A 31 year old Caucasian female presented for an optic nerve assessment. Acuities were 6/24 OD and 6/7.5 OS, uncorrected. Identify the optic nerve condition seen in this patient and the possible complications of this condition.
ANSWER

Morning glory anomaly.

This anomaly is congenital and typically unilateral in presentation. It is characterised by a large funnel-shaped excavation of the disc, usually with an associated white glial tuft in the centre of the disc. This tuft is caused by a persistent hyaloid vascular remanent – seen in this case at the centre of the excavated disc in the middle OCT image.

The disc is typically orange/pink in colour with surrounding chorioretinal pigment changes in a ring-shaped pattern and the blood vessels are increased in number, emerging from the excavated disc in a radial pattern rather than in a typical branching pattern.

From the OCT images, we can also see paravascular cysts superior and inferior to the disc with associated vitreo-retinal traction. Inferiorly there is also a mild retinoschisis present. The B-scan ultrasound shows a posterior staphyloma and the morning glory disc is evident.

Morning glory anomaly has a strong association with serous retinal detachment the incidence of which is commonly reported at 30%. Presentation may be sporadic, or have systemic associations such as frontonasal dysplasia (mid-facial anomalies) and midline brain malformations.