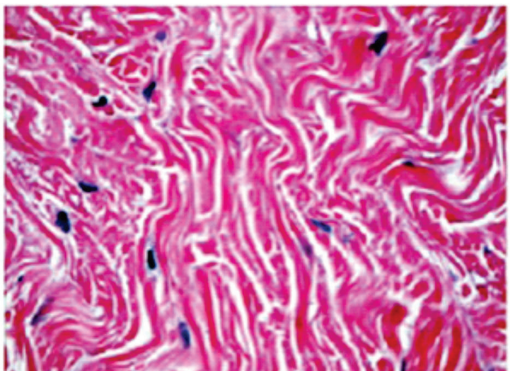

Figure 4: Slide of the histopathological exam. Histological aspect of tarsal lesion composed of dense, hyaline collagen fibers, with discreet proliferation of fusiform cells with no atypia. (HE)

The main differential diagnosis in this case is the benign sclerotic fibrohistiocytoma. However, the absence of morphologically indicative areas on the periphery of the lesion disfavors the diagnostic possibility.

The excision of the lesions led to aesthetic improvement of the eyelid (Figure 5), with no lesion recurrence been observed during the 8 months of postoperative follow-up.

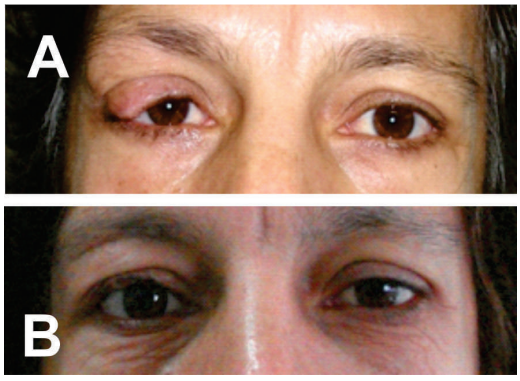

Figure 5: Left: preoperative - bulging orbital reborda and mechanical ptosis caused by fibroma. Right: postoperative - appearance 5 months after removal of tumors and reconstruction of upper eyelid.

Discussion

Very slow growth and not deformation of faneros at the injury site indicated to be a benign eyelid lesion.

Because the lids have various types of tissue in their composition, the possibilities for the origin of tumors is quite wide, from tumors of the skin, tarsus and the annexes, to glands, as well as the conjunctival mucosa.

The tarsal lesion the patient presented was of consistency similar to the tarsus. The ectoscopy already distinguished this lesion from a possible Meibomian carcinoma, another type of lesion that could affect the tarsal glands that besides the appearance, also have another kind of behavior, with destruction of the cilia. The sclerotic benign fibrohistiocytoma would also be a possible diagnosis, but the most commonly reported location is orbital, and histopathology may identify fusiform and fibroblast cells with histiocytic aspect.[11]

Characteristically, fibroma is a benign lesion, and its surgical excision is curative. At the moment, the patient is in the 8th postoperative month, without tumor recurrence.

The insidious growth of the lesion presented in the case is typical of fibromas reported in the ocular annexes. Particularly in this case the fibroma was restricted to tarsus, acquired the plate format and virtually replaced the tarsus, in contrast to the polypoid lesions described in the literature.[10] Histopathologically, the lesion is similar to that described by Clinch, who reported a hardened lesion, with indolent growth and formed by thick collagen and fibroblasts. [10]

It is interesting to mention the association to bone tumor of the orbital reborda of also slow growth and concomitant with tarsal fibroma, as well as a clear clinical correlation with prior trauma, but these findings are not described in the comprehensive review of the literature.

In conclusion, the authors draw attention to the fact that, although rare, the primary fibroma of tarsus must be considered among differentials of solid tarsus lesions.

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