A Bansal, JF Salmon, R Malhotra, CK Patel and P Rosen

Oxford Eye Hospital, Oxford Radcliffe Hospitals
NHS Trust, Oxford OX2 6HE, UK

Correspondence: JF Salmon
Tel.: +44 1865 224360
Fax: +44 1865 224013
E-mail: john.salmon@orh.nhs.uk

Sir,

Keratoacanthoma of the conjunctiva

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Cutaneous keratoacanthoma is relatively common, occurring most frequently in sun-exposed areas of Caucasians in middle life.[1] It is a rapidly growing squamo-proliferative lesion of symmetrical globular shape, ultimately developing an enlarging central keratin plug before resolving spontaneously to leave a scar. In contrast, mucosal keratoacanthoma is very rare. We report a case of conjunctival keratoacanthoma in a black patient, indistinguishable from squamous cell carcinoma clinically, which was treated with complete excision.

Case report

A 40-year-old man from Barbados was visiting relatives in this country and attended the eye emergency department with a sore and red right eye. He had noticed a lump on the nasal conjunctiva of his right eye for 2 months, which had gradually increased in size, and recently become inflamed and uncomfortable with a discharge over the preceding 2 weeks. There was no history of injury or previous ophthalmic surgery and he was systemically well.

Examination revealed a 4 mm × 6 mm raised, soft, white, fleshy lesion on the nasal bulbar conjunctiva 1 mm from the limbus (Figure 1). The lump was mobile and there was contact bleeding from fine surface vessels. There was no lymphadenopathy and the remainder of the ophthalmic examination was normal. At the time the differential diagnosis included foreign body granuloma, infected pingueculum, and intraepithelial neoplasia/carcinoma.

Cultures were prepared from conjunctival swabs and a topical antibiotic commenced, with no clinical improvement over the following week. The lesion was subsequently excised under local anaesthesia leaving bare sclera, and cryotherapy was applied to the conjunctival margins. The lesion was not adherent to underlying tissues.

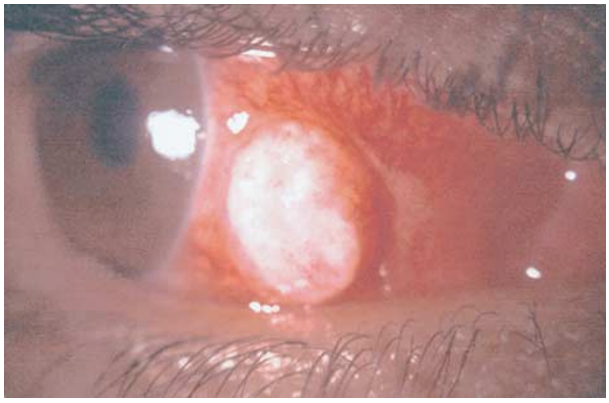

Figure 1 Anterior segment photograph showing raised, fleshy, bulbar conjunctival lesion.

The specimen was immediately immersed in 10% formalin, then bisected and paraffin-embedded. Histological examination demonstrated a hyperkeratotic, exophytic, and acanthotic lesion. The squamous epithelium was bulbous and well defined at the base with neutrophilic infiltrate and scattered microabscesses (Figure 2). The keratinocytes had eosinophilic/glassy cytoplasm and showed a moderate degree of atypia, with a very low mitotic rate (not exceeding three per 10 high-power fields). In the subepithelium, there was solar elastosis associated with a plasma cell-rich chronic inflammatory cell infiltrate. A diagnosis of conjunctival keratoacanthoma was made.

The conjunctiva healed and the patient was followed-up for 2 months without evidence of recurrence before returning to Barbados.

Comment

Since Freeman in 1961, only a handful of cases of conjunctival keratoacanthoma have been documented, notably in white farm workers with heavy sun exposure,[2,3] with only one previous case in a black patient.[4] The documented cases have occurred on the bulbar conjunctiva, within the palpebral aperture and adjacent to the limbus, as in our case. These features highlight sunlight as an aetiology in these cases, and the finding of solar elastosis in the histology of this case supports this argument. Keratoacanthoma has, however, rarely affected the buccal mucosa,[5] and a sun-related aetiology seems unlikely in this site.

