

Comment on: Central retinal vein occlusion secondary to varicella zoster retinal vasculitis in an immunocompetent individual during the COVID-19 pandemic - A case report

Dear Editor,

With great interest, I went through the article titled "Central retinal vein occlusion secondary to varicella zoster retinal vasculitis in an immunocompetent individual during the COVID-19 pandemic - A case report" by Sarpangala *et al.*^[1] The authors have managed a tricky case in which multiple etiologies had to be ruled out. I have a few observations. The authors have mentioned that there was clinical improvement 3 days following institution of systemic anti-viral therapy. However, in the clinical fundus photograph provided, 3 days following therapy, it seems as if the vascular sheathing along the superotemporal vein has actually increased (worsened) following anti-viral therapy. It would be good to know the duration between initial presentation and institution

of systemic therapy. A longer duration between initial presentation and start of therapy might have led to an increase in the vascular sheathing. It will also be interesting to know if there was an increase in visual acuity and decrease in vitreous haze 3 days after starting anti-viral therapy.

Ocular involvement in sarcoidosis is present in 80% of the cases and is frequently manifested before the diagnosis of systemic disease.^[2] Posterior segment involvement in sarcoidosis can take the form of retinal vasculitis, perivenous infiltrates with characteristic candle wax drippings, choroiditis patches, and optic nerve granuloma. Absence of characteristic sarcoid lesions does not rule out ocular sarcoidosis. The definitive diagnosis of ocular sarcoidosis is based on biopsy-proven lesions compatible with clinical signs of uveitis.^[2] Investigations supportive of ocular sarcoidosis include raised serum angiotensin-converting enzyme (ACE)/lysozyme levels, chest X-ray or high-resolution computed tomography suggestive of bilateral perihilar lymphadenopathy, abnormal liver enzyme tests, and negative tuberculin test in a BCG-vaccinated patient.^[2] The present case had raised serum ACE levels. Other laboratory tests supportive of ocular sarcoidosis could have been performed before ruling it out as a possible etiology.

In addition, the present case had raised serum homocysteine levels. Elevated serum homocysteine is itself an independent risk factor associated with retinal vein occlusions.^[3] Raised serum homocysteine levels can also be associated with systemic thrombosis. The chances of raised homocysteine level as the possible etiology for central retinal vein occlusion in the present case seem highly unlikely. However, as elevated levels of serum homocysteine are associated with thrombotic lesions, treatment should be started to lower its level to prevent any systemic complications in the future.

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Conflicts of interest

There are no conflicts of interest.

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