

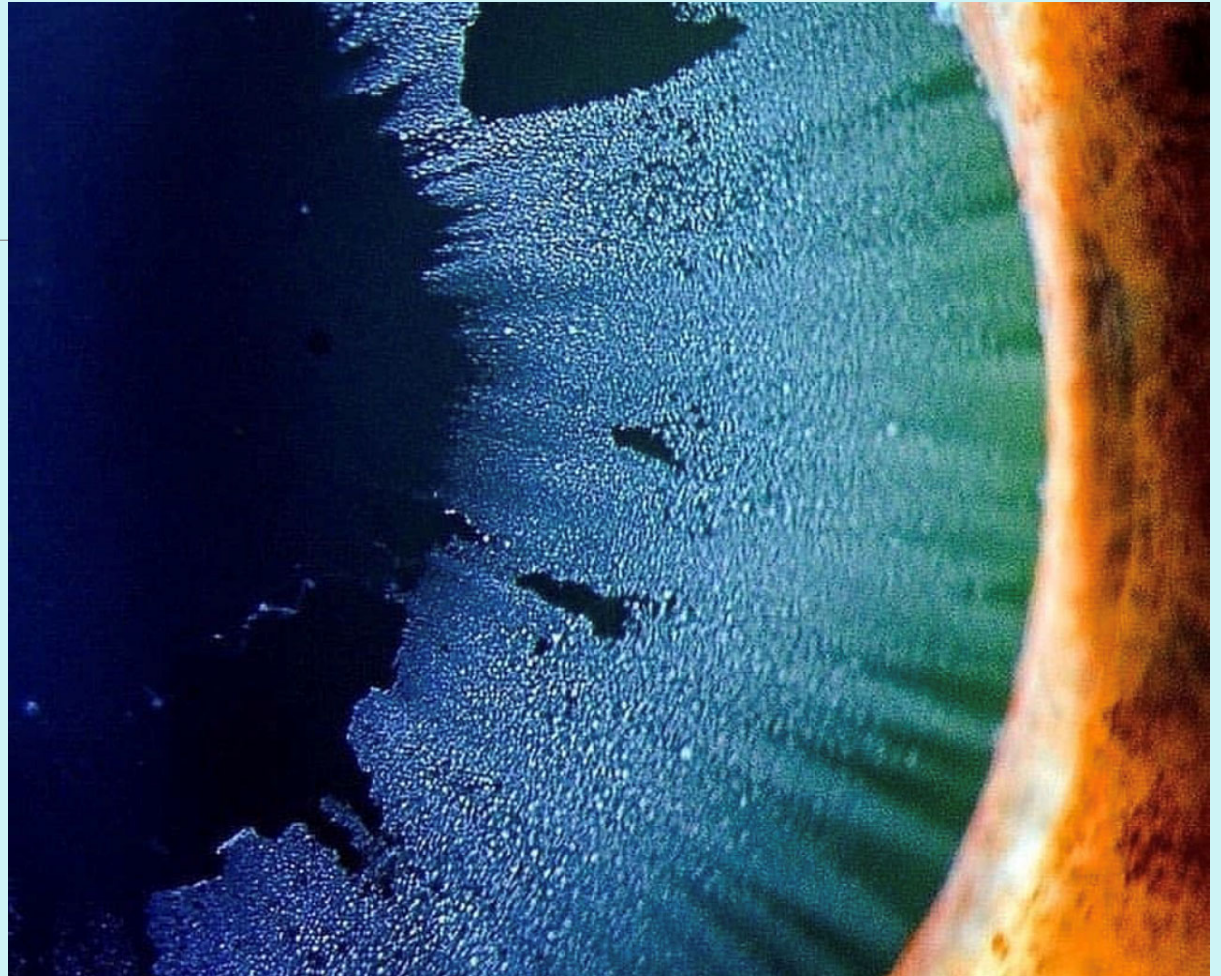
Weak Zonules – Identification and Treatment Options