Histologically, cutaneous keratoacanthoma is a heavily keratinized dermal squamous cell lesion, surrounded by acanthotic epithelium, often with an inflammatory

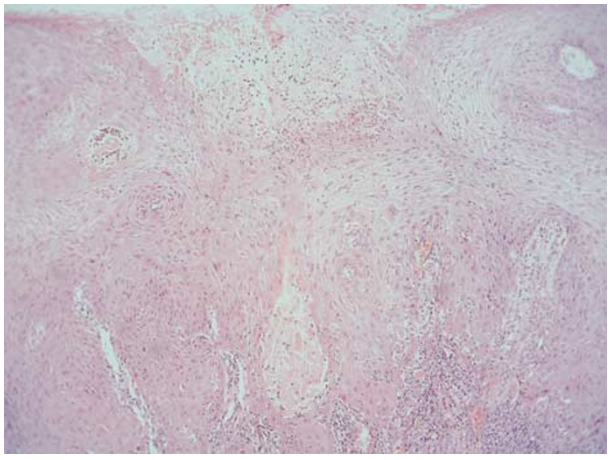

Figure 2 Photomicrograph showing well-differentiated epithelium with glassy appearance and a central keratin-filled crater. Scattered neutrophils are present throughout the epithelium with focal microabscess formation (top left), and there is a dense inflammatory infiltrate in the subepithelium Magnification: $\times 100$, counterstain: haematoxylin and eosin.

infiltrate at the base. Lesions may have invasive features but rarely extend deeper than the sweat coils, and mitoses should only be present in the outer-most layers.[6] Invasion has been described[7] and some have suggested that keratoacanthoma is a variant of squamous cell carcinoma. Our case emphasizes the need for a histological diagnosis to be made as the occurrence of keratoacanthoma on mucosal sites and in non-Caucasians is rare, and furthermore cannot be easily differentiated from malignant tumours such as squamous cell carcinoma clinically.

Unlike cutaneous lesions, the natural history of conjunctival keratoacanthoma is obscure because they are excised early. Whether these lesions would regress like their cutaneous counterparts or go on to become invasive is unknown. Of the six or so previously documented cases of definite conjunctival keratoacanthoma, there have been no reports of recurrence after excision with follow-up ranging from 4 to 24 months. However, a noteworthy case, described by Grossniklaus *et al*,[8] of a rapidly growing limbal lesion with keratoacanthoma features was excised after 3 weeks with evidence of invasion on histology. There was subsequent rapid recurrence with intraocular invasion requiring enucleation. It is unclear whether the lesion in their report was a keratoacanthoma or a very rapidly growing squamous carcinoma, but clearly early excision of a suspected conjunctival keratoacanthoma is recommended in light of this particular case.

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EH Hughes[1], L Intzedy[2], AD Dick[1] and DM Tole[1]

[1]Department of Ophthalmology
University Division of Ophthalmology
Bristol Eye Hospital
Lower Maudlin Street Bristol, UK

[2]Department of Histopathology
Bristol Royal Infirmary
Bristol, UK

Correspondence: E Hughes
Tel +44 1179 284 770
Fax: +44 1179 284 891
E-mail: e.h.hughes@bristol.ac.uk

Sir,

Proliferative vitreoretinopathy developed in HLA-B27-associated uveitis

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In Japanese, HLA-B27-associated uveitis is quite rare because of the low frequency of HLA-B27-positive individuals.[1] The main clinical feature is similarly anterior uveitis as that of Caucasian population. Its various lesions in the nonanterior segment include vitritis, papillitis, macular oedema, retinal vasculitis, disc neovascularization and so forth. This type of uveitis usually has a good therapeutic response to corticosteroid therapy.[2,3] We now report a case of HLA-B27-associated