

BACKGROUND

- A variety of conditions can benefit from a soft prosthetic contact lens, such as color deficiency, diplopia, photophobia, aniridia, leukocoria, microphthalmia, or strabismus.<sup>1</sup>
- Types of lenses
  - Frequent replacement: simple cosmetic change, pigment not dense enough for occlusion
  - Computer printed: reproducible, useful for darker irides
  - Hand painted: more precise, more expensive, useful for lighter irides
- To order, obtain:
  - Fitting eye - keratometry measurements, centration and stability information
  - Fellow eye - iris diameter, pupil diameter (normal room illumination), color matching photos<sup>2</sup>

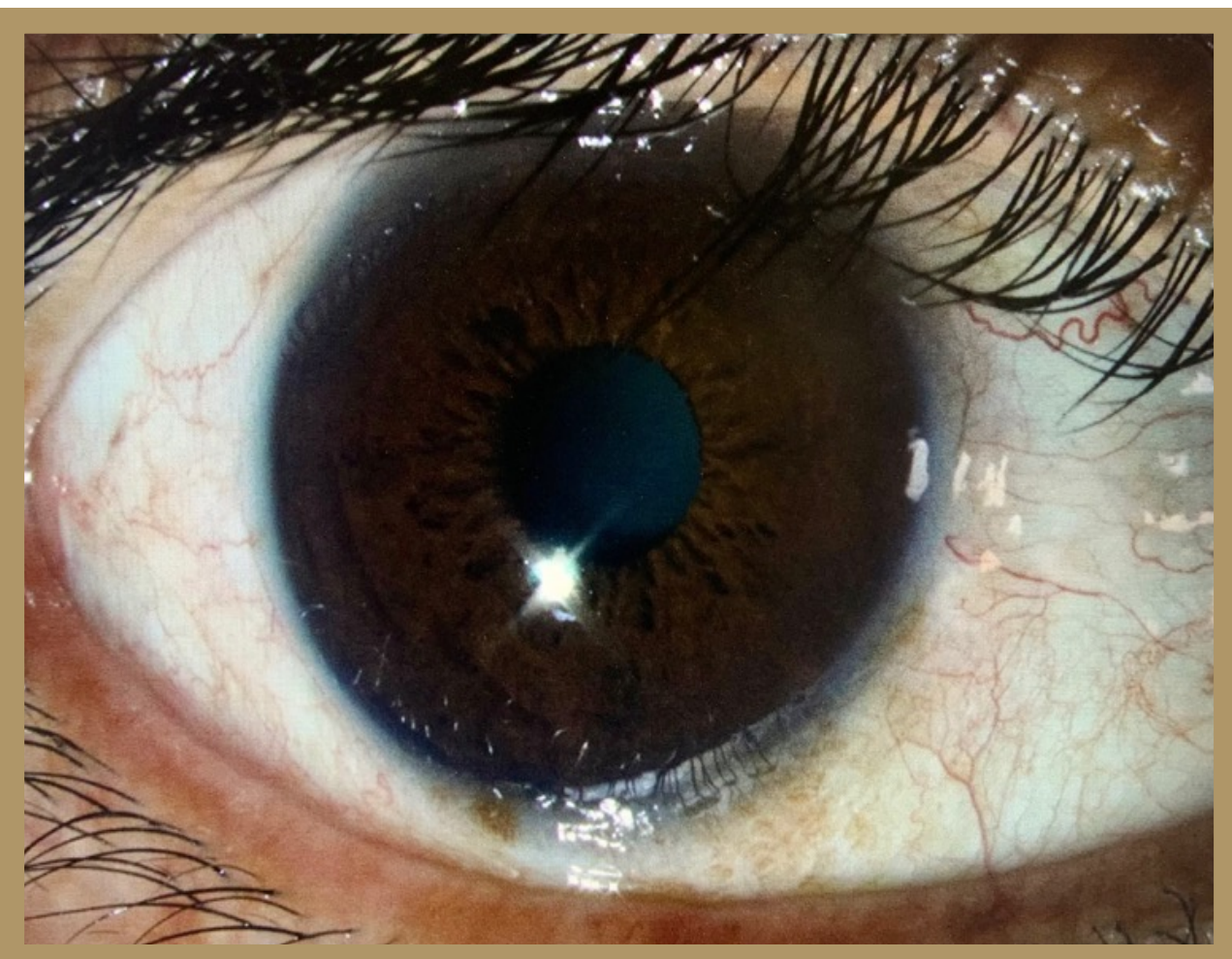
CASE HISTORY



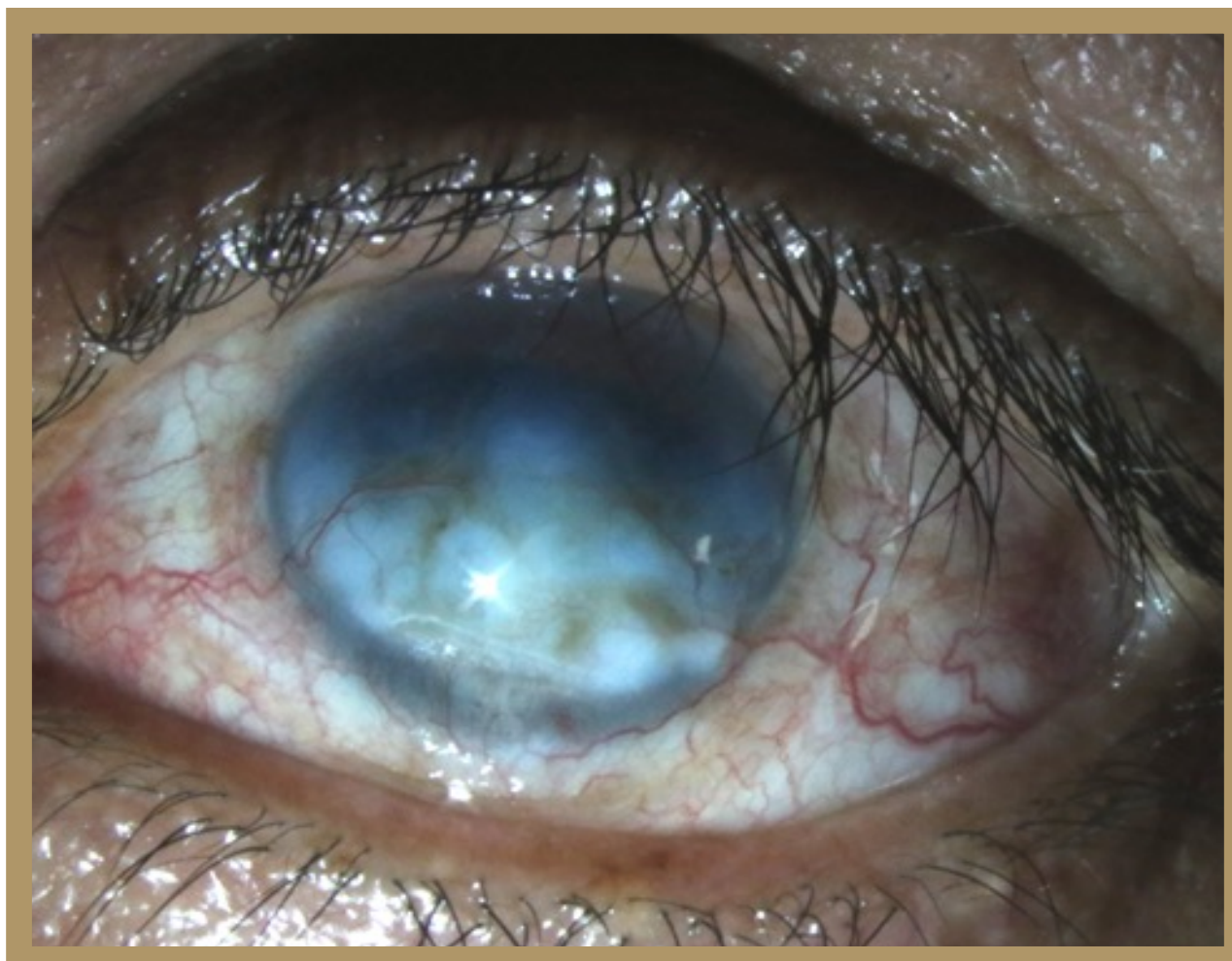
- 62 H M
- Presents with above glasses
- CC: mild intermittent blur OD, photophobia
- POH: **Repair for open globe rupture OS due to two inch finishing nail through cornea** (Aug '17)
  - Recurrent retinal detachments/Traumatic glaucoma OS
  - Charles Bonnet Syndrome
  - Lost to follow up for 2 yrs

CLINICAL FINDINGS

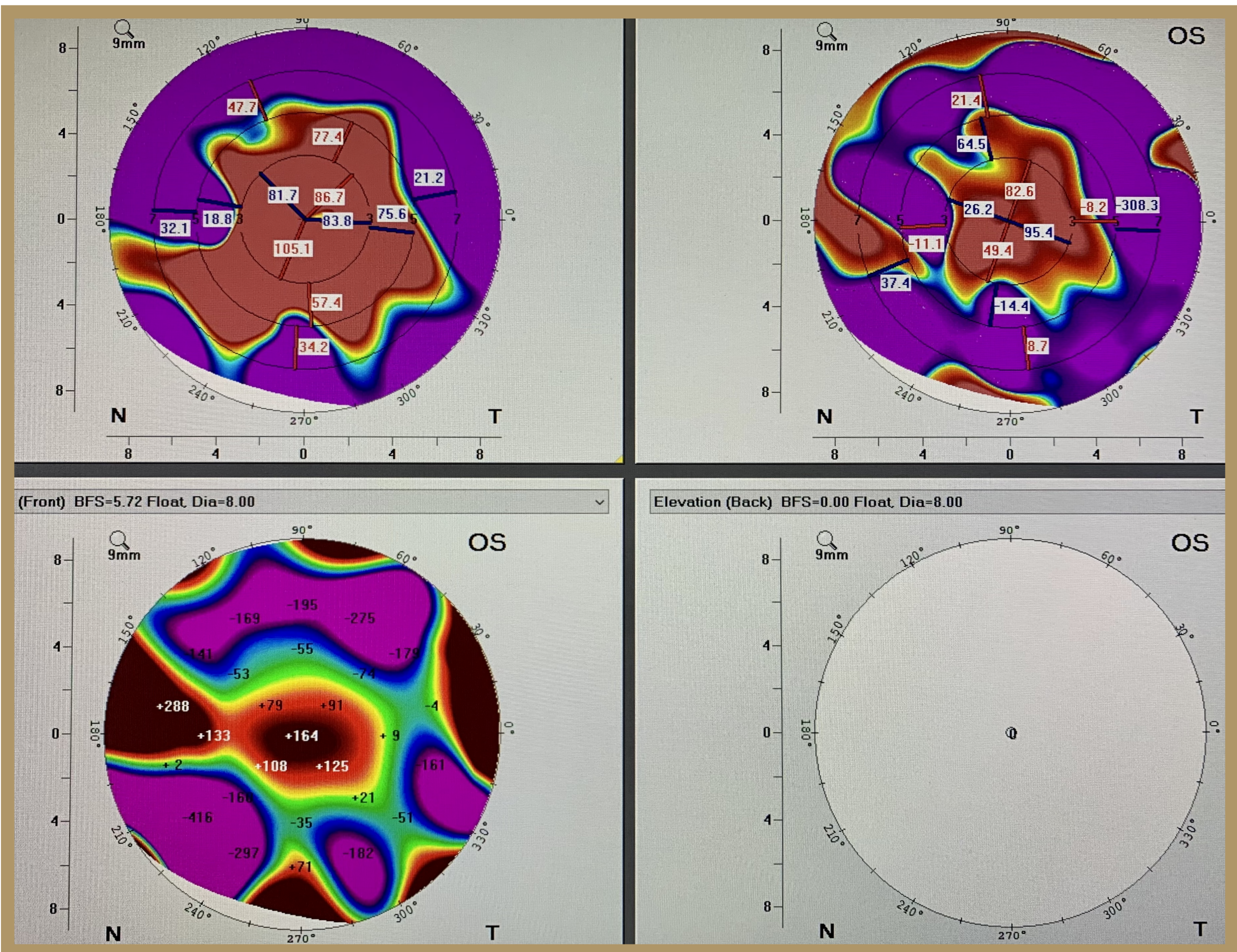
	OD	OS
VA	20/20, cc	LP, sc
IOP, GAT	16	40



OD: ambient pupil size 3mm, HVID 11.5mm

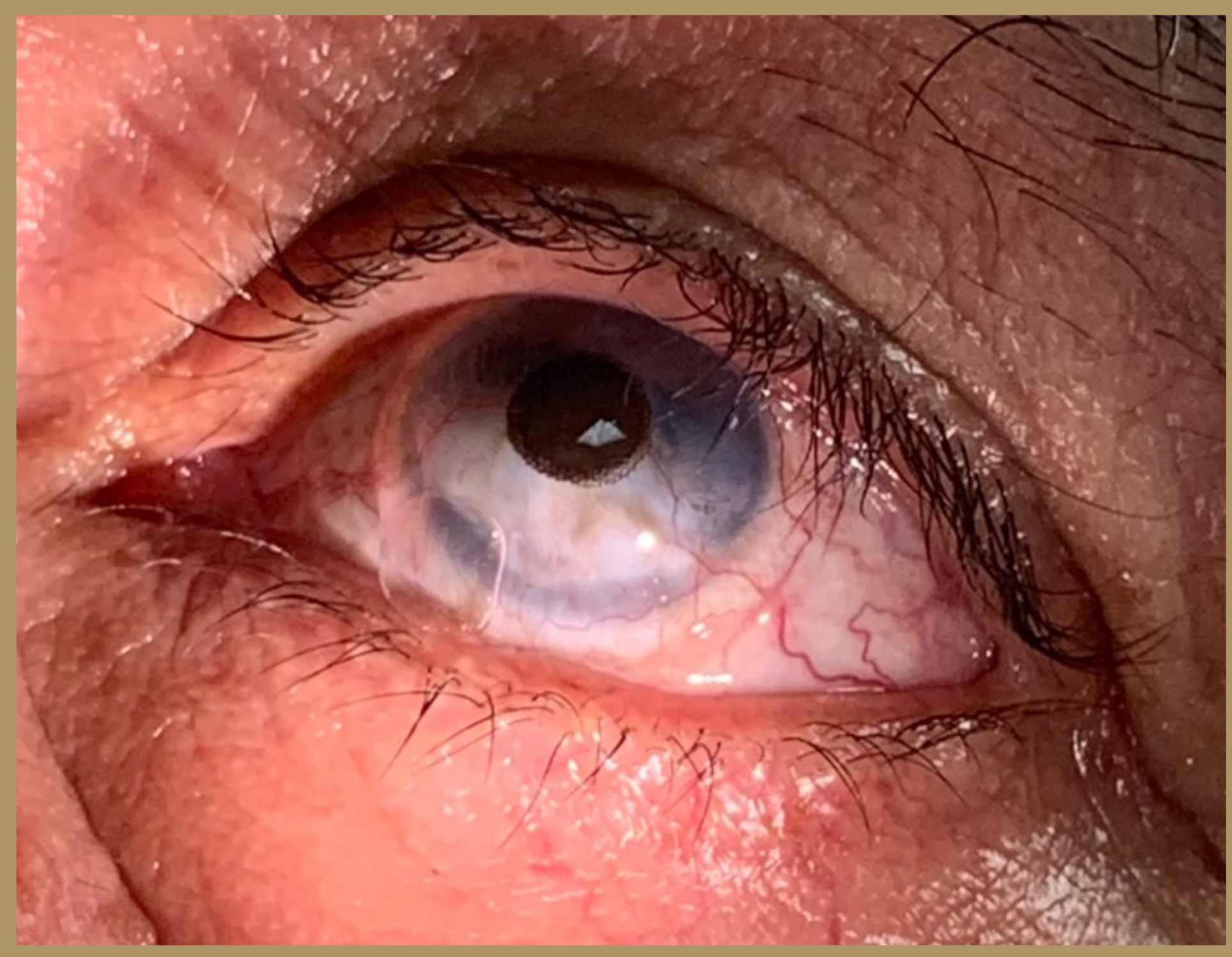


OS: conjunctivization of cornea with deep neo



MANAGEMENT

- Traumatic glaucoma
  - Begin pressure lowering drops and Diamox. Consider future CPC.3
- Dry Eye
  - Cause of intermittent blur. Begin ATs qid/prn.
- Photophobia
  - Fit a prosthetic contact lens OS with occlusion backing for both function and cosmesis



NovaKone (15.0 dia, 6.6 bc)  
 → large bubble inf/nas  
 → adequate fit given circumstances  
 → brand not available with occlusion



Orion bioColors (14.3 dia, 8.6 bc)  
 → excessive edge fluting

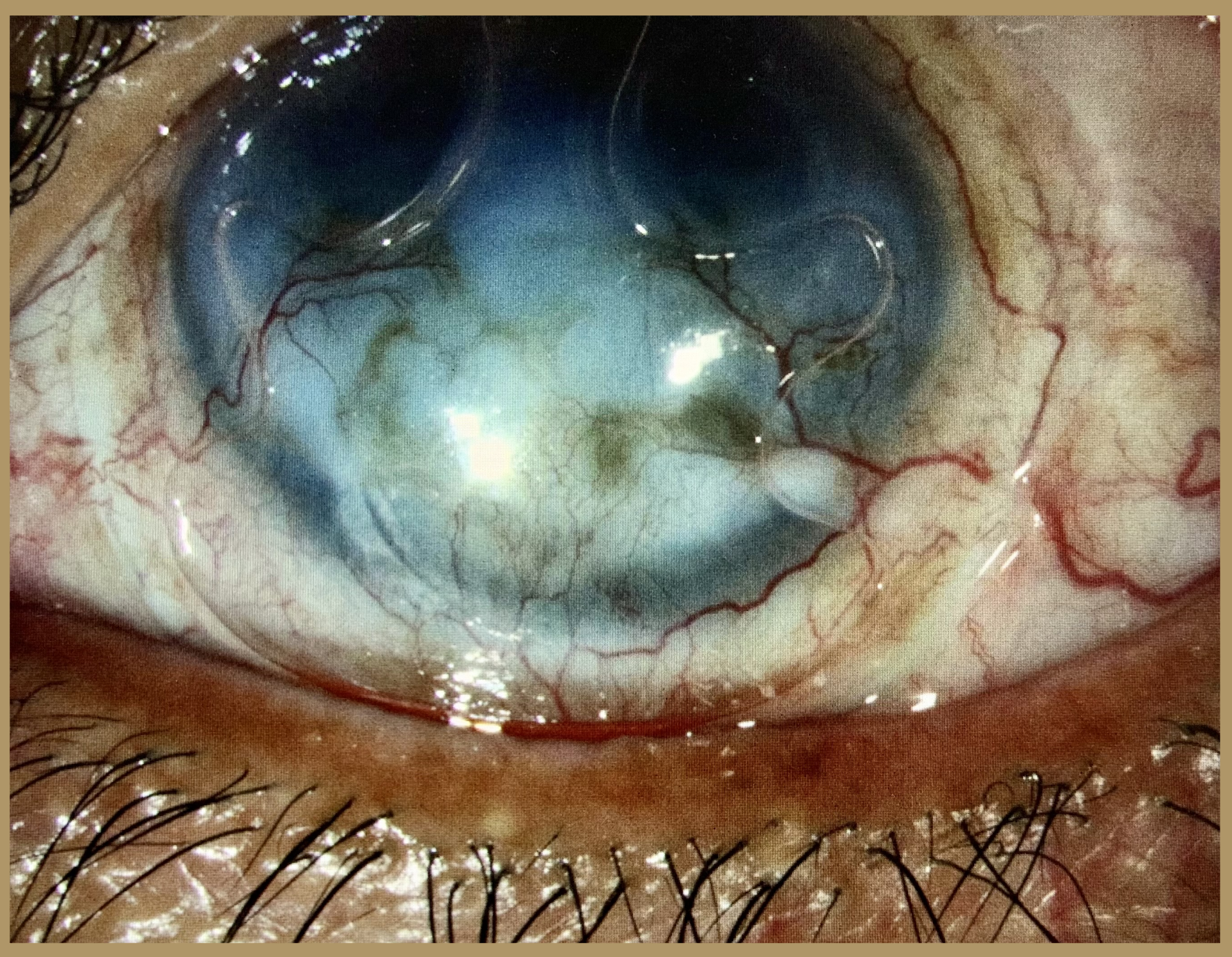


ABB clear custom trial (14.0 dia, 6.8 bc)  
 → excessively steep



ABB clear custom trial (14.5 dia, 7.6 bc)  
 → large bubble inf/nas  
 → adequate fit given circumstances  
 → okay to order with occlusion

- Ordered:
- 14.5 dia
  - 7.6 bc
  - Complete occlusion, Underprint U1, black 3mm pupil, iris color #55x, HVID 11.75mm

TAKE HOME POINTS

- Before investing in a printed lens, It can be helpful to order a clear trial to ensure proper fit, comfort, and vision.
- Consider continued use of glasses over the lens. This aids in safety, helps to camouflage the prosthetic, and can change the perceived size of the eye.
- Soft prosthetic lenses can improve the quality of life for patients with a variety of ocular conditions.

REFERENCES

- Lam, D. (2015). Soft Contact Lenses for Prosthetic Fitting. Contact Lens Spectrum, 30, 33–39.
- Cassel , M. (2010). Changing Lives With Prosthetic Soft Lenses. Contact Lens Spectrum.
- Ahluwalia , M. A., & Vold, S. D. (2013). Managing the Blind, Painful Eye. Glaucoma Today, Clinical Strategies