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Financial Disclosures

Alcon

Aerie Pharmaceuticals

Bausch and Lomb

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Novartis

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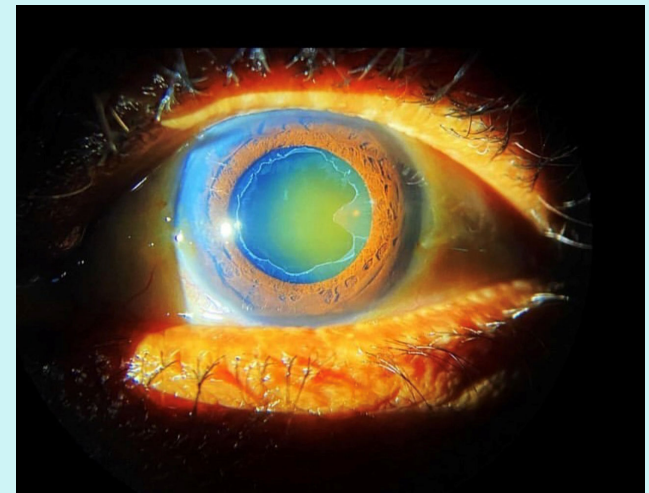


Start with a Thorough History and Slit Lamp Exam

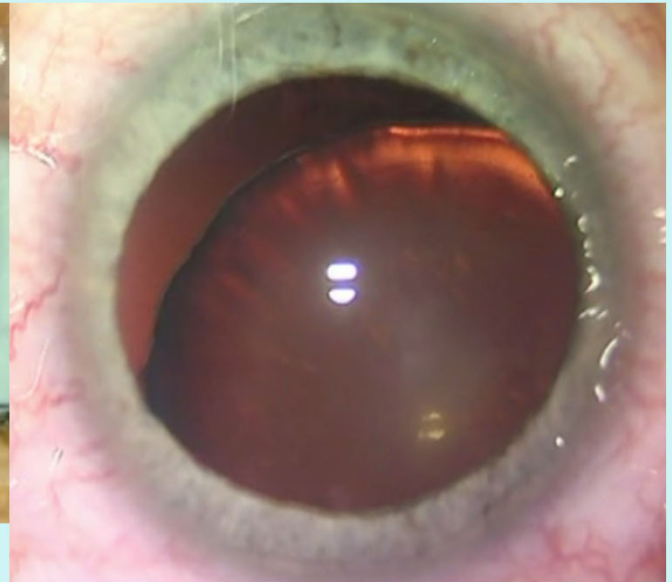
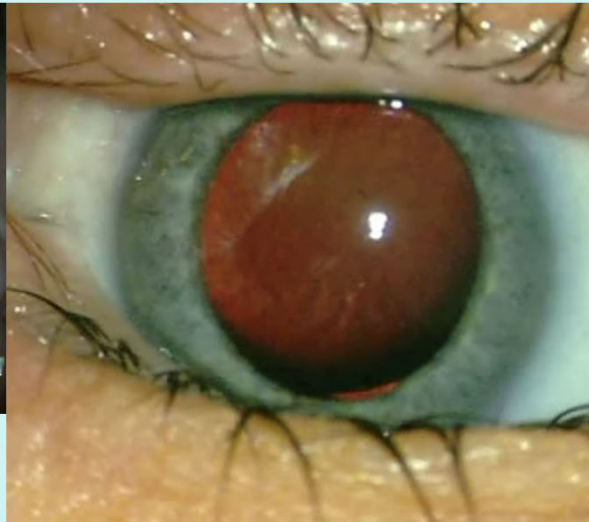
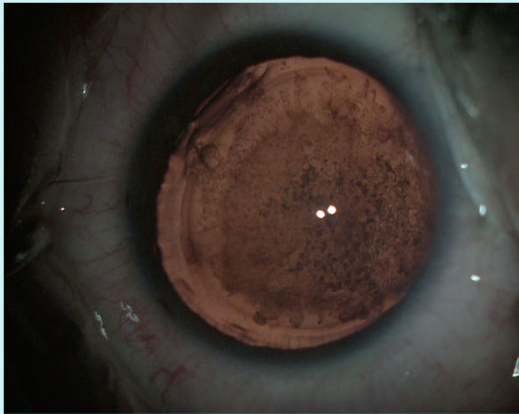
History of trauma or prior vitrectomy

