Inverted mucoepidermoid papilloma of conjunctiva: A rare histological entity

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Conjunctival squamous papillomas are usually exophytic in nature but rarely they can present as inverted papillomas. The inverted papilloma of the conjunctiva was first described by Streeten *et al.* (year) are characterized by folds and ribbons of lining epithelium with endophytic downward growth into the underlying stroma.^[1]

Inverted papillomas typically involve the nose, paranasal sinuses, lacrimal sac and rarely, the conjunctiva. They exhibit a strong tendency for local recurrence and can undergo malignant transformation.^[2]

Inverted mucoepidermoid papilloma is rare variant of inverted papilloma. It was first described by Jakobiec *et al.*^[3] and recommended the term owing to the significant cystic component within the acanthotic lobules to distinguish these conjunctival lesions from inverted papilloma of other sites. They proposed that these lesions can/should be considered as benign in nature.

This entity can be confused with low grade mucoepidermoid carcinoma, hence knowledge about existence of this entity and rendering correct diagnosis is important to ensure appropriate treatment.

An 81-year-old man presented to ophthalmology outpatient department with complaints of a reddish mass over inner part of his right lower eyelid and increased

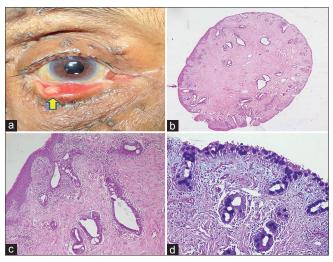
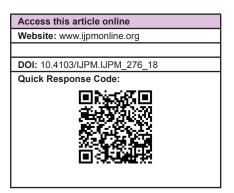


Figure 1: (a) The right lower palpaebral conjunctiva showing the mass (arrow) (b) Haematoxylin and Eosin stain - Shows a polypoidal fragment lined by lined by stratified squamous cells with dispersed goblet cells (c) Haematoxylin and Eosin stain - Shows downward extension of conjunctival epithelium into the sub epithelium in form of small islands and cystic spaces lined by stratified squamous epithelium with goblet cells. (d) PAS -Alcian blue stain – Highlights the dispersed goblet cells



epiphora since 1 year. The mass was slowly progressive and painless in nature. On examination, the visual acuity was 6/9 in both eyes. A single. well-defined, reddish fleshy mass $(1 \times 0.8 \text{ cm})$ was seen over the right inferior palpebral conjunctiva [Figure 1a]. His past medical history was unremarkable. An excisional biopsy of mass was performed and the grevish-white sample measured $1.0 \text{ cm} \times 0.5 \text{ cm} \times 0.3 \text{ cm}$. Histopathologic examination demonstrated a single polypoidal fragment lined by stratified squamous cells with dispersed goblet cells. The sub epithelium showed downward extension of conjunctival epithelium with formation of small

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islands and cystic spaces lined by stratified squamous epithelium with goblet cells. Goblet cells with acidic mucin were highlighted by PAS – Alcian blue stain [Figure 1b-d]. No increased atypia, mitosis, necrosis or intermediate cell population was noted to suggest mucoepidermoid carcinoma or any other malignancy. Based on these histological features diagnosis of Inverted mucoepidermoid papilloma was made. The post-operative period was uneventful with a recurrence free follow up of 8 months.

Inverted mucoepidermoid papilloma of conjunctiva is a rare entity and on literature search, we could only find one case report from India.^[4]

The most effective treatment is simple surgical excision. However, the rarity of this condition does not clearly establish the biological behaviour of the tumour. Although, these tumours are usually benign, Heuring and colleagues found peripheral carcinomatous foci within the lesion in their case.^[5] However, in this case we did not find any evidence of malignancy.

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Conflicts of interest

There are no conflicts of interest.

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