Primary squamous cell carcinoma arising from palpebral conjunctiva: A rare presentation

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Squamous cell carcinoma (SCC) of the conjunctiva usually arises from the limbal conjunctiva. Rarely, it can arise from the palpebral conjunctiva. We report a case of primary conjunctival SCC of the palpebral conjunctiva which was treated successfully.

Key words: Lid malignancy, palpebral conjunctiva, squamous cell carcinoma

Limbus is the common site for SCC of the conjunctiva. Palpebral conjunctival involvement due to SCC is rare. Goldberg et al reported the first case report of invasive SCC of the palpebral conjunctiva in 1993. We hereby report a case of primary SCC of the palpebral conjunctiva treated by surgical excision and reconstruction.

Case Report

An 80-year-old man presented with a history of redness, lacrimation, and swelling in upper eyelid of the right eye (OD) of 1-month duration. On examination, there was a swelling in the right upper lid. Eversion of the right upper eyelid showed a papillomatous growth over the tarsus in the palpebral conjunctival surface, extending from the posterior eyelid margin to the upper border of the tarsus, measuring 20 mm × 10 mm [Fig. 1]. He was pseudophakic in both eye, and visual acuity was 6/24p (OD) and 6/18p (left eye). Fundus examination showed normal retina in both eyes. There was no enlargement of preauricular or submandibular lymph nodes. He was on treatment for diabetes mellitus and hypertension for the past 13 years.

Incisional biopsy of the lesion was done under local anesthesia. Histopathology reported squamous cell carcinoma (SCC). The patient underwent full-thickness excision of the upper lid lesion with clear margin of 3 mm under general anesthesia. Margin clearance was confirmed by intraoperative frozen section of the margins of the excised tissue. Upper lid was reconstructed by Cutler-Beard technique using the healthy lower lid [Fig. 2].

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Histopathological examination disclosed papillary type of invasive moderately differentiated SCC showing infiltrating islands of malignant squamous cells with moderate cytoplasm, hyperchromatic nuclei with clumped chromatin, and occasional mitoses. The tumor was infiltrating into the desmoplastic stroma. However, there was no focus of lymphatic embolus or perineural invasion [Figs. 3 and 4]. The patient underwent second-stage procedure to release the flap after 12 weeks [Fig. 5].

Discussion

SCC is a common malignancy of ocular surface arising from the limbus. Rarely, it can be seen arising from palpebral conjunctiva.[1-3] It is one extreme of a spectrum of lesions encompassed in ocular surface squamous neoplasia, which range from dysplasia to carcinoma *in situ* to invasive SCC.[4] There are only five cases of palpebral SCC which have been reported in literature. Table 1 shows previous case reports of SCC arising from the palpebral conjunctiva.

The first case report of SCC of the palpebral conjunctiva was reported by Goldberg *et al*.[5] Their patient presented with invasive SCC of the palpebral conjunctiva, masquerading as chronic conjunctivitis. He was treated with radiotherapy, a total dose of 54 Gy.[5] The tumor recurred after 7 weeks of follow-up, and the patient died from complications of metastatic breast carcinoma.

Motegi *et al*. reported a case of SCC arising from the palpebral conjunctiva previously misdiagnosed as chalazion and treated later with resection of the tumor and reconstruction by Mustarde's switch flap technique.[6] Our patient too had the lesion projecting from the palpebral conjunctiva, which looked like chalazion granuloma.

Another case reported by Matsumoto *et al*. presented with ocular discomfort and lacrimation who was diagnosed to have SCC of the palpebral conjunctiva which was treated with surgical excision and cryotherapy.[7]

A case report of basaloid SCC arising from palpebral conjunctiva presenting as eyelid mass was reported by Vasudev *et al*. which was treated by excision.[8]

Rinaldi *et al*. presented a case of a patient with a history of blepharoconjunctivitis unresponsive to topical medications which diagnosed later as primary SCC arising from conjunctival epithelium and was treated by complete tumor excision and reconstruction.[9]

There have been few reports of conjunctival SCC arising from the palpebral conjunctiva in an anophthalmic socket following long-term use of ocular prosthesis,[10] but our patient had no predisposing factors.

Our patient had a tumor histopathologically classified as moderately differentiated SCC which was successfully excised

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Table 1: Squamous cell carcinoma arising from the palpebral conjunctiva with the site of involvement, ocular presentation, management, and outcome

Site of involvement	Clinical presentation	History	Management	Outcome	Reference
Left upper eyelid	Chronic blepharoconjunctivitis	Erythema of upper lid	Radiotherapy	Recurrence, patient died due to complications	Goldberg *et al.*[5]
Left upper eyelid	Recurrent chalazion	Swelling in upper lid	Excision and reconstruction	No recurrence	Motegi *et al.*[6]
Left upper eyelid	Mass in the upper lid	Ocular discomfort and lacrimation	Surgical excision and cryotherapy	No recurrence	Matsumoto *et al.*[7]
Right upper eyelid	Mass in the upper lid	Swelling in the upper lid	Wide excision		Vasudev *et al.*[8]
Left upper eyelid	Chronic blepharoconjunctivitis	Ocular discomfort	Excision and reconstruction	No recurrence	Rinaldi *et al.*[9]