Instability of the capsular bag complex

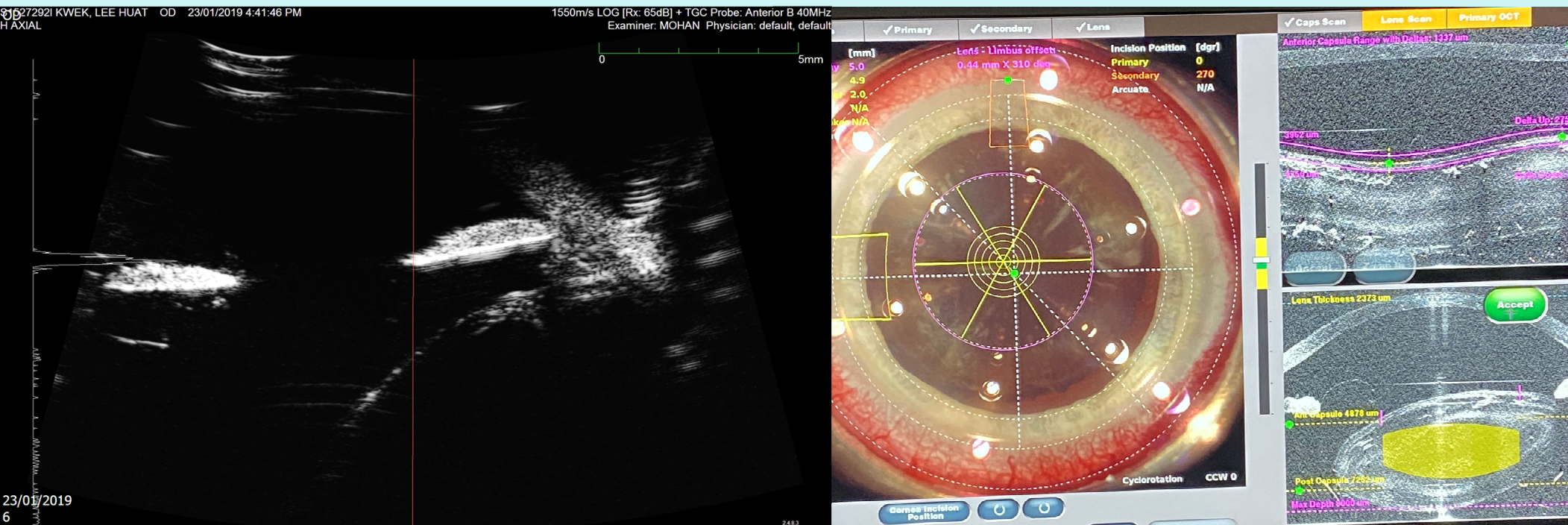
- Pupil Size
- Pseudoexfoliation material
- Change in lens position with movement of patient (blink, supine, looking in various directions)
- Iris transillumination defects
- Depth of the anterior chamber
- Space between iris and anterior capsule wider on one side



