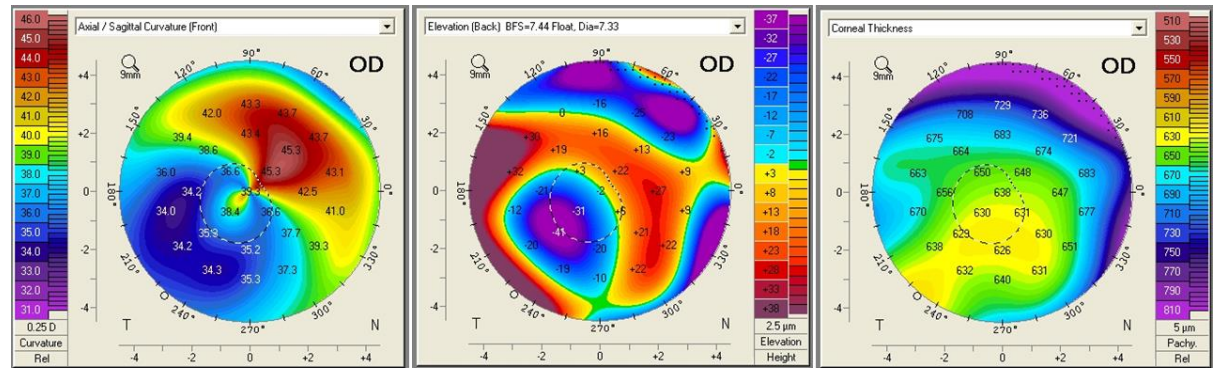
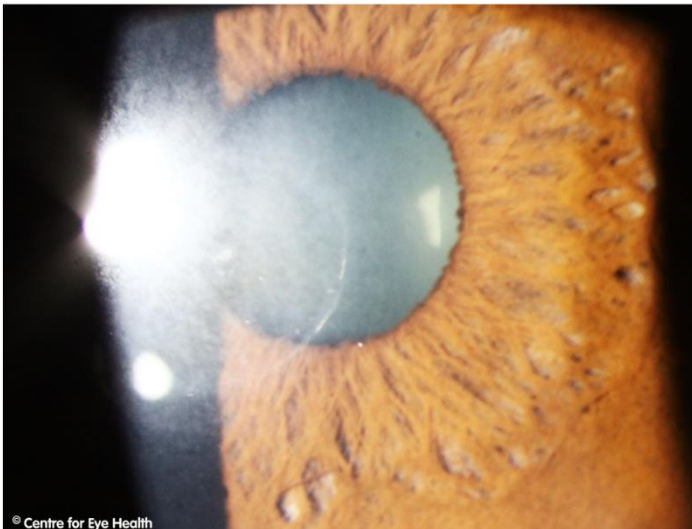


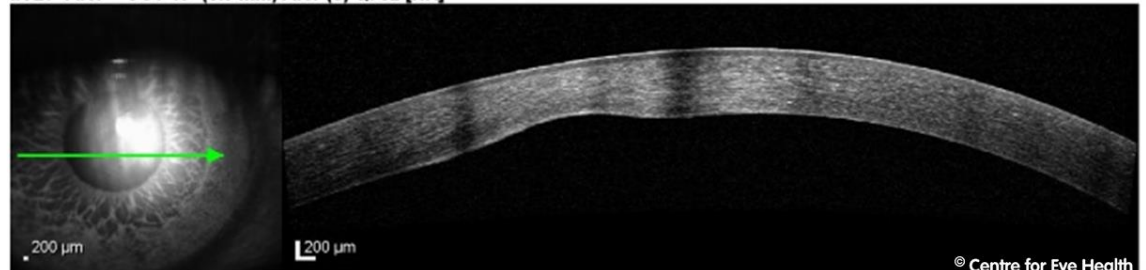


CFEH Facebook Case #132

A 46 year old male presented for a corneal assessment. He reports that he has always felt his vision was a bit blurry and that he finds night driving difficult. He takes Celebrex and has an unremarkable ocular history. Both eyes had a similar appearance so only the right eye is shown below. His corrected acuity was 6/9 in this eye, central corneal thickness was $633\mu\text{m}$ and minimum corneal thickness $608\mu\text{m}$. What is the most likely diagnosis for this patient (note that no contact tonometry was performed on this patient).



IR 20° ART + OCT 15° (8.3 mm) ART (8) Q: 32 [HR]



Answer

This patient has bilateral disc-like areas of stromal haze in the central cornea. OCT scans show focal areas of irregular thickening and thinning as well as increased hyper-reflectivity of the posterior cornea. Corneal topography showed anterior corneal steepening superonasally with flattening of the inferotemporal cornea. Central corneal thicknesses were greater than average at 633 μ m (OD) and a similar reading on the left eye.

These findings are consistent with a diagnosis of posterior keratoconus – a rare, non-progressive condition with sporadic presentation. It is usually considered a developmental disorder, however it may also arise secondary to ocular trauma. Vision impairment may arise from stromal scarring or amblyopia.

There are 2 distinct types of this condition described in the literature:

- Keratoconus posticus generalis: characterised by increased curvature of the entire posterior cornea
- Keratoconus posticus circumsriptus: characterised by localized paracentral or central posterior corneal indentation, as in our patient.

This patient was scheduled for review in 6 months to establish stability of the condition.