

Invited Comment

Cytomegalovirus can cause a wide spectrum of multi-systemic disorders including pulmonary disease, gastrointestinal disorders and disabling central or peripheral neurological dysfunction, as well as other manifestations that are well described by Laher *et al.* in their article. However, retinal disease is by far the most common clinical manifestation of CMV for patients with HIV, and this devastating condition has rightly been termed 'the neglected disease of the AIDS pandemic'.¹

Cytomegalovirus retinitis (CMVR) is the most frequent cause of visual loss in individuals with AIDS, and before availability of HAART in the USA approximately 30% of patients with AIDS developed CMVR.² Direct involvement of the optic disc and macula, retinal detachment and immune recovery-related phenomena can all complicate the condition, and may lead to visual impairment or blindness. A recent survey in Botswana suggests that up to 16.5% of individuals accessing HAART in a hospital setting have CMVR, in alignment with the findings of Visser, based in Durban.^{3,4} The high burden of HIV disease and the increasing scale-up of HAART provision in South Africa (with patients often initiating treatment at low CD4 counts) suggest that cytomegalovirus disease, whether ocular or systemic, will have a huge impact on HIV-related morbidity and mortality.

Detection of systemic CMV disease may need to be augmented by diagnostic laboratory tests, as outlined by the authors. However, retinal CMV disease is considered to have a characteristic appearance on ophthalmoscopy. Clinical examination of the fundus by indirect ophthalmoscopy is the gold standard for detection of CMVR, yet in many resource-limited settings the geographical and numerical maldistribution of ophthalmologists to HIV-affected individuals renders this an untenable situation. Furthermore, the cost of treatment is prohibitive, and intra-ocular injections for CMVR also require ophthalmic expertise.

As HIV clinicians and eye care professionals, we are in a position to curtail the 'neglect' of CMV – diagnosis and management of CMV infection, whether systemic or ocular, should be part of routine care. The development of novel strategies to train non-ophthalmologists to screen for CMVR means that ocular case detection may be possible even with decentralisation of HIV services to primary care levels. However, detection of CMV infection is just the first of many steps. A major obstacle faced in South Africa is the challenge of making treatment available, effective and affordable. We need to rise to the challenge and lobby for availability of economically priced treatment, otherwise we risk leaving our patients vulnerable to the scourge of CMV disease – and potentially a life filled with darkness.

Sophia Pathai

Clinical Research Fellow

International Centre for Eye Health

London School of Hygiene and Tropical Medicine

REFERENCES

1. Heiden D, Ford N, Wilson D, Rodriguez WR, *et al.* Cytomegalovirus retinitis: the neglected disease of the AIDS pandemic. *PLoS Med* 2007; 4(12): e334.
2. Hoover DR, Peng Y, Saah A, *et al.* Occurrence of cytomegalovirus retinitis after human immunodeficiency virus immunosuppression. *Arch Ophthalmol* 1996; 114(7): 821-827.
3. Nkomazana O, Tshitswana D. Ocular complications of HIV infection in sub-Saharan Africa. *Current HIV/AIDS Reports* 2008, 5: 120-125.
4. Visser L. Managing CMV retinitis in the developing world. *Comm Eye Health* 2003; 16(47): 38-39.