Zonular dialysis may be noted at the SLE

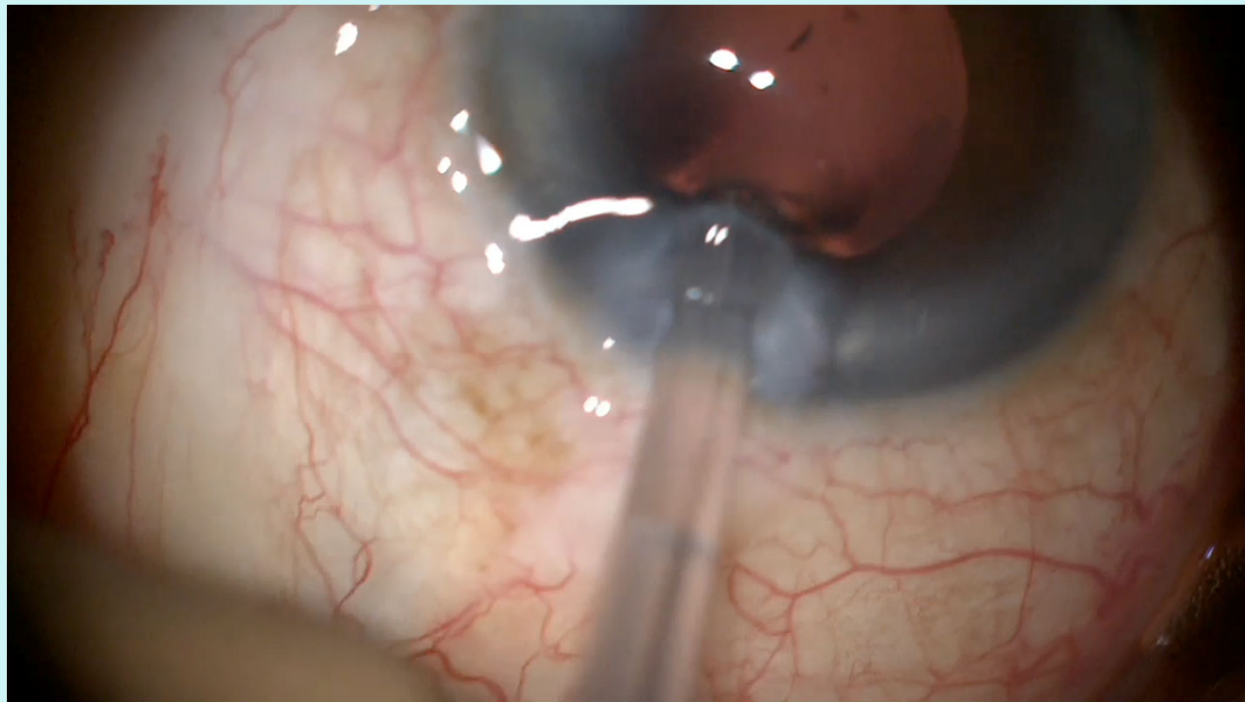


Zonular dialysis may be noted with UBM or OCT



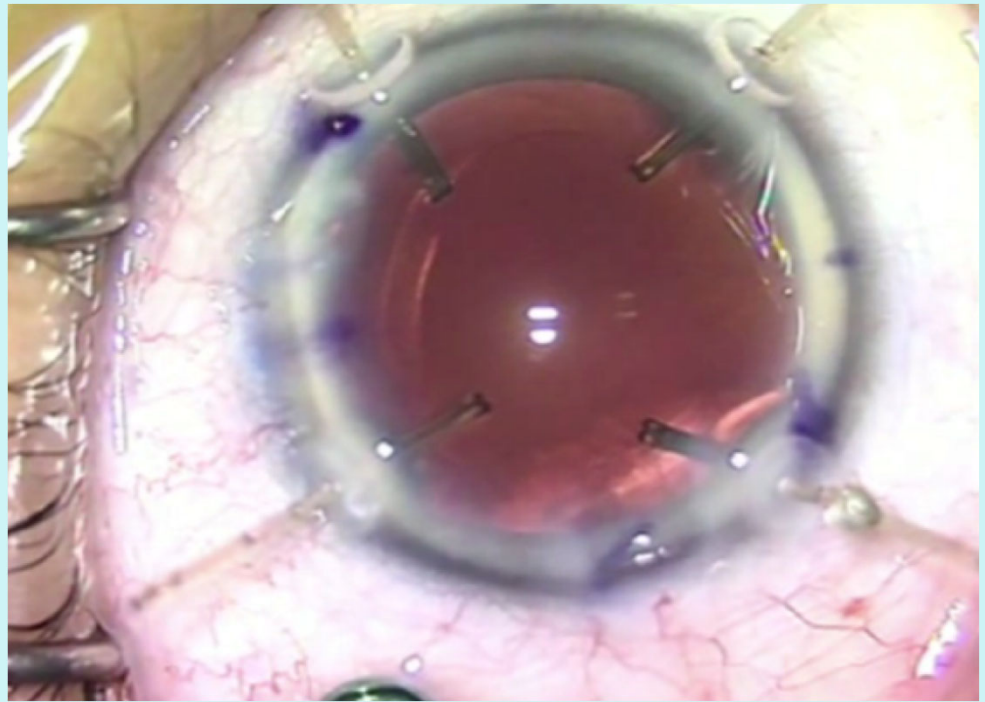
Mild Zonulopathy

- Mild generalized weakness
- One quadrant or less
- Iatrogenic more stable
- Managed without the use of capsule hooks

