deoxyribonucleic acid (DNA) was positive from the conjunctival tumour and the facial papilloma.

The total lymphocyte count was 1192/mm^3, CD4 count was 182/mm^3 (15%), CD8 count was 603/mm^3 (50%), and CD4:CD8 ratio was 0.33. The dosage of immunosuppressive drugs was modulated over the next 6 months to bring CD4 counts within the normal range. The patient had no local tumour recurrence at 18-months follow-up.

Comment

The pathogenesis of skin cancer in OTR is multifactorial, involving immunosuppression, oncogenic virus infection, and ultraviolet radiation.[1,3] Immunosuppression is considered a major causal risk factor, especially for HPV-induced malignancies.[4] CD4 lymphocytopenia, being associated with increased incidences of malignancies, may be an important marker.[5] There is a well-recognized causal relationship between HPV and squamous neoplasia of the uterine cervix. A similar causal relationship between OSSN and HPV has been suspected.[6]

Postrenal transplantation, our patient was on long-term immunosuppression and had CD4 lymphocytopenia. He subsequently developed OSSN in the right eye and papilloma of the facial skin. Multifocality of OSSN as seen in our patient is a rare manifestation.[6] The OSSN as well as the skin papilloma were positive for HPV DNA by PCR, indicating that immunosuppression and CD4 lymphocytopenia may have predisposed to oncogenic HPV infection and subsequent development of OSSN. There is only one more case reported in the setting of immunosuppression following liver transplantation.[2] This patient, however, did not show evidence of HPV infection and manifested an aggressive tumour with orbital recurrence, intracranial extension, and tumour-related death.[2]

The association of OSSN and postorgan transplantation immunosuppression appears causal, being mediated by oncogenic HPV infection. Systematic periodic ophthalmic evaluation of OTR may help in early diagnosis of subtle OSSN.

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Sir,

The impact of HIV on sub-Saharan African eye departments

In Evans's discussion of the impact of HIV on the management of eye disease,[1] he omitted the commonest HIV-related disease presenting to eye departments in sub-Saharan Africa: squamous cell carcinoma (SCC) of the conjunctiva. HIV infection increases the risk of SCC 10-fold,[2] and an epidemic of conjunctival SCC has been coincident with the HIV epidemic. The number of patients with conjunctival SCC exceeds all other ocular manifestations of HIV/AIDS treated at the Lion's Sight First Eye Hospital in Blantyre, Malawi. A proportion of patients present with recurrences, or at such a late stage that removal of the eye is required. In addition to the morbidity of SCCs, the burden of

care for these patients removes time available for eye care professionals to dedicate to Vision 2020 goals. Evans's article focused on HIV-related superinfection; the conflicting evidence regarding conjunctival squamous neoplasia's association with human papilloma virus infection at least merits its inclusion.[2,3]

Unlike Herpes Zoster, conjunctival SCC is not featured in WHO staging of AIDS used to consider eligibility for antiretroviral therapy in Malawi.[4] With a limited supply of antiretroviral drugs currently now available, there is an urgent need for research into the contribution conjunctival SCC could, or should make to the WHO staging, as well as the best preventative and therapuetic interventions for it in this setting.

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Sir,

Response to Beare *et al*

I am grateful to Beare and Batumba for drawing attention to my failure to include squamous cell carcinoma (SCC) of the conjunctiva in my short article. I concentrated on super-infection as that was the subject I was given for my lecture and hence formed the basis of the article. Despite this it seems likely that SCC, given the much higher increased risk in HIV-positive people, is associated with an oncogenic infection in addition to ultraviolet radiation and immunosuppression. If this is true, then SCC would be a disease similar to Kaposi's sarcoma and anal neoplasia in being increased in HIV-positive people and associated with specific infections (HHV8 for KS and HPV for anal carcinoma).

However, I feel that the perspective of SCC as gained from a specialist Eye Hospital will give a somewhat biased view of how common SCC is. Morgan *et al*[1] when describing ophthalmological complications in the MRC Ugandan cohort concludes that although ocular complications of AIDS seem to comprise a large extra element in the work-load of tertiary care hospitals dealing with eye problems, on a population basis such cases are infrequent. Even Newton *et al*[2] in their comprehensive paper acknowledge that in Uganda, SCC is not a particularly common manifestation of HIV disease but they estimated that HIV accounts for around 60% of the population attributable fraction of SCC.

However, I should have drawn attention to SCC, even if just to acknowledge that as yet we do not know whether it is caused by a super-infection. I am therefore grateful that omission has been corrected by these letters.

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