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Sir,

Squamous cell carcinoma of the conjunctiva as initial presenting sign in a patient with acquired immunodeficiency syndrome (AIDS) due to human immunodeficiency virus type-2

Conjunctival squamous cell dysplasia and neoplasia have been associated with HIV infection and AIDS in the sub-Saharan African population.¹ There has been a 6-fold rise in the incidence of conjunctival malignancy following the epidemic of HIV infection reported in Uganda.² Ocular involvement in AIDS was first described in India in 1995; of the two patients, one had cytomegalovirus retinitis and the other had endogenous endophthalmitis.³ In India there is currently a rapid increase in patients with various ocular manifestations of AIDS. In a series reported by us 45.7% had ocular lesions, the most common being cytomegalovirus retinitis (21.4%). Extraocular lesions were seen in only 4 cases (5.7%).⁴ Ocular involvement was lower than in similar studies in the USA (65%) and Africa (55%).



Fig. 1. The mass lesion in the temporal part of the bulbar conjunctiva in the right eye (arrow). Note the multiple dilated conjunctival vessels (patient looking towards the left). An elevated triangular leukoplakic patch was seen on the nasal part of the bulbar conjunctiva (single arrow and inset).

We describe a healthy young patient presenting with leukoplakia and a conjunctival mass as the initial manifestations of HIV infection. Subsequent histopathological study revealed conjunctival dysplasia on the nasal side and squamous cell carcinoma on the temporal bulbar conjunctiva. This is the first report of squamous cell carcinoma of the conjunctiva occurring in AIDS in India.

Case report

A 34-year-old man presented in September 1998 with a 7 month history of a progressive swelling in the right eye associated with redness, watering and diplopia on right gaze. He had received treatment for pulmonary tuberculosis due to Mycobacterium tuberculosis 3 years previously and for herpes zoster skin infection 6 years earlier. On examination, his best corrected visual acuity was 20/20 in both eyes. External examination of the right eye revealed conjunctival congestion, an elevated triangular leukoplakic patch at the 4 o'clock limbus (Fig. 1, inset) and a 15 mm 12 mm mass in the temporal bulbar conjunctiva 4 mm from the limbus, with prominent vessels (Fig. 1). The mass had a firm consistency, was non-tender and fixed to the globe. Intraocular pressure was 16 mmHg and fundus examination revealed the indentation effect produced by the mass lesion at the temporal ora serrata. The left eye was normal.

Ultrasonography of the right eye revealed a wellcircumscribed homogeneous mass of low reflectivity measuring 16 mm 11 mm, situated in the anterior orbit anterior to the insertion of the lateral rectus muscle. Indentation of the globe wall was noted, but the sclera was not infiltrated. The other ocular structures were normal. CT scan did not reveal any changes in the bony wall of the orbit. The patient underwent excision of the leukoplakic lesion and an incisional biopsy of the mass lesion.

Histopathological study of the leukoplakic lesion revealed hyperkeratosis, parakeratosis, acanthosis and loss of polarity of epithelial cells, indicating dysplasia of the conjunctival epithelium (Fig. 2, inset). On histopathological examination the conjunctival mass lesion contained scattered clusters of malignant squamous cells and vascular channels with sparse infiltration of lymphocytes (Fig. 2). In view of the rarity of squamous cell carcinoma in immunocompetent patients, underlying HIV infection was suspected. ELISA testing revealed positive antibody to HIV-2, and Western blot test confirmed the ELISA finding. Total white blood cell count was 7200/mm³, absolute CD4 count was 324/ μ l, CD8 count was 578/ μ l, and the CD4/CD8 ratio was 0.56. On questioning, the patient disclosed a positive history of unprotected sexual exposure with a commercial sex worker in 1988. The patient was examined in an AIDS Care Centre by an internist and no systemic opportunistic infection was found.



Fig. 2. Photomicrograph of the biopsy of the mass lesion on the temporal side of the bulbar conjunctiva, showing a portion of sclera with epithelial cells surrounded by sparse infiltration of lymphocytes (H&E; 200). Inset shows acanthotic conjunctival epithelium with loss of polarity of epithelial cells and intact basement membrane indicating dysplasia of the conjunctival epithelium (H&E; 200).

Due to the extensive involvement of the conjunctiva with extension into the orbit, the patient was advised to undergo exenteration in the right eye with additional radiotherapy. As the patient was unwilling for exenteration, he underwent radiotherapy treatment. He reported to us in January 1999 after the radiotherapy. His visual acuity was hand movements close to face. There was gross lid oedema, and symblepharon formation with extensive scarring in the region of the tumour secondary to the radiotherapy treatment. On ultrasonography the mass had increased to 18 mm 14 mm 6.7 mm. There was no enlargement of cervical lymph nodes. In view of the clinical picture the patient was strongly advised to undergo exenteration of the right eye, but refused despite an explanation of the risks involved.

Comment

Conjunctival dysplasia and neoplasia are most commonly seen in the elderly population. The unusual features in our case were a healthy young patient with leukoplakia and a mass in the conjunctiva. Clinically we suspected lymphoid malignancy, but a biopsy showed a squamous cell carcinoma. Due to the advanced stage of the disease with involvement of the orbit, exenteration was the recommended procedure. As the visual acuity was normal the patient was unwilling to undergo the disfiguring surgical procedure. However, radiotherapy alone did not prove to be effective.

The majority of the AIDS patients reported in India have HIV-1 infection, HIV-2 infection being more common in the African population.⁵ HIV-2 infection has been reported in some parts of India, but the seroprevalence is low even in high-risk groups. In a study by Solomon and co-workers,⁶ of 150 patients who were HIV positive, 139 (92.7%) were HIV-1, 9 (6%) HIV-1 and -2 and only 2 (1.3%) HIV-2 positive. Conjunctival squamous cell carcinoma has rarely been reported in HIV-2 patients.⁷ Our case is the first report of conjunctival squamous cell carcinoma in an HIV-2 positive patient in India.

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Sir,

Scedosporium (Pseudallescheria) fungal infection of a sponge explant

Scedosporium is a fungus with low inherent virulence and is considered an opportunistic pathogen. It is found in soil, rotting organic matter and polluted water, existing in two states: an asexual (imperfect) form (*Scedosporium*) and a sexual (perfect) form (*Pseudallescheria*).¹

We report an unusual case of scedosporial scleritis with fungal colonisation and apparent decomposition of an inert surgical plomb.

Case report

A 70-year-old diabetic male professional gardener presented to the local casualty department with an injected, painful right eye. Five years prior to presentation he had sustained right ocular trauma from a plant twig resulting in retinal detachment followed by unsuccessful surgical repair. The eye had remained uncomfortable since the operation and became symptomatic only 3 weeks prior to presentation.