Dear Author,

Ebola retinal lesions in this review are described as 'multiple, peripheral, chorioretinal scars with hypopigmented halos'. This description, from Varkey et al⁵ was a single case report. In our recent case-control study, 'A Novel Retinal Finding in Ebola Survivors, Sierra Leone 2016'⁴ we were unable to find any retinal lesions of this description and appearance in 82 Ebola survivors and only one example in 105 controls using ultra-wide field retinal imaging.

We did report a novel retinal lesion which appears specific to Ebola in 14.6% of survivors. It appears to have a peripapillary and/or isolated multifocal distribution following the anatomical pathway of the retinal ganglion cell axons implying a neuronal transmission to the retina. The lesions appear light grey in colour, of variable size, with surrounding retinal darkening in many cases. Their shape is variable but the presence of linear margins with sharp angulations in keeping with the photoreceptor triangular mosaic arrangement appears specific. OCT analysis demonstrates these lesions are limited to the retinal layers with no choroidal involvement. In all cases, we found they spare the fovea and therefore are not directly responsible for visual acuity deficits in the absence of intraocular inflammation.

As posterior uveitis secondary to Ebola has previously been based on case series,^{1,3} many retinal lesions seen in survivors may have falsely been attributed to Ebola when in fact they

are common in the local West African population. Treatment for Ebola retinal lesions alone with periocular or systemic steroids may not be indicated or efficacious given the good visual outcome of Ebola survivors with multiple retinal lesions in the absence of cataract formation and may be detrimental in cases of inadvertent toxoplasmosis misdiagnosis which is a far more common cause of retinitis in West Africa².

In the final paragraph, it is stated one of the complications of posterior uveitis is recurrence of anterior uveitis. PCR confirmed anterior uveitis secondary to Ebola virus can occur in the convalescent period⁶ but although reoccurrences have been reported up to 13 months by Hereth Hébert et al¹, no aqueous humour PCR analysis was conducted to enable confirmation. As only one of the nine figures in this publication were consistent with our description of Ebola retinal lesions, an alternative aetiology for the uveitis reoccurrence is more likely.

Word count 378

Disclosures

Potential conflicts of interest: P.J.S. reports a related grant from Bayer for the research referred to in this reply. M.G.S. and J.T.S reports related grants and support from the Wellcome Trust and the Bill and Melinda Gates Foundation outside of the submitted work.

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