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PHOTO ESSAY

Epibulbar osseous choristoma: a photo essay case report

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Abstract
Purpose To present the pre-, per- and postoperative features of epibulbar osseous choristoma.
Methods Case description including intraoperative imaging and histopathology.
Results A 32-year-old male patient presented with a lesion on his right eye, suggestive of an epibulbar dermolipoma. Excision of bony lesion was performed and revealed epibulbar osseous choristoma.
Conclusions Epibulbar osseous choristoma is a rare and benign condition which can present with features similar to dermolipoma.

Keywords Epibulbar osseous choristoma · Episcleral osteoma · Choristoma · Epibulbar lesion

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Introduction: precis

Epibulbar osseous choristoma or episcleral osteoma is an extremely rare condition involving the conjunctiva and the episclera of the eye [1]. This choristoma typically presents as a superotemporally located epibulbar isolated bony nodule. Our case is illustrated with pre-, per- and postoperative images of the lesion, including ultrasonography and pathology images.

Case description

The patient is a 32-year-old male without any past medical history, who presented with an epibulbar lesion of his right eye, which had been first noticed 10 years earlier. The superotemporal quadrant of the right eye showed a superficial, yellow, gelatinous sessile epibulbar lesion fixed to the underlying tissues, extending in the direction of the lacrimal gland (Fig. 1a). It was complicated by a symblepharon-like formation at the level of the temporal upper eyelid. The rest of the examination was unremarkable. Ultrasonography was performed, showing a hyperechogenic lesion with post-lesional shadowing, but further differentiation could not be made (Fig. 1b). The lesion was suggestive of a congenital dermolipoma or complex choristoma. The differential diagnosis included lacrimal gland tissue (prolapse or ectopic), foreign body granulation, or other

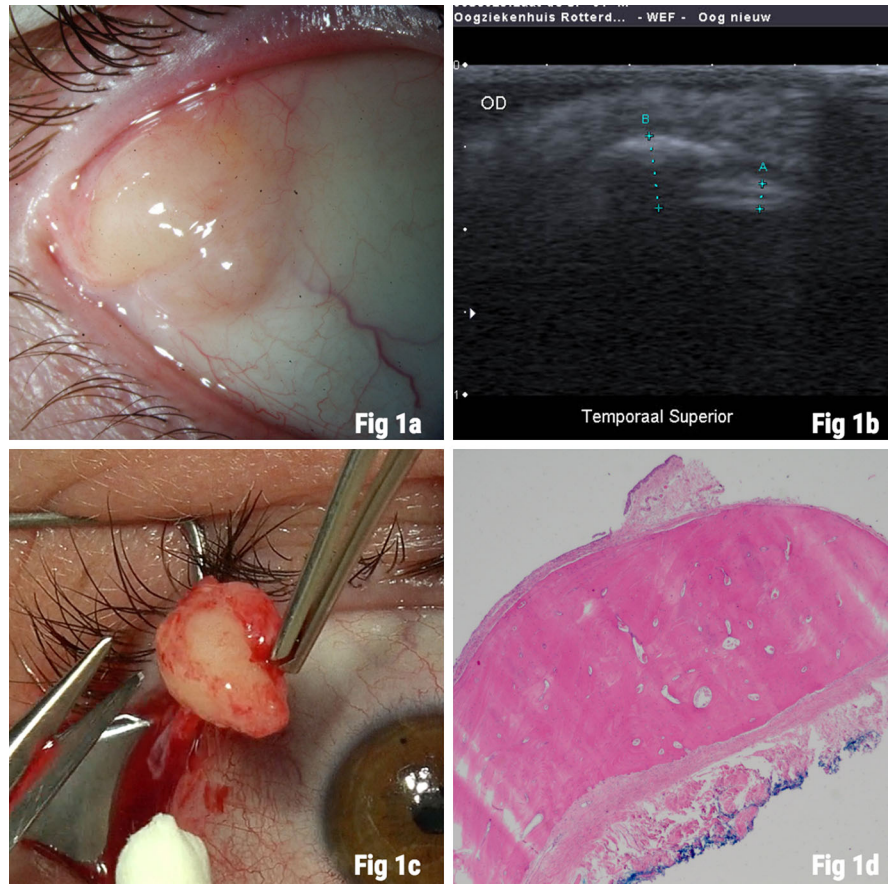

Fig. 1 **a** Preoperative photograph of the epibulbar lesion, in the superotemporal quadrant of the right eye. **b** Preoperative ultrasonography of the lesion, showing hyperechogenic epibulbar lesion, but without further differentiation. **c** Intraoperative image of the resection of the epibulbar osseous choristoma. **d** Pathology specimen of the resected material, with features of an episcleral osseous choristoma: cortical lamellar osseous tissue with Haversian canals surrounded by a thin connective tissue capsule and overlying normal conjunctiva and episcleral collagen beneath. Hematoxylin and eosin, ×25

inflammatory processes (dacryoadenitis, sarcoidosis). A transconjunctival debulking procedure was planned and performed under local anesthesia (Fig. 1c). The conjunctival wound was primarily sutured. Histological examination of the excised specimen showed an epibulbar osseous choristoma consisting of cortical lamellar bone with Haversian canals surrounded by a thin layer of connective tissue (Fig. 1d).

At 18-month follow-up consultation, there was no evidence of a tumor remnant nor of dry eye.

Discussion

Epibulbar osseous choristoma is a very rare, benign condition. No malignant transformation has ever been reported [2]. It can cause discomfort, pain and even irregular astigmatism on the cornea if the tumor is sizeable. Epibulbar osseous choristoma is a mass of histologically normal cortical bone in an ectopic, abnormal location [3]. It has been proposed by some to represent an atavistic remnant of scleral ossicles that can be seen in lower vertebrates [4, 5]. However, since episcleral osseous choristoma is located in the episclera or conjunctiva and not in the sclera, combined with its rarity and invariable location in the superotemporal region near the zygomaticofrontal suture, it most likely represents an embryonal developmental anomaly that leads to an accessory ossicle as a result of a closure defect [6].

Compliance with ethical standards

Conflict of interest All authors declare that they have no conflict of interest.

Patient consent The patient has consented to the submission of the case report for submission to the journal.

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