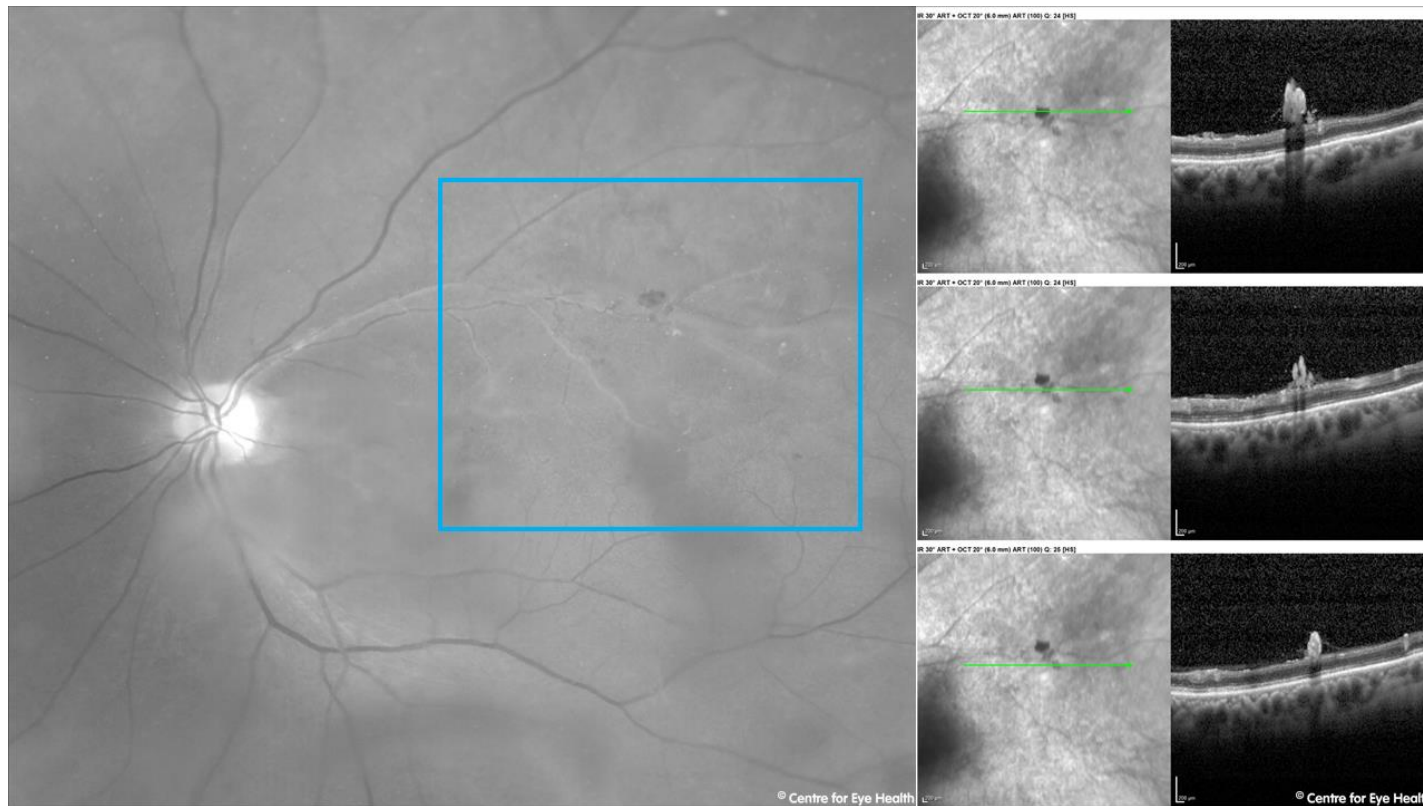


CFEH Facebook Case #58

A 73 year old Asian male was referred for retinal imaging. He suffers from hypertension which is controlled by medication, but is otherwise healthy. What is the nature of the lesion seen on OCT?



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ANSWER

This patient has had a branch retinal vein occlusion some time ago, and subsequently has developed neovascularisation and associated fibrosis which is showing up on OCT as a raised, hyper-reflective lesion above the plane of the retina.

Hypertension and hyperlipidemia can cause arteriolar sclerosis, resulting in compression of the vein at arteriovenous crossings. Other conditions associated with BRVO include diabetes mellitus and peripheral arterial disease. Occlusion of one of the major branch retinal veins (major BRVO) may be either ischemic (2/3 of cases) or non-ischaemic (1/3 of cases) and 65% of BRVO's are found in the superior-temporal quadrant. Neovascularisation can develop following an ischaemic BRVO, such as in this case.

The potential complications of a BRVO include macular oedema, retinal neovascularisation, vitreous haemorrhage and tractional retinal detachment, so treatment is aimed at managing these complications to improve visual acuity and reduce metamorphopsia.