

Mixed occlusive phase: a rare manifestation of HIV infection

Nur Nadhiratul Jihan Badrul Hisham¹, Siti Nur Syuhada Ali¹, Josephine Lee En Hui¹, Rajasudha Sawri Rajan²

¹Department of Ophthalmology, Hospital Raja Permaisuri Bainun, Ipoh, Malaysia, ²Department of Ophthalmology, Hospital Shah Alam, Selangor, Malaysia

ABSTRACT

Central retinal artery occlusion (CRAO) and central retinal vein occlusion (CRVO) are critical ophthalmic conditions that can serve as manifestations of human immunodeficiency virus (HIV) infection. Although uncommon, their occurrence in HIV-positive patients highlights the profound impact of the virus on the vascular system and overall immune function. A 26-year-old gentleman with no co-morbidity presented with right eye sudden painful visual loss for 1 day, which was preceded by a 2-week history of headaches and a 1-week history of fever, vomiting, and diarrhoea. Right eye examinations revealed visual acuity of hand movement with a positive relative afferent pupillary defect. Right eye fundus examinations showed optic disc swelling with extensive disc haemorrhages, tortuous retinal vessel, blot haemorrhages at all quadrants. Two days later, retina appeared pale and prominent at inferior macula. Left eye was unremarkable. A diagnosis of Right eye CRAO and CRVO was made. Systemic examination noted small and matted lymphadenopathy over left inguinal region. Investigations revealed positive HIV and toxoplasma immunoglobulin G. Computed tomography of the brain showed white matter oedema in the bilateral cerebral hemisphere at the frontal, parietal and occipital lobes. He was treated as cerebral toxoplasmosis by medical team. Antiretroviral therapy, intravenous ceftriaxone, oral Bactrim, topical steroid, and right eye laser pan retinal photocoagulation were initiated. 1 month later, right eye optic disc appeared pale with resolved disc haemorrhage whereas visual acuity remains the same. A simultaneous CRAO and CRVO in a young patient with no systemic comorbidities raises suspicion of other causes such as inflammation and infection. A prompt systemic examination and investigation are crucial to unveil the life-threatening cause.