



Case Report

Conjunctival choristoma in an adolescent

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ABSTRACT

Conjunctival choristoma presents as a painless epibulbar mass comprising epidermal and dermal tissues. Histopathological evidence helps to establish the diagnosis. The tumor manifests in childhood, nonetheless, it may also be seen in adolescents.

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1. Introduction

Choristomas are tumors composed of benign tissue elements that are not normally found in that anatomic location. Choristomas, though rare, are the commonest epibulbar tumors seen in infants and young children.¹ The embryonic sequestration of the conjunctiva leads to conjunctival choristomas. They appear as a well-defined soft tissue mass in the bulbar or forniceal conjunctiva that are lined by conjunctival epithelium and contain adenexal structures. They present usually as a unilateral unifocal lesion. We report a case of conjunctival choristoma in an adolescent girl.

2. Case Report

A 20-year-old female reported as a painless, slowly growing cystic mass in her right eye of six months duration. On examination her visual acuity was 6/6 in both eyes. An almond-shaped cystic swelling was seen over the outer part of lower bulbar conjunctiva extending in the lower fornix (Figure 1). The tumor was mobile, non-tender and its

posterior margin merged with orbital contents. On slit lamp examination fine hair shafts were observed / over the cystic mass projecting from the surface. Extraocular movements were full and anterior segment and systemic examinations were unremarkable.



Fig. 1: Cystic conjunctival lesion in the inferotemporal part of right eye

CT scan showed a well-defined lesion in the inferotemporal extraconal compartment of right orbit measuring 1.4 x 0.6 cm. The lesion was indenting on the belly of inferior rectus muscle though not involving the muscle (Figure 2).

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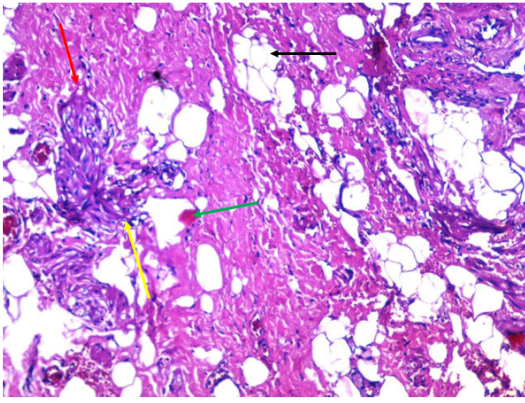


Fig. 4: Photomicrograph (10x) showing abundant fibrous tissue with few inflammatory cells (red arrow), fascicles of smooth muscle fibers (yellow arrow), occasional blood vessels (black arrow) and fat cells (green arrow) on hematoxylin and eosin staining (x40)

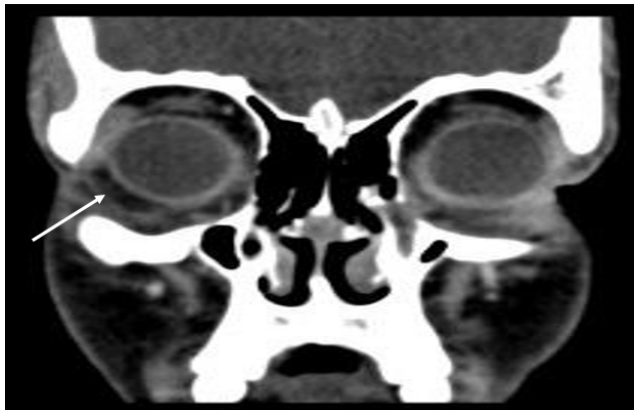


Fig. 2: CT non contrast, coronal view at level of orbit showing well defined, hypo dense lesion (white arrow) in the extraconal compartment of right orbit

The tumor mass was excised under local anesthesia and sent for histopathological examination. A cyst lined with non-keratinized stratified squamous cells containing hair follicles (\$), occasional blood vessels, fat cells, smooth muscle fibers and a few inflammatory cells (\$) was seen on histopathology confirming the diagnosis of conjunctival choristoma.

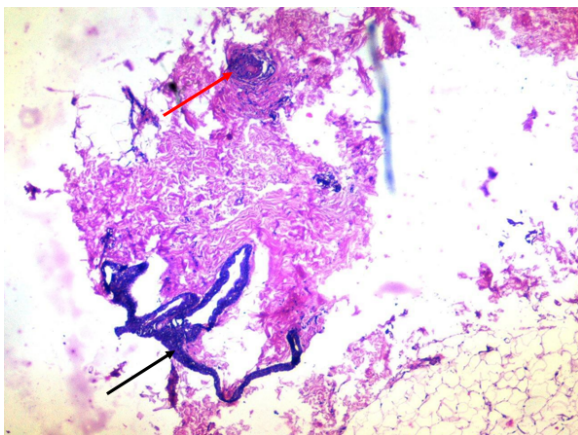


Fig. 3: Photomicrograph (10x) showing hair follicle (red arrow) and cyst lined by non-keratinized stratified squamous epithelium (black arrow)

3. Discussion

Choristoma is defined as the presence of normal tissue in an abnormal location.^{1,2} They are derived from germ cells that are abnormally captured within developing tissues during the embryogenesis.¹ The epibulbar choristomas occur commonly in children.³ These tumors can enlarge to a variable extent but rarely undergo malignant transformation. Occasionally, they may be associated with ocular coloboma, Goldenhar syndrome or organoid nevus syndrome.⁴

In the present case, a healthy 20-year-old girl presented with slowly growing lower bulbar conjunctival mass in right eye. The histopathology of excised tissue was consistent with conjunctival choristoma with predominant mesodermal elements.

Conjunctival choristomas are lined by non-keratinized conjunctival epithelium and dermal adnexa in the form of hair follicle, fat, fibrous tissue, cartilage, bone, smooth muscle and neural tissue.⁵ The choristomas can be simple, consisting of tissues derived from one germ cell layer, or complex, containing variety of tissues from more than one germ layer.⁶ Dermoids contain fibrous tissue and skin appendages whereas fat is the chief component in dermolipomas. Epibulbar choristomas must also be differentiated from hamartoma, which is a proliferation of normal tissue at its normal location, and teratoma, a tumor arising from all three germ cell layers.¹ In conclusion, every ophthalmologist should bear in mind the possibility of conjunctival choristoma in adolescent patients presenting with benign epibulbar mass lesion.

4. Source of Funding

None.

5. Conflict of Interest

The authors declare no conflict of interest.

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