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Case Report

Diagnosis of a painless eyelid swelling: Pleomorphic adenoma in the palpebral lobe of the lacrymal gland

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Abstract: Lacrymal gland tumors are rare; they can be misdiagnosed as some palpebral conditions like chalazion. We report a case of pleomorphic adenoma involving the palbebral lobe of the lacrimal gland.
Keywords: Lacrymal gland tumors, chalazion.

INTRODUCTION

Lacrimal gland is a bilobed eccrine secretory gland in the shape of an almond located in the supero lateral extraconal fat in the lacrimal fossa [1, 2]. It is an exocrine gland and consists in an orbital lobe and in a palpebral lobe separated by the aponeurosis of the levator palpebrale superioris muscle. There is also the accessory lacrimal gland located in the lamina propria of conjunctiva. Lacrimal gland lesions represent 5 to 25 % of orbital tumours. The lacrimal gland tumors which occur in order of frequency are pleomorphic adenoma, adenoid cystic carcinoma and carcinoma ex pleomorphic adenoma [3]. Pleormorphic adenoma is the commonest benign epithelial lacrimal gland tumor. The incidence of pleomorphic adenoma in the literature has been reported as 9-27% of lacrimal gland tumor [4, 5]. Pleomorphic adenomas occur in the fourth or fifth decade of life. They are essentially benign but can undergo malignant change. This tumor grows very slowly; cases have been reported with a decade long history.1 it has a tendency to recur if the tumor is not removed with its capsule. Over 50% recur after about 10 years, following surgery [6]. The risk factors of pleomorphic adenoma are still unknown. It always develops by the deep orbital lobe, rarely from the palpebral lobe [7]. The case presented here developed from the palpebral lobe.

CASE REPORT

A 50-year-old man presented with a mass in the left superior lateral right eyelid. The mass was painless and developed slowly in a time slot of 5 years. The rest of the history was unremarkable. Computed tomography (CT) scan revealed a cystic soft mass of the upper anterior quadrant of the left orbit. The mass was removed under local anesthesia through a skin incision following the skin crease of the upper eyelid. This incision was completed with a lateral osteotomy of the orbit; then we removed in toto the mass without damaging the capsule. Histopathologic examination showed proliferation of epithelial and myoepithelial cells arranged in ductules and nests in a myxoid stroma. Thus the diagnosis was benign pleomorphic adenoma of the lacrymal gland.

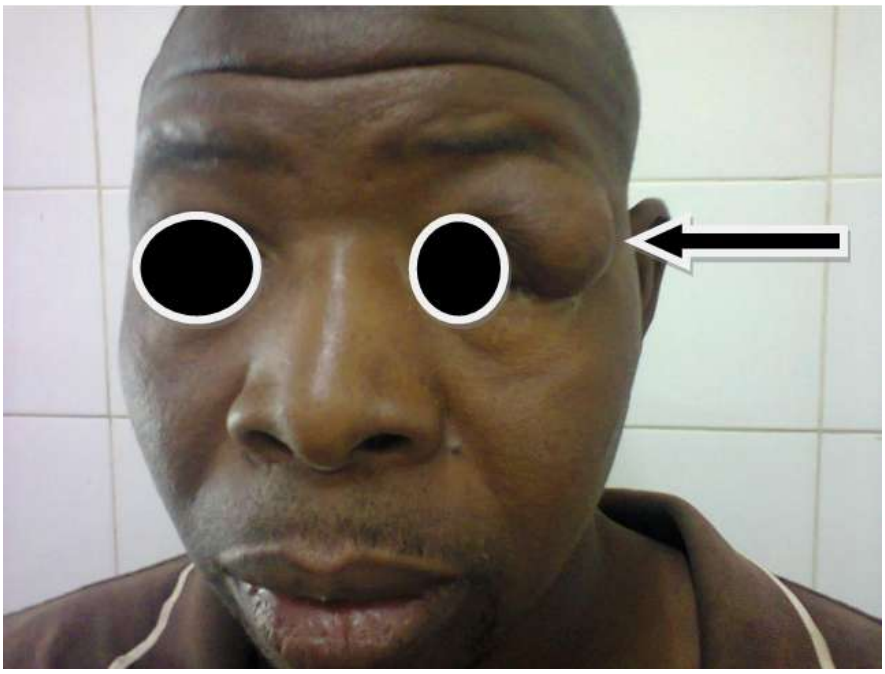

Fig.1: Photograph of the patient showing the swelling of the left upper eyelid

Fig.2: CT-Scan showing oval, well circumscribed mass of the upper anterior quadrant of the left orbit

DISCUSSION

The lacrimal glands are unique structures possessing both epithelial and lymphoid tissue and may fall prey to an unusually wide range of pathologies including various neoplastic, infective, infiltrative, inflammatory and structural processes ranging from benign adenomas, adenocarcinomas, histiocytosis, benign dacrocysts and lymphomas to sarcoidosis [8].

When painless swelling in the upper lid without inflammatory symptoms and signs presents for more than 12 months, benign mixed tumor (pleomorphic adenoma) should be suspected. On CT scans pleomorphic adenomas usually show round to oval, well circumscribed mass and enlargement of the lacrymal fossa without invasion of overlying bone. Such a tumor should be excised intact through a lateral orbitotomy [9]. The CT scan of the current patient showed a well defined oval mass. The commonest benign neoplasm of the lacrymal gland is the pleomorphic adenoma. The term "benign mixed tumor" came from an earlier hypothesis, which remains popular, that these tumors derive from a mixture of epithelial and mesodermal elements. In fact, these tumors are epithelial in origin. Ductal epithelium develops into the epithelial component, and cells in the

stroma and myoepithelium develop into cells in the stroma. Pleomorphic adenoma of lacrimal gland usually presents in middle age. These tumours originate from lacrimal gland, accessory lacrimal sac, plica semilunarie and lacrimal caruncle. Clinically it will present with slow progressive, painless mass [10]. Our patient was 50 years old with a lateral and upper lid mass which grew slowly. Pleomorphic adenomas of the lacrimal glands are epithelial tumors, usually benign but can become malignant. When the mass is found to be adherent to the roof of the orbit, it is suspected to be malignant [6]. Lacrimal gland pleomorphic adenomas (LGPAs) should be excised completely with a margin of normal tissue as incomplete resection may lead to recurrence even decades later. In select cases, a preoperative biopsy will help the clinician choose the correct management strategy [11].

CONCLUSION

Pleomorphic adenomas of the palpebral lobe of the lacrymal gland are rare and may be misdiagnosed as some eyelid lesions such as chalazion. CT scan is very contributive to the diagnosis and only histopathologic examination can confirm it. The tumor must be removed without damaging the capsule in order to minimize the recurrences.

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