Short communication

Lacrimal sac lymphoproliferative lesion: Case report

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ABSTRACT

Case report: The case is presented of a 51 year-old woman with a firm mass at the medial canthus of the right eye of five years onset. A low-grade lymphoproliferative lesion (reactive lymphoid hyperplasia) was diagnosed from an excisional biopsy.

Discussion: Lacrimal sac tumors are rare, with a peak incidence in the fifth decade of life. The initial clinical features are epiphora and medial canthus swelling. As it mimics nasolacrimal duct obstruction, up to 40% of these tumors are misdiagnosed until undergoing surgery.

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Lesión linfoproliferativa del saco lagrimal: caso clínico

RESUMEN

Caso clínico: Se presenta el caso de una mujer de 51 años con tumoración firme a nivel del canto interno del ojo derecho de 5 años de evolución. La biopsia excisional mediante dacrito-cistectomía estableció el diagnóstico de lesión linfoproliferativa de bajo grado (hiperplasia linfoido reactiva).

Discusión: Los tumores del saco lagrimal son muy raros, con un pico de incidencia en la quinta década de la vida. La clínica en fases iniciales es parecida a la obstrucción lagrimal por otras causas, de ahí que hasta un 40% de estos tumores no se sospechen y sean diagnosticados durante la realización de una dacriotomía.

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Introduction

Lacrimal sac tumors are extremely rare. They have no preference for sex and, although they can appear at any age, peak incidence is during the fifth decade of life.1 The typical clinic of this type of lesions comprises increased volume in the medial canthal region at the expense of a noninflammatory tumor resistance to pressure and without regurgitation through the canaliculi (negative expression). Occasionally, these tumors can present bloody tears or epistaxis, above all in the case of melanoma. The typical clinical progression of this type of lesions was described by Jones in 1956: epiphora, dacryocystitis, tumoration and bleeding.2 However, up to 40% of these tumors are not suspected or diagnosed while performing dacryocystorhinostomy, as the most frequent clinical presentation is not specific, similar to acute or chronic dacryocystitis.3

The treatment for said lesions depends on their nature and size. In some cases, simple resection with suffice although in most cases it is necessary to perform more radical procedures such as dacryocystectomy including the canaliculi and the nasolacrimal duct.4

The case of a female, 51, with lacrimal tumor with onset beginning 5 years ago.

Fig. 1 – Clinic photograph of patient upon admittance, showing restricted palpebral opening due to tumor in the right internal canthus.

Fig. 2 – Orbits tomography. (A) Axial sections, showing a lesion with soft part-like density similar occupying the right lacrimal sac fossa together with internal micro-califications. Bone shaping compatible with long-term evolution; (B) coronal section, evidencing that the lesion is occupying the lacrimal sac and the nasolacrimal duct.
Clinic case

Female 51, who visited due to tumor in the right internal canthus with onset approximately 5 years ago. She referred exhibiting epiphora and acute dacryocystitis the 2 first years. No relevant pathological or ophthalmological history.

Upon examination, best corrected visual acuity of 0.8 in RE and 0.9 in LE. Anterior and posterior segment within normal range and intraocular pressure of 14 mmHg in both eyes. Diminished RE palpebral opening. In addition, increased volume at the level of the right internal canthus due to a firm and well defined tumor which displaced the medial canthal tendon upwards (Fig. 1). No regional ganglion felt with palpation.

Due to suspected lacrimal bag neoplasia, tomography was requested (Fig. 2A and B) which showed a lesion with a density similar to that of the cerebral parenchyma in the right lacrimal sac fossa and nasolacrimal duct with some microcalcifications inside.

Excisional biopsy was performed with enlarged dacrocystectomy (common canaliculus, sac and nasolacrimal duct) with the histopathological diagnostic of low degree lymphoproliferative process (reactive lymphoid hyperplasia) (Fig. 3).

The patient exhibited good evolution without local relapse or expression of similar lesions in other locations after a follow-up of 15 months (Fig. 4).

Discussion

Lymphoid tumors account for between 10% and 15% of all tumors in the ocular region. They may originate in the orbit/periorbit (primary lymphoma) or due to systemic dissemination from another location (secondary lymphoma).

Clinic will mainly depend on the location of the lesion. The patients may exhibit asymptomatic lesions, ptosis or palpebral edema, proptosis and even epiphora if the lacrimal sac is involved. Secondary lacrimal sac tumors are very rare and the majority of published cases report secondary diffuse large B-cell lymphoma (DLBCL). Previous articles have proposed that DLBCL may have its origin in low degree lymphoid lesions such as secondary MALT lymphoma due to the accumulation of additional genetic aberrations. The risk of new mutations increases with persistent antigenic stimuli as in the case of chronic lacrimal sac infections/inflammations and delayed diagnostic of lesions in early stages.

In the present case the patient exhibited a low degree lesion of the lymphoid hyperplasia type without systemic extension. Upon admission she did not exhibit epiphora but referred having it in the early stages as well as acute dacryocystitis episodes. For this reason she was scheduled for external dacryocystorhinostomy which was not performed due to personal reasons. However, even though the diagnostic was not defined until later, the lesion did not express sufficient mutations to become a high degree lesion, as would be expected according to the descriptions found in the literature.

Fig. 3 – Photomicrographies of the excisional biopsy histopathological study with H&E stain. Inflammatory infiltrate rich in lymphocytes with formation of (*) lymphoid follicles, and (§) lymphoid follicle with germinal center (10×). Additional enlargement (40×) shows lymphocytes in various maturity stages, eosinophiles (arrows) and some plasmatic cells.

Fig. 4 – Clinical photograph of the patient in the late post-surgery period, showing the resolution of the condition encountered at admission, evidencing the scar produced by the V-shaped medial approach.
Conflict of interest

No conflict of interest has been declared by the authors.

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