Simultaneous presentation of ocular surface squamous neoplasia with viral retinitis in HIV-positive patients with low CD4 counts

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Key words: Cytomegalovirus, ocular surface squamous neoplasia, human immunodeficiency virus

Ocular manifestations of human immunodeficiency virus (HIV) are common, even in the era of highly active antiretroviral therapy (HAART).^[1]

Case Reports

Case 1

A 36-year-old HIV-positive male, on HAART with CD4 count of 160 cells/mm³, presented with an inferonasal raised opalescent corneal limbal mass (3 × 1 mm) with fimbriated edges in the left eye [Fig. 1]. Fundus examination in the left eye showed vitritis, multiple retinal haemorrhages and necrotising retinitis [Fig. 2], clinically suggestive of acute retinal necrosis (viral retnitis).

Serology was positive for syphilis, whereas polymerase chain reaction (PCR) test on aqueous was positive for varicella-zoster virus (VZV). Patient was treated with intravenous acyclovir followed by oral valacyclovir and anti-syphilitic treatment. Excisional biopsy of the ocular surface lesion was performed showing conjunctival epithelial dysplasia.

Case 2

A 41-year-old HIV-positive male, on HAART with CD4 count of 192 cells/mm³, presented with an inferonasal raised gelatinous limbal mass (7×5 mm) with prominent feeder

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vessels [Fig. 3]. Fundus examination in both eyes revealed mild vitritis, retinal vasculitis and granular retinitis [Fig. 4], clinically suggestive of active granular cytomegalovirus retinitis.

PCR test on aqueous was inconclusive. Patient was treated with oral valgancyclovir. Excisional biopsy of the ocular surface lesion was performed showing conjunctival epithelial dysplasia [Fig. 5].

Discussion

Ocular manifestations of HIV include HIV retinopathy, viral retinitis, opportunistic infections, and ocular malignancies.^[2]

HIV is a known risk factor for ocular surface squamous neoplasia (OSSN)^[3] Most common posterior segment manifestation is viral retinitis caused by human herpesvirus family.^[4,5]

Isolated anterior and posterior segment manifestations of HIV are common. Medline search did not report any simultaneous occurrence of OSSN with viral retinitis in HIV.

Conclusion

Ocular manifestations of HIV may rarely have simultaneous anterior and posterior segment involvement, especially with

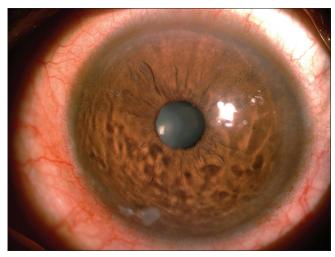


Figure 1: Left eye showing an inferonasal opalescent limbal lesion extending into cornea with fimbriated edges

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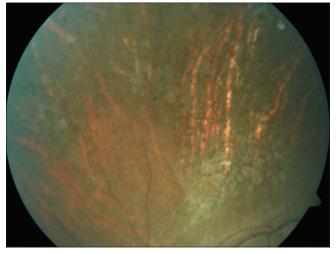


Figure 2: Fundus image of the left eye showing healing necrotising retinitis after initiation of treatment



Figure 3: Right eye showing an inferonasal gelatinous mass at the limbus extending into cornea with feeder vessels

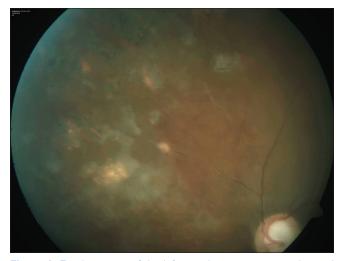


Figure 4: Fundus image of the left eye showing retinitis and retinal vasculitis with multiple yellowish granular lesions and perivascular sheathing

low CD4 counts. Comprehensive evaluation leading to early diagnosis and management may limit vision-threatening complications.

Declaration of patient consent

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

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Conflicts of interest

There are no conflicts of interest.

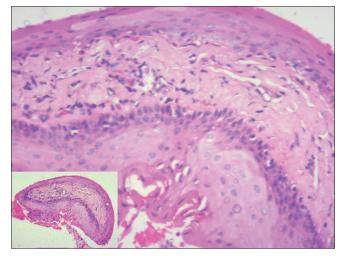


Figure 5: Histopathology image showing multilayered conjunctival epithelium with dyskeratotic cells and stromal fibrosis, suggestive of conjunctival epithelial dysplasia

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