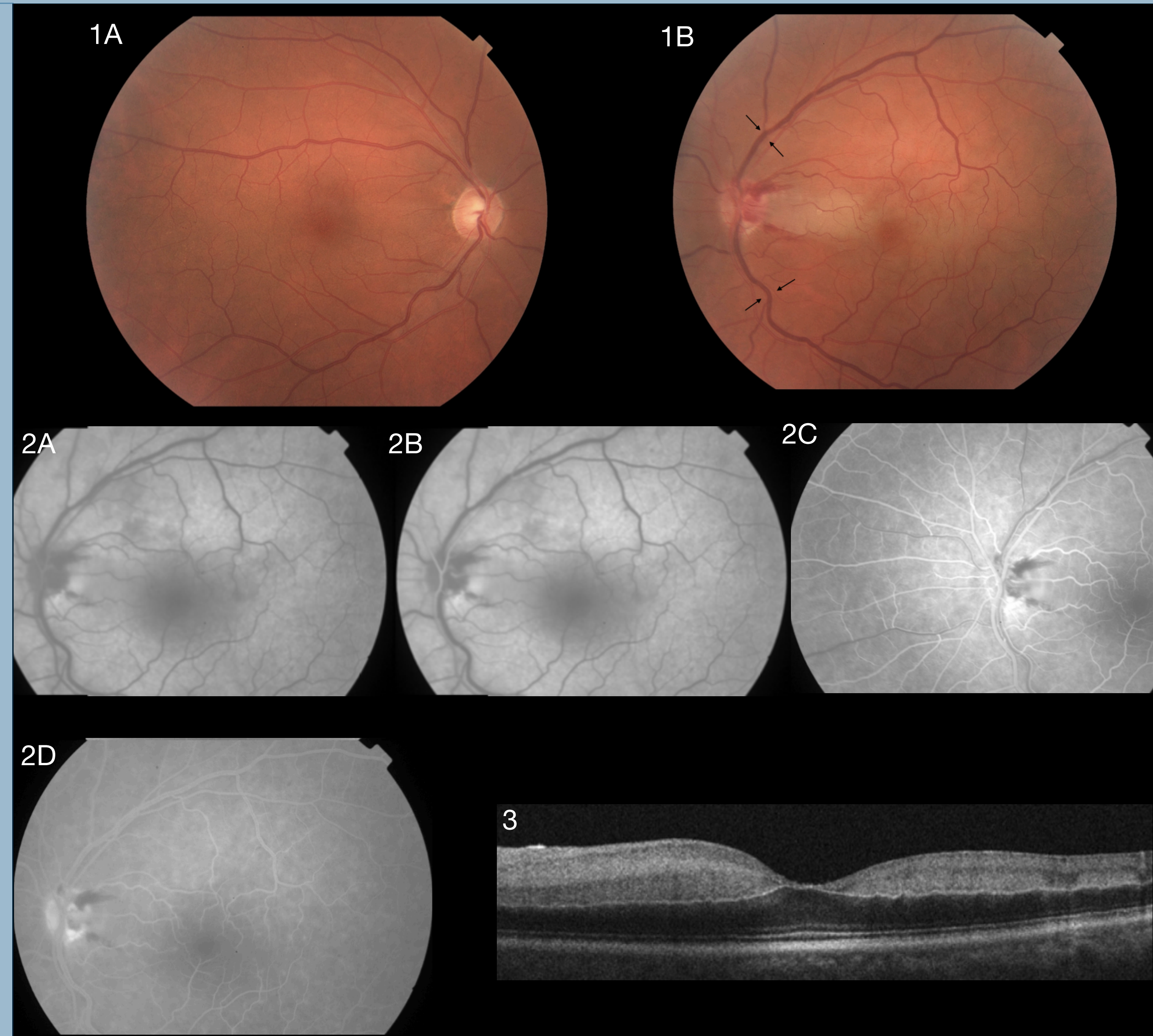


Purpose: To report an unusual case of combined central retinal vein occlusion (CRVO) with cilioretinal artery occlusion (CLRAO).

Case report: A 65-year-old white male presented with sudden low visual acuity on left eye (OS) two days previous to admission. Past medical and ophthalmological history were unremarkable. Best corrected visual acuity was 20/40 on right eye (OD) and counting fingers at 1 meter on OS. Anterior segment examination and intraocular pressure were unremarkable on both eyes. Fundus examination of OD was unremarkable (Figure 1A). OS revealed superficial flame hemorrhages temporally to the optic disc, engorged retinal veins on inferior and superior quadrants and retinal whitening on the papillomacular area (Figure 1B). Early stages of Fluorescent angiography (FA) showed blocked fluorescence and area of non perfusion along the cilioretinal artery zone (Figures 2A, 2B and 2C). Late stages showed delay on venous filling (Figure 2D). Optical coherence tomography showed hiperreflectivity and thickening of inner layers on the cilioretinal territory (Figure 3).

Discussion: Combined CRVO and CLRAO is a rare variant of retinal vascular disease. The pathophysiology is still not well understood.¹ It is thought to be caused by a mechanical compression of enlarged and thrombosed central retinal vein leading to an increase in the resistance to the cilioretinal flow.^{1,2} Patients may present with visual loss and scotomas. Fundus examination can reveal widespread retinal hemorrhages, engorged vessels and ischemic areas throughout the cilioretinal territory. FA shows a delay in cilioretinal artery filling and area of non perfusion extending temporally to the optic disc. Visual prognosis can vary according to the extension of the occlusion.² The severity of central vein occlusion remains the main factor of visual outcome ^{2,3}. There are few reports in literature of combined CRVO and CLRAO. Nevertheless, these patients should be routinely evaluated due to increased risk of retinal non perfusion, neovascularization, and permanent vision loss.



References:

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