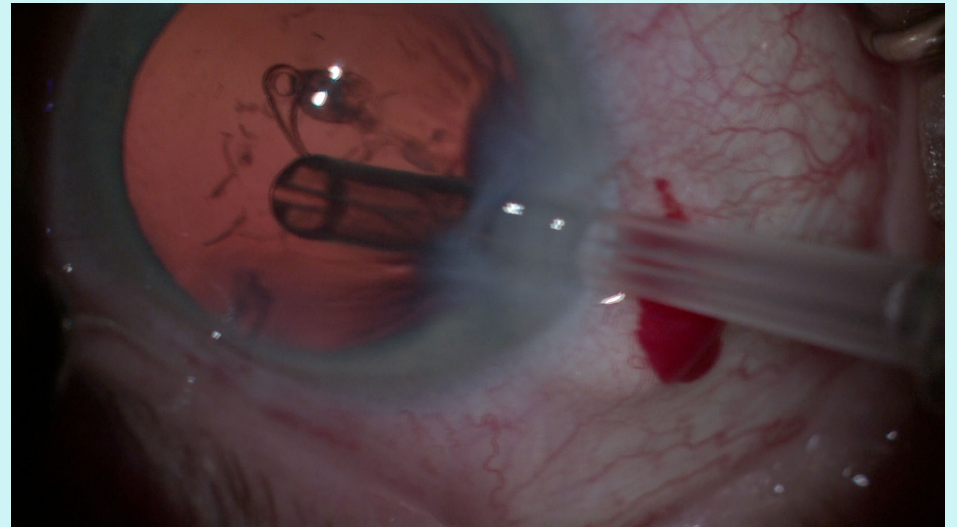
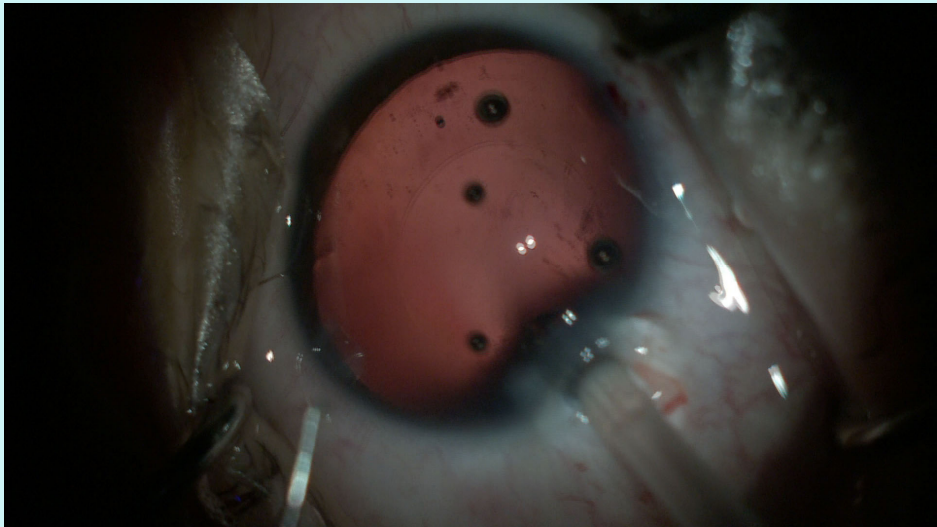


