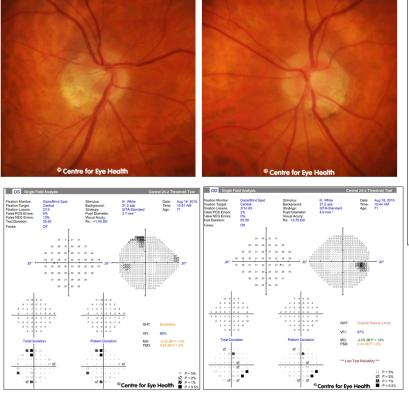
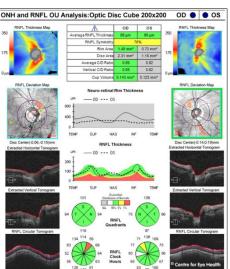
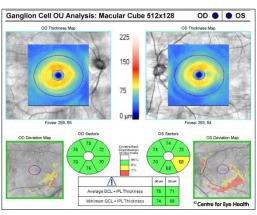


CFEH Facebook Case #26

A 71 yo male was referred to CFEH for a glaucoma assessment. His historical glaucoma risk profile includes high myopia and hypertension. IOP's were 16mmHg OD, 24mmHg OS. CCT was 573µm OD, 568µm OS. Gonioscopy was wide open with moderate pigmentation and slitlamp showed a few scattered endothelial pigment cells but no transillumination defects in either eye. His visual fields results were variable when repeated with no repeatable relative depressions. What is your diagnosis for each eye? For the Centre's chairside references on glaucoma and glaucoma treatment click here







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ANSWER

Right eye – glaucoma suspect. Left eye – (pre-perimetric) primary open angle glaucoma

The small, tilted and obliquely inserted discs complicate a glaucoma assessment. Similarly high myopia and associated staphylomas can also lead to variable imaging and visual field results, in particular with respect to normative comparisons. As a result, the complete clinical picture needs to be assessed to arrive at an appropriate diagnosis.

Pigment dispersion syndrome (PDS) is usually characterised by two or more of: iris transillumination, pigment deposition on the central corneal endothelium and increased pigmentation of the trabecular meshwork (Balidis et al., 2002). In this case, a diagnosis of PDS is not appropriate given the sparse nature of endothelial pigment deposition in conjunction with a lack of transillumination defects.

There is no evidence of glaucomatous thinning of the NRR or OCT RNFL and GCA in the right eye. In conjunction with variable visual fields results showing no repeatable loss, the right eye was classified as a glaucoma suspect.

The left NRR was thin inferiorly with stereo assessment with a correlating relative thinning of the OCT RNFL and GCA analysis (despite being classified as within the normal range). Given that the IOP was elevated but there was no repeatable field defect, the left eye was classified as having pre-perimetric primary open angle glaucoma.

A prostaglandin analogue was prescribed for the left eye only, lowering the IOP to 15mmHg. The patient is now undergoing collaborative care with the referring optometrist and CFEH's Glaucoma Management Clinic.