A 68 year old Caucasian female was referred to the Centre for a peripheral retina suite. 2 months previously she had a sudden blurring in the right eye and was treated for a retinal tear. Her best corrected acuity was 6/6 in the right eye and 6/7.6+ in the left. A peripheral lesion was noted in the left eye – Optomap image and OCT of the lesion are shown below. What is your diagnosis and management?
Lattice Degeneration with a sub-clinical retinal detachment.

The Optomap image shows an oval, white/gray band at the inferior temporal equator. The orientation of the lattice is parallel to the ora serrata. The white lines crossing the lattice represent sclerosed blood vessels. Over time, lattice degeneration shows increased pigmentation and retinal thinning, possibly resulting in retinal holes.

OCT imaging of this band of lattice shows thinning of the retina (this is seen in the horizontal line scan, by comparing the retina at the left side to the right side of the image). There is also vitreoretinal traction resulting from the strong adhesion of the vitreous to the lattice. This has resulted in a retinoschisis (splitting of the retina) as can be seen most clearly in the horizontal OCT line scan, and also a sub-clinical retinal detachment where the sensory retina has separated from the RPE. This detachment can be seen in the right hand side of the vertical line scan.

Other findings evident on the Optomap image include a posterior vitreous detachment (as evidenced by the dark floater seen below the optic disc) and spots of chorioretinal atrophy temporal to the area of lattice degeneration.

Lattice degeneration is found in 6-10% of the normal population. It first appears in young patients with a peak incidence in 2nd-3rd decade of life and is bilateral in up to half of all cases. It is most commonly found in the superior and temporal retinal periphery and is more commonly seen in myopes. In an acute PVD, tears may develop along the posterior edge of the lattice.

This patient was referred to a retinal specialist for consideration of prophylactic treatment. For patients with lattice and no associated detachment or tear, an annual dilated fundus examination is recommended with advice to return urgently if any new signs or symptoms occur. Scleral indentation and OCT imaging is highly recommended as these can detect any anomalies such as the sub-clinical detachment seen in this patient.