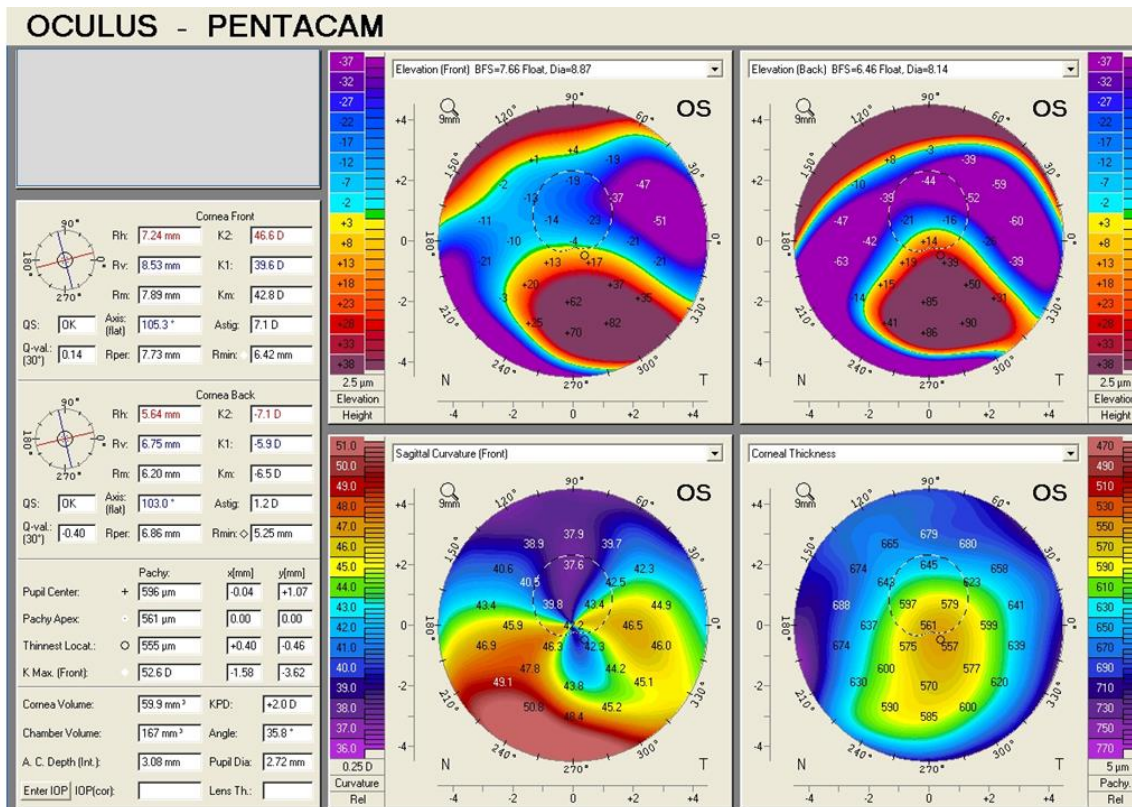




CFEH Facebook Case #107

A 59 year old male presents complaining of some blur at night, even with spectacles. His general health is good and he takes no medications. Refraction shows 7.00D of cyl in each eye (axis 90 degrees) and best corrected acuity is 6/7.5- in the left eye which is shown. Note that both eyes have similar topographic results. What condition is causing the blur noticed by this patient?



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ANSWER

Pellucid marginal degeneration.

This patient's topography results show an inferior elevation of the anterior and posterior corneal surfaces with a crab-claw pattern of anterior corneal surface steepening. Corneal thicknesses at the pupil centre are within normal limits with the thinnest locations measuring 555µm. These findings are consistent with a diagnosis of pellucid marginal degeneration.

Pellucid marginal degeneration is most common in males and is typically diagnosed in the 4th or 5th decade of life. It is associated with high against the rule astigmatism with near-normal visual acuity.

Over time, PMD can progress, leading to more inferior corneal thinning and increased blur with spectacles. Management options include spectacles and/or RGP contact lenses with most cases able to be managed in this way. Very advanced cases can develop acute hydrops with corneal oedema and these cases may require surgical intervention in the form of penetrating keratoplasty, lamellar keratoplasty, INTACS or collagen cross-linking.

For further information on differentially diagnosing corneal ectatic disorders, please refer to the CFEH Chairside reference "Corneal ectatic disease and thinning disorders", available at

<https://centreforeyehealth.com.au/wp-content/uploads/2017/09/Chairside-reference-Corneal-Ectasia.pdf>