Primary epitarsus: a case report

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SUMMARY Epitarsus is a rare congenital anomaly or may be acquired following severe conjunctivitis, usually of a cicatrising nature. The terms primary and secondary epitarsus are suggested to denote the two different aetiological varieties. On its clinical and histopathological features the present case conforms to the interfornix variety of primary epitarsus.

Epitarsus is a peculiar condition which typically occurs as an apron-like fold of conjunctiva attached to the inner surface of the upper lid but occasionally as a bridge of tissue under which a probe may be passed.¹ It is known to occur as an end result of neglected conjunctivitis, particularly purulent, pseudomembranous, and trachomatous,^{2,3} and also as a congenital anomaly without signs of inflammation.¹

Epitarsus occurring as a congenital anomaly is rare, and still rarer is the interfornix variety found in the present case, which therefore seems worth reporting.

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Fig. 1 Showing the membrane extending from upper fornix to lower fornix (interfornix epitarsus).

Case report

This 3-month-old male child had a history of membrane in the left eye since birth. There was no history of redness, discharge, or ocular trauma (mechanical, chemical, or thermal). Delivery of the child had been normal. Systemic examination did not reveal any abnormality. The family history had nothing of relevance to the case.

Ocular examination showed a conjunctival fold extending vertically from the upper to the lower fornix over the temporal aspect of the left globe, including part of cornea (Fig. 1). The fold was pinkish white, unassociated with any other anomalies, and was not adherent to the underlying eye ball. The medial border of the fold was free, and a probe could be passed under it easily. Extraocular motility was normal, and there was no blepharoptosis. Fig. 2 shows the appearance after surgical excision of the membrane. The right eye was normal.

Fig. 2 After excision of the membrane.

Fig. 3 The mucosa on either side comprises stratified squamous epithelium. Subepithelial soft tissue contains few mononuclear cells. (Haematoxylin and eosin, $\times 120$).

HISTOPATHOLOGY

Gross description. Material submitted for histopathological examination comprised thin, flat membrane like piece of greyish white soft tissue measuring 1.4×1.2 cm. In thickness it varied from 1 to 1.5 mm. Both the surfaces were smooth and mucosa-like.

Microscopic description. Paraffin embedded sections stained with haematoxylin and eosin revealed vascularised bands of moderately dense fibrous connective tissue covered over by stratified squamous epithelium on both sides. Subepithelial tissue contained a few scattered, small groups of mononuclear cells (Fig. 3).

Discussion

The first clinical case of epitarus was reported in 1895⁴ and the condition fully described in 1899.⁵ Herbert⁶ used the term conjunctival bridge to denote the same condition.

The deformity is almost invariably seen in the upper lid, though its bilateral occurrence in the lower lids has also been reported.¹ In the present case membrane extended vertically from the upper to the lower fornix, bridging the eyeball on the temporal side. It was attached laterally to the lateral fornix, but the medial border was free, and a probe could be passed under it. Histopathological examination following resection of the fold showed moderately dense fibrovascular connective tissue covered by stratified squamous epithelium on both the sides (Fig. 3) as also reported by other workers.^{1,3}

Many workers have documented the association of epitarus with untreated or ill treated acute conjunctivitis in infants and children.^{3,4} Adhesions of the amniotic bands to the epithelial covering of the eyeball and persistence of hypertrophic plica semilunaris have also been blamed for the occurrence of epitarus.¹ On the other hand Schapring⁵ considered it to be a primary congenital deformity of the conjunctiva owing to the absence of inflammatory signs in many cases. The present case also did not have any clinical or histopathological signs of inflammation. The presence of a few mononuclear cells in the subepithelial tissue does not denote inflammation, for these may be present in case of congenital anomaly, as is not unusual with other congenital abnormalities.

From our observation and reports in the available literature we suggest classifying epitarus aetiologically into two types: primary epitarus, occurring purely as a congenital anomaly; and secondary epitarus, following neglected cases of conjunctivitis. Singh and Grover³ have described four clinical varieties of epitarus depending on the extent of the deformity, namely intrafornix, fornix-tarsal, fornix-limbal, and interfornix. The lesion in the patient described here was clinically consistent with the interfornix type.

References

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