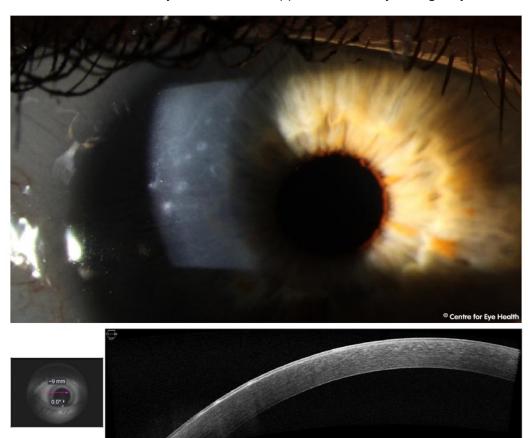


CFEH Facebook Case #52

A 59 year old Caucasian female was referred for a corneal suite. She was asymptomatic and taking no medications. What is the likely condition she suffers from? Note that both eyes had a similar appearance so only the right eye is shown here.











ANSWER

Epithelial basement membrane dystrophy (EBMD) - formerly known as map-dot fingerprint dystrophy or Cogan microcystic epithelial dystrophy.

This condition is the most common type of corneal dystrophy, affecting approximately 2% of the population. EBMD has a spectrum of possible presentations, including this one where the patient has "dots", characterised by round or oval intraepithelial opacities that have a greyish appearance and don't stain with fluorescein dye. The anterior OCT shows corresponding abnormalities at the basement membrane.

Other presentations can include "maps", "fingerprint" lines or a "bleb" pattern. Onset is typically in adult life and the condition is often asymptomatic initially but can be associated with painful corneal erosions and visual disturbances (irregular astigmatism and image ghosting). This condition may be degenerative. Initially management of the corneal erosions may include bandage soft contact lenses, lubricating gels or hyperosmotic ointment. More advanced cases may require greater intervention, such as superficial keratectomy.