

Epipalpebral conjunctival chondroid choristoma: Interesting developmental anomaly presenting in an adult

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Ocular choristomas are uncommon lesions chiefly presenting in children. Choristomas may contain dermal and epidermal components, muscle, cartilage, bone, etc. They are usually seen in epibulbar conjunctiva, but epipalpebral location is uncommon. We present a case of epipalpebral chondroid choristoma presenting in an adult patient.

Key words: Cartilaginous choristoma, epipalpebral, eye

Choristomas in palpebral conjunctiva are rare. These may present as a sessile or pedunculated protruding mass from palpebral conjunctiva. Choristomatous elements may be composed of adipose tissue, adnexal structures, chondroid, or osseous tissue. Osseous elements have been reported in epibulbar location. Chondroid elements in palpebral choristoma are extremely rare. We present this case for its rarity.

Case Report

A 34-year-old male presented to the ophthalmic clinic with a gradually increasing left palpebral conjunctival swelling of 4-year duration accompanied by irritation and redness of the eye. There was no history of previous trauma. On examination, a nodular pedunculated polypoidal mass was seen over the left eyelid on the palpebral aspect which was clinically diagnosed as chalazion [Fig. 1]. The mass was excised and sent for histopathology. On examination, the tissue was well circumscribed, gray white, firm and measured 0.8 cm × 0.4 cm × 0.3 cm. Histopathological examination revealed well-demarcated area of mature hyaline cartilage comprising mature chondrocytes within lacunae within a matrix of hyalinized ground substance. The overlying conjunctival lining was normal. No other tissues such as dermal adnexal structures, osseous, or lacrimal were identified within the lesion. A histological diagnosis of chondroid choristoma of the palpebral conjunctiva was made [Fig. 2].

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Discussion

Choristoma is derived from a Greek word choristos meaning "separated" and is defined as the presence of normal tissue in an abnormal location.^[1,2] It differs from hamartoma which is an excessive proliferation of normal tissue at the normal site and from teratoma which is a neoplasm comprising tissues from all three germ layers.^[1] Choristomas are commonly seen in the head and neck region.^[1,2] For example, lymph node containing salivary tissue, thyroid follicles, squamous or mullerian epithelium and nevus cell rests, salivary gland choristomas in the middle ear, neuromuscular and rhabdomyomatous choristomas in central nervous system, cartilaginous choristoma of uterus, cartilaginous choristoma of tonsil, phakomatous choristoma of eye, lingual osseous and cartilaginous choristoma, and others.^[1,2]

Choristomas make up about 3% of all conjunctival and corneal tumors. Although choristomas can be seen in any age, these are common in children and are the most common epibulbar and orbital tumors among them.^[1] Elsas and Green reported 33% cases of choristoma in their case series of 302 cases of periorbital tumors in children.^[3]

Ocular choristomas are most frequently epibulbar and located in the superotemporal quadrant near the superior and lateral rectus muscles. Epipalpebral location is rare. Ocular choristomas contain a variable proportion of epithelium, dermal adnexa such as pilosebaceous or eccrine glands, adipose tissue, fibrous tissue, cartilage, bone, smooth muscle, and neural tissue. Depending on the predominant component, they have been variably named as dermoids, dermolipomas (lipodermoids), and complex choristomas.^[4]

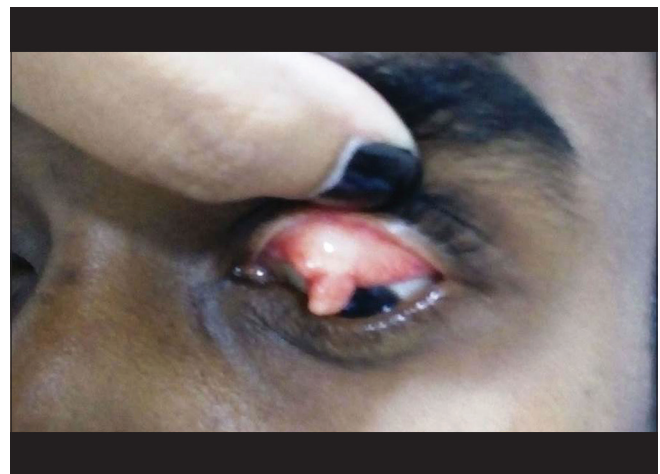


Figure 1: Clinical photograph showing exophytic growth in upper palpebral conjunctiva

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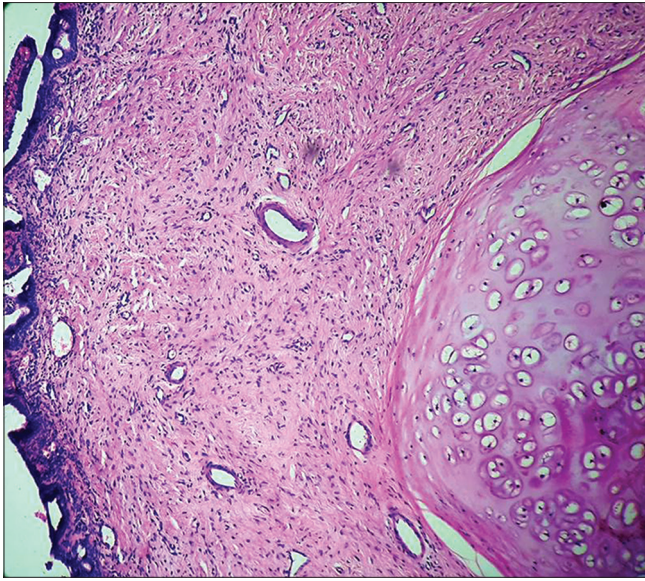


Figure 2: Mature cartilage with overlying conjunctiva

Dermoids contain a significant proportion of epidermal and dermal elements, dermolipomas contain predominantly adipose tissue and dense collagen tissue, and complex choristomas contain a significant proportion of cartilage, bone, smooth muscle, lacrimal tissue, etc.^[5] Orbital osseous choristoma has been reported, but those showing purely a cartilaginous component are rare.^[5-7] Microscopy of these revealed nodular islands of mature chondrocytes in a myxoid matrix.^[8] Usual clinical presentations are irritation, redness, and visual disturbance.^[9,10] It may present as a single, subcentimetric flat lesion, or a large mass filling most of the epibulbar regions.

Choristomas are sometimes familial and may also occur in association with coloboma, Goldenhar syndrome, or epidermal nevus syndromes; those associated with the latter are often bilateral and extensive.^[1] The differential diagnosis includes chalazion, epithelial inclusion cysts, dermoids, dermolipomas, pyogenic granuloma, and papilloma.

Our case showed a well-demarcated, subconjunctival mass composed of mature hyaline cartilage with scattered mature chondrocytes of varying sizes interspersed between amorphous matrices of hyalinized ground substance.

Choristomas have to be differentiated from chalazion which shows lipogranuloma composed of central fat with surrounding lipid macrophages and giant cells. Ocular

dermoids show fibrous tissue and skin appendages. Dermolipomas have abundant mature adipose tissue with minimal skin appendages. Epithelial inclusion cysts are lined by stratified squamous epithelium and contain keratin material.

Very few cases of cartilaginous choristoma are reported in epibulbar region,^[4,5] whereas in our case the location was in epipalpebral conjunctiva with cartilage as choristomatous element.

Conclusion

Epipalpebral cartilaginous choristoma is a histological curiosity. Although this may clinically mimic various benign tumors in children and occasionally malignant neoplasm in adults, it has a very characteristic histology and this should be kept in mind to make a correct diagnosis. This should also prompt a careful search for other associated sequelae of associated syndromes.

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Conflicts of interest

There are no conflicts of interest.

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