Moderate Zonulopathy

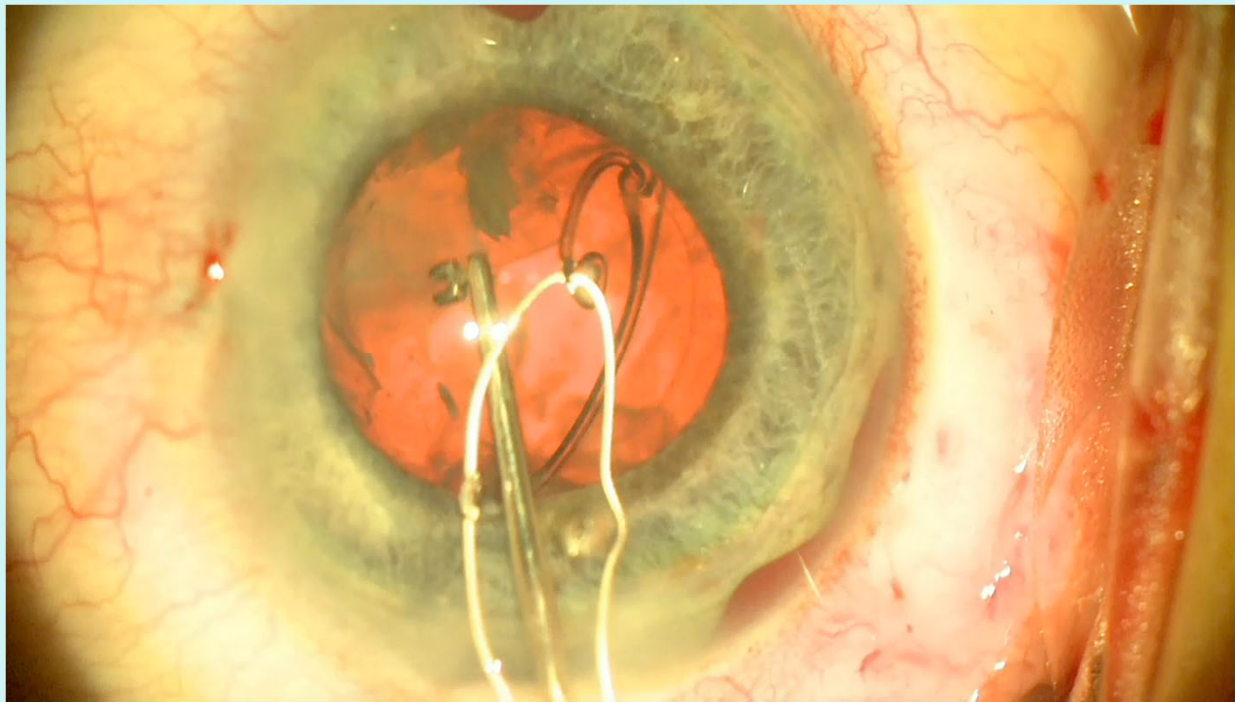
- Moderate generalized weakness
- More than one quadrant involved
- Iatrogenic more stable
- Capsule hooks or segments may be needed



CTR insertion with Sinsky

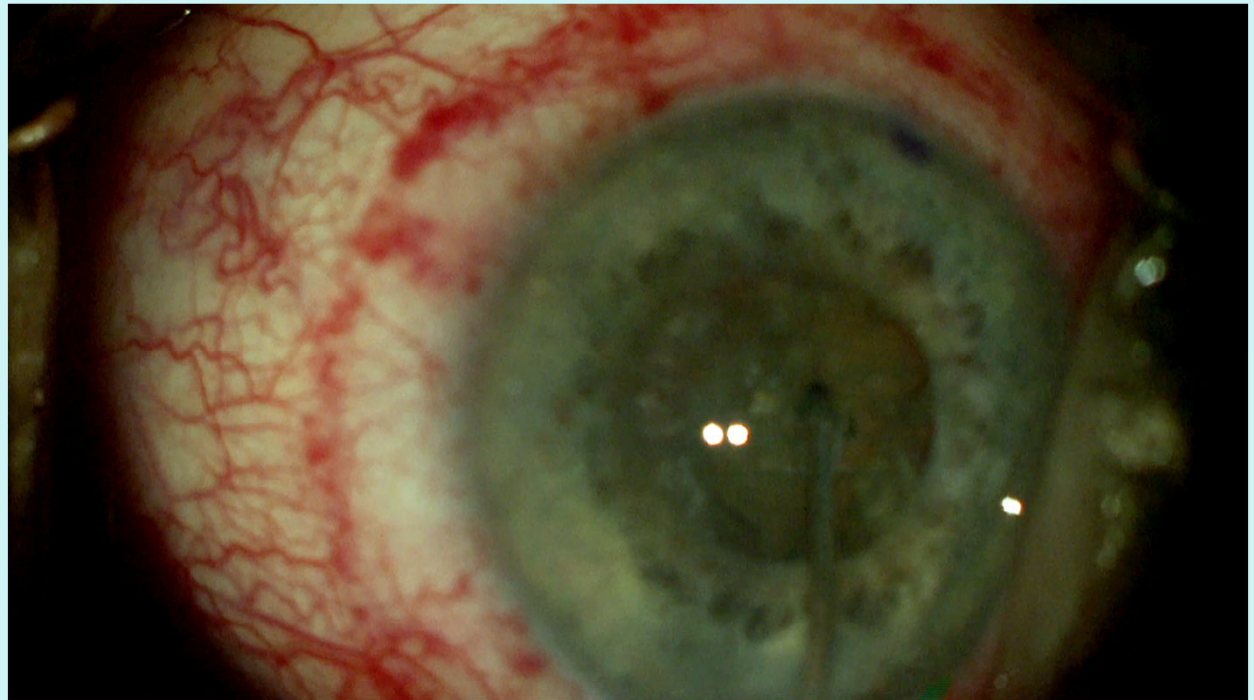


Moderate/Severe Zonulopathy

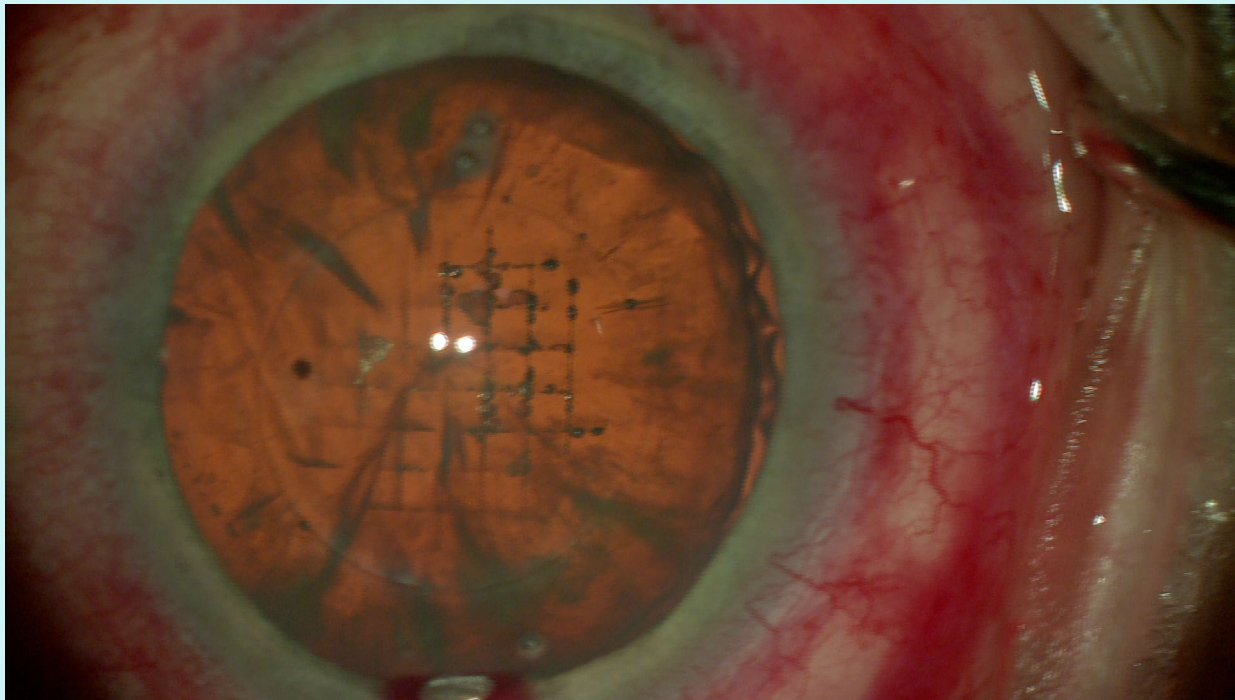


Mod/Severe Zonulopathy

