

Branch retinal vein occlusion following Tubercular vasculitis – A case report

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PURPOSE

To report a case of branch retinal vein occlusion in a patient with occlusive vasculitis secondary to Tuberculosis.

METHODS

A full ophthalmic examination complemented by fundus photo, optical coherence tomography (OCT) and fluorescein angiography (FA).

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Case report

A 17-year-old male presented with acute visual loss in left eye started 5 days ago. A complete ophthalmologic examination showed best corrected visual acuity (BCVA) of 20/20 in the right eye (OD) and 20/400 in the left eye (OS). Anterior segment showed 2+ cellularity in OS and was unremarkable in OD. Laboratorial tests showed a VHS=45 and Tuberculin skin testing (PPD) was 22 mm. Fundoscopy evidenced multiple flame-shaped hemorrhages associated with cotton wool spots and venous perivasculature sheathing in the superotemporal arcade in OS (Fig.1). Fluorescein angiography in OS showed vascular leakage with areas of capillary non-perfusion (Fig.2).

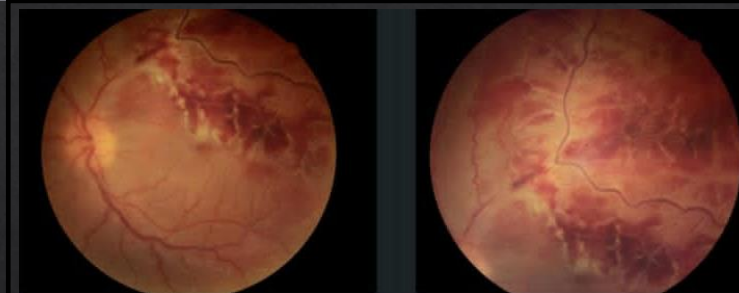


Fig. 1 – Fundus photo of the left eye showing superior temporal branch retinal vein occlusion.

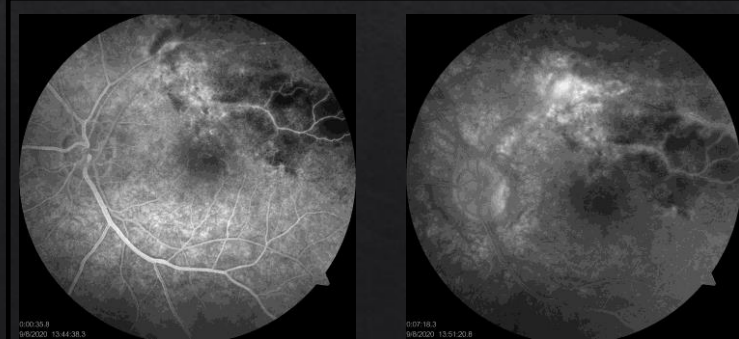
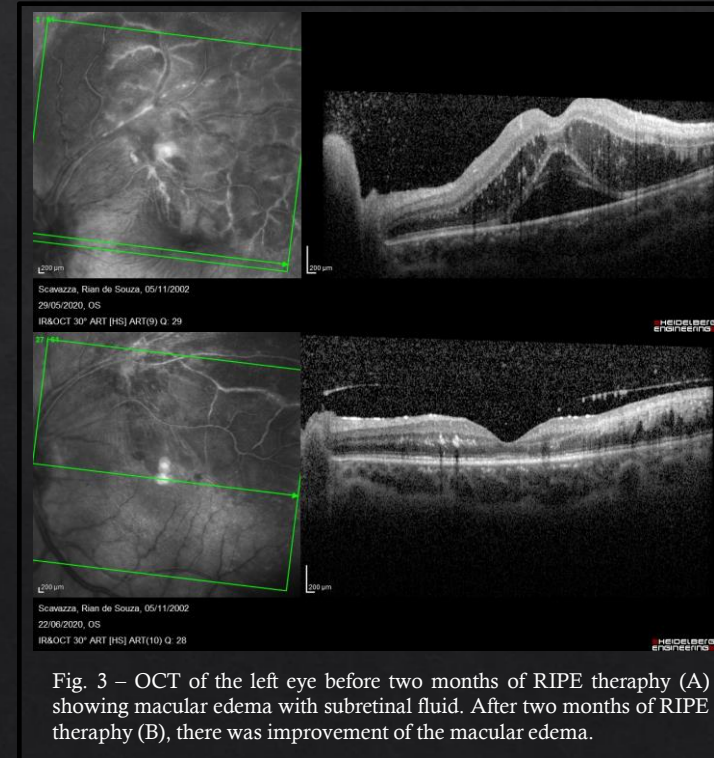


Fig. 2 – Fluorescein angiography of the left eye showing vascular leakage with areas of capillary non-perfusion.

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Optical coherence tomography (OCT) showed macular edema with subretinal fluid that later improved with two months of RIPE therapy, with improvement of the BCVA to 20/40 in OS.



Discussion

Cases of retinal vein occlusion in young patients requires a extensive investigation for an underlying cause, specially if there are not an apparent systemic symptoms. Retinal vasculitis should be considered as a possible cause. Branch retinal vein occlusion due to ocular tuberculosis is a rare presentation of retinal vasculitis.¹ The clinical suspicion rely on a typical ocular features, indirect evidence of tubercular hypersensitivity (skin or blood) and pulmonary changes on x-ray.²

The antitubercular treatment must be initiated in suspicious cases and is the key treatment. Corticosteroids may be required when the inflammation is sight-threatening or in cases of paradoxical worsening after initial treatment with antitubercular treatment, due to exaggerated inflammatory response.

Delay in diagnosis of tubercular vasculitis can lead to complications including neovascularization with recurrent vitreous bleeds, tractional retinal detachments, iris neovascularization and neovascular glaucoma.

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