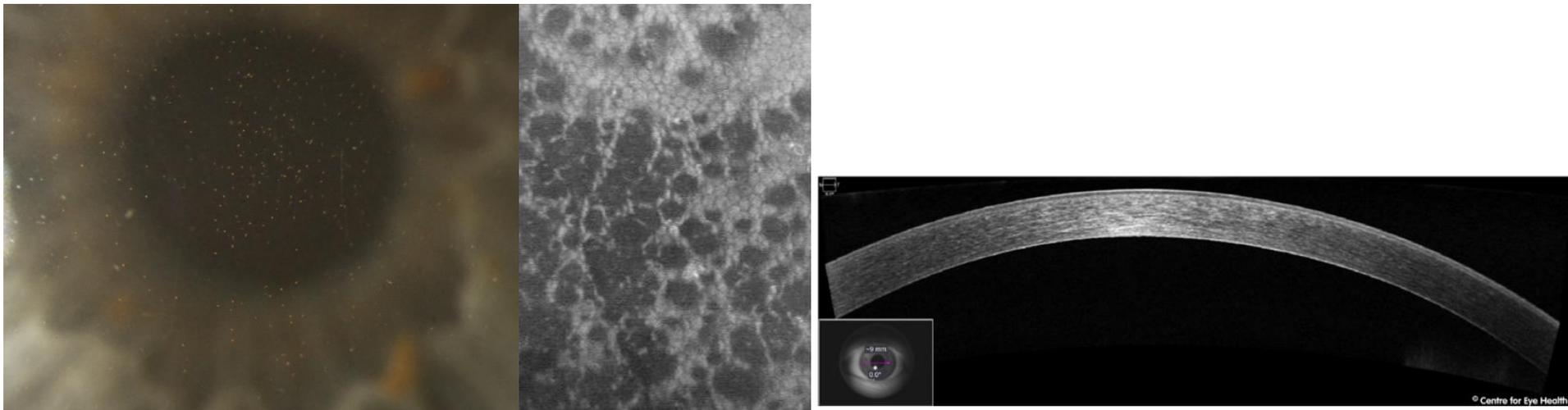




CFEH Facebook Case #114

A 38 year old Caucasian female presented for a corneal assessment. She mentioned she was very sensitive to glare and that her vision was often blurry in the mornings. She is not a contact lens wearer and reports no previous eye trauma. Her visual acuity was 6/7.5- OU and both eyes had a similar appearance so only the left eye is shown. What is the corneal condition causing her current symptoms and what is the appropriate management of this patient?



ANSWER

The slit lamp photo shows pigment dusting. The guttata are more obvious on the confoscan image while anterior OCT shows nodular formation of the endothelium and a thickened Descemet's membrane. These clinical signs and the patient's symptoms are consistent with a diagnosis of Fuch's endothelial corneal dystrophy. This presentation is already relatively advanced.

Fuch's dystrophy typically appears in the 4th decade of life and is more common in females than males. Guttata usually start in the central cornea and over time expand to affect the peripheral cornea. The corneal endothelium has a "beaten metal" appearance and, as in this case, may show signs of pigment dusting.

Over time, stromal oedema can progress to cause epithelial bullae or bullous keratopathy. Scarring, fibrosis and superficial vascularization of the cornea can occur secondary to the long-standing corneal oedema associated with this condition.

In the early stages, hypertonic saline may be used to manage the corneal oedema, however as the disease progresses, surgical options must be considered. Due to the high rates of rejection and complications, penetrating keratoplasty is not the first choice of treatment for Fuch's dystrophy. Newer techniques such as Descemet's stripping automated endothelial keratoplasty (DSAEK) and Descemet's membrane endothelial keratoplasty (DMEK) are preferred options.

This patient was referred to a corneal specialist for consideration of surgery.

Proudly brought to you by
LEARNING FOR VISION