Figure 1: Eversion of the upper lid showing papillomatous plaque

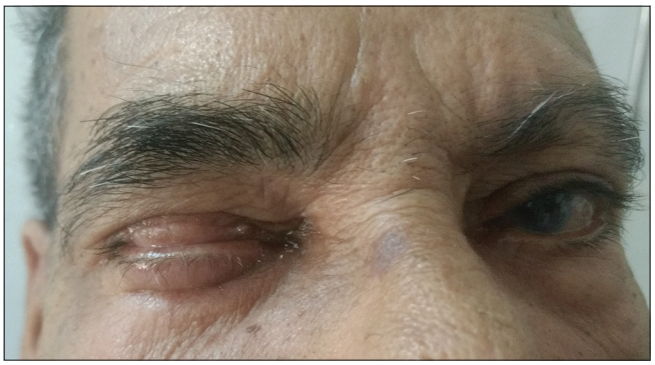

Figure 2: Following surgical excision of the mass and lid reconstruction

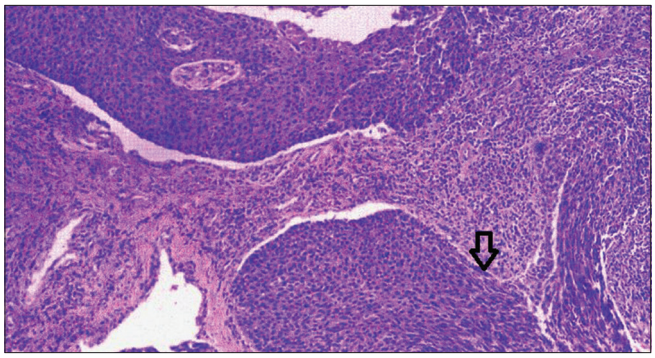

Figure 3: Histopathology (H and E, ×100) section showing infiltrating islands of atypical squamous cells surrounded by a desmoplastic stroma with mixed inflammatory infiltrate depicted by the arrow

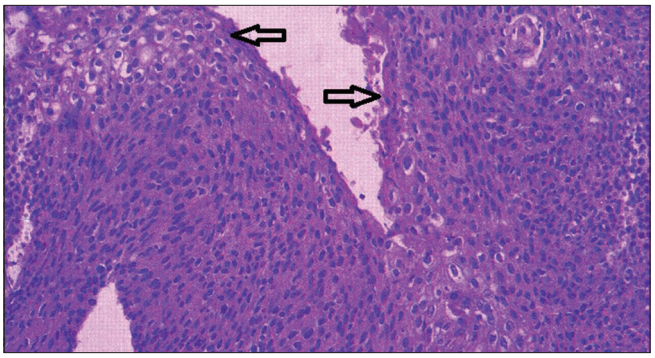

Figure 4: Histopathology (H and E, ×200) section showing papillae lined by atypical squamous cells depicted by the arrows

surgically. The patient has completed 6 months of follow-up. There is no evidence of recurrence of tumor.

Several reports of SCC of the conjunctiva masquerading as chronic conjunctivitis have been reported.[5] Our patient had a history of redness and lacrimation which are symptoms of conjunctivitis. It is also important to examine the palpebral conjunctiva for any growth in such patients with chronic conjunctivitis.

Conclusion

Thus, SCC of the conjunctiva must be considered as a differential diagnosis in elderly patients with unilateral chronic conjunctivitis. It is important to consider the possibility of SCC in addition to sebaceous gland carcinoma of the palpebral conjunctiva.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for images and other clinical information to be reported in the journal. The patient understands that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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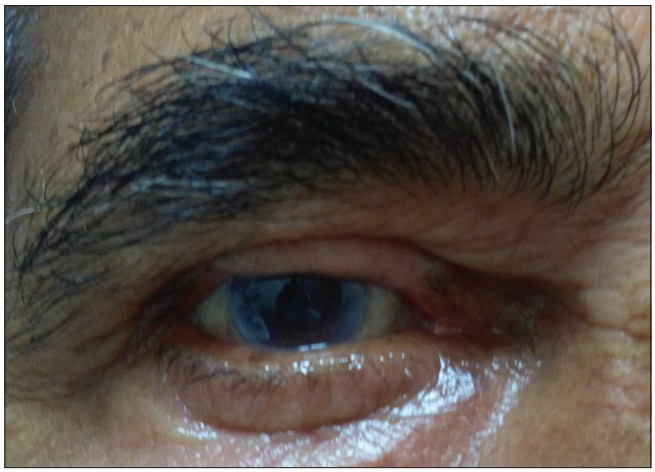

Figure 5: Following second-stage procedure of flap release

Conflicts of interest

There are no conflicts of interest.

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