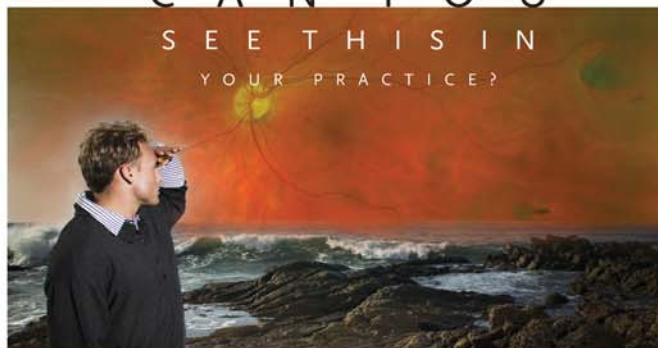


optomap®

Case Study

Retinoschisis

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This patient is a 52 year-old highly qualified nurse who has attended regular eye examinations since 2001. He has an interesting ophthalmic history of nystagmus with an alternating divergent strabismus since his premature birth. His mother suffered toxæmia of pregnancy and his family history includes a maternal grandfather with nystagmus. Over the past 10 years he has had squint surgery and a trial of memantine in an attempt to control his nystagmus. His refraction is:

$$R +5.25/-0.50 \times 20 = 6/12+3$$

$$L +5.50/-1.50 \times 10 = 6/12$$

As far as his current general health is concerned, he has vascular hypertension and hyperlipidaemia which is controlled with Simvastatin and Valsartan. We first scanned him with the **optomap** device in 2005 soon after taking delivery of the instrument, when nothing significant was found (Figure 1). At the next routine visit, two years later, the **optomap** revealed a retinoschisis in the infero-temporal quadrant of the right retina (Figure 2). It looked safe as there were no breaks in either the inner or the outer layers and there was no pigmentation at the edge. He is also hyperopic (about 70 % of patients with innocuous retinoschisis are hyperopic). I emailed his **optomap** images to a retinal specialist who thought the patient was a little older than usual for the lesion to occur. To be on the safe side I referred, but no treatment was advised. Figure 3 shows an OCT image of the lesion.



Figure 1 Right 2005 before retinoschisis



Figure 2 Right 2008 after Retinoschisis

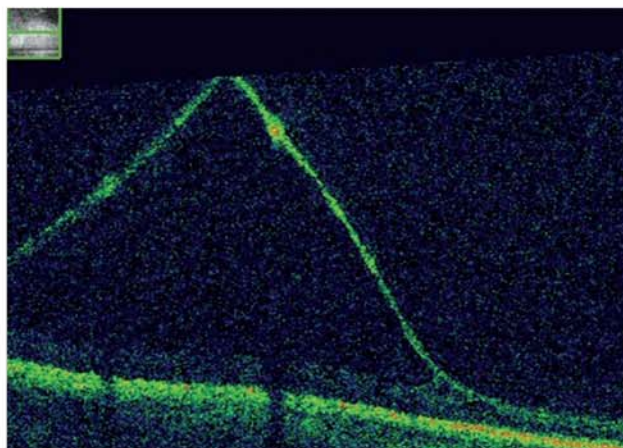


Figure 3 During OCT

Discussion

About 5 % of people over 20 have acquired degenerative retinoschisis. This forms when the retina splits into a cavity bounded by an inner layer formed by the superficial retinal layers, and an outer layer formed by the deeper layers of the retina and retinal pigment epithelium (RPE). The RPE is not disrupted by retinoschisis hence there is no pigment line at the edge. If a pigment line does form, it suggests a retinal detachment is also present. It is usually bilateral and in the infero-temporal retina. The patient is almost always asymptomatic, although may report a visual field defect corresponding to the extent of the retinoschisis. Unless there are breaks in both layers, treatment is rarely indicated as a retinal detachment is most unlikely. However, best practice is to check the retinoschisis every 6-12 months and observation with the **optomap** system is ideal for this task.

David P Austen works in private practice in Loughborough, UK


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