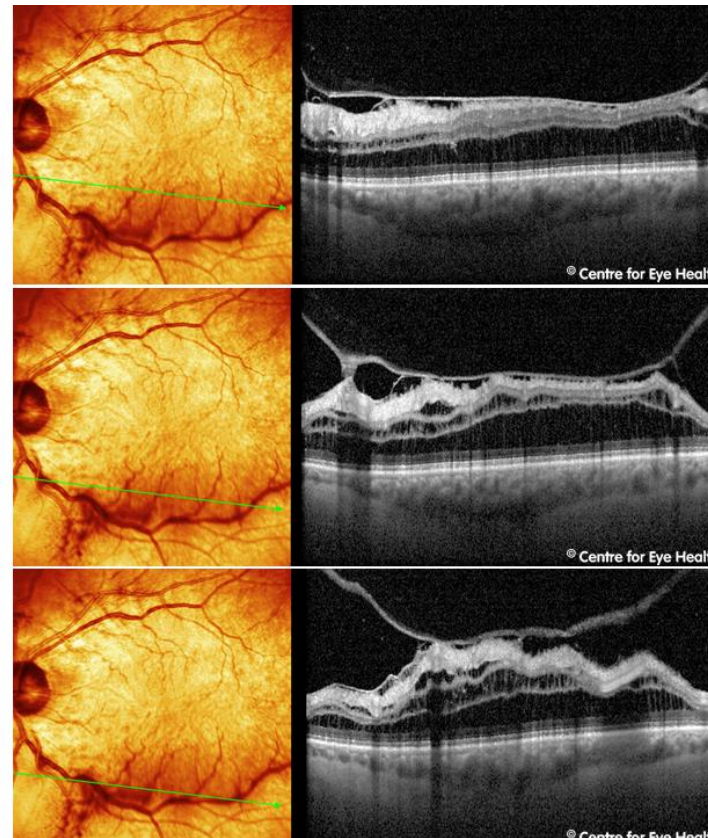
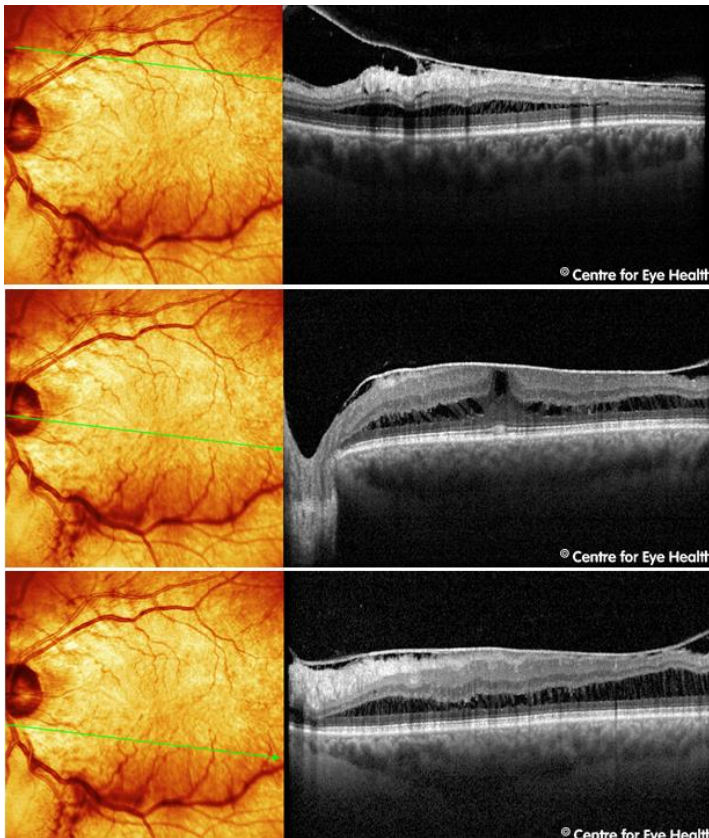




CFEH Facebook Case #122

A 64 year old female presented for a macula assessment. She has a low hyperopic prescription and 6/6 acuity vision in the right (unremarkable) eye and 6/7.5 in the left. The patient mentions that the vision in her left eye has been worse than the right for several years. Testing with an amsler grid shows distortion in the left eye. What is your diagnosis and management of this patient?



ANSWER

This patient has an epiretinal membrane (ERM) with associated vitreous adhesion and traction, causing distortion and thickening of the macular area, and an associated schisis. An ERM is thought to be formed when a partial posterior vitreous detachment results in residual vitreous material being left behind on the inner retinal surface. These residual cells proliferate to form an ERM which contracts causing macular pucker, and over time additional proliferation and contraction worsens the situation putting stress on the underlying retina. This effect is exacerbated when vitreous traction is also present.

Vitreomacular traction (VMT) can cause similar macular changes (with or without an ERM) and this is an important differential in this case. VMT is defined by the literature as a partial posterior vitreous detachment that causes an anomalous distortion of the fovea (Dukker et al. 2013). The traction can cause macular pseudo-cysts, cystoid macular oedema and also macular schisis.

It has been hypothesized that disruption of the foveal layers by ERM may pre-dispose towards the formation of idiopathic macular holes following PVD (natural or surgical – Bersirli et al. 2012). Additionally, ERMs can be associated with peripheral retinal degeneration including holes and tears. For that reason, detection of an ERM indicates the need for a dilated peripheral retinal examination. In this case, the patient has amsler distortion and the schisis is fairly extensive so referral to an ophthalmologist for assessment was recommended. Smaller, asymptomatic ERM's may be managed with 6 monthly review to establish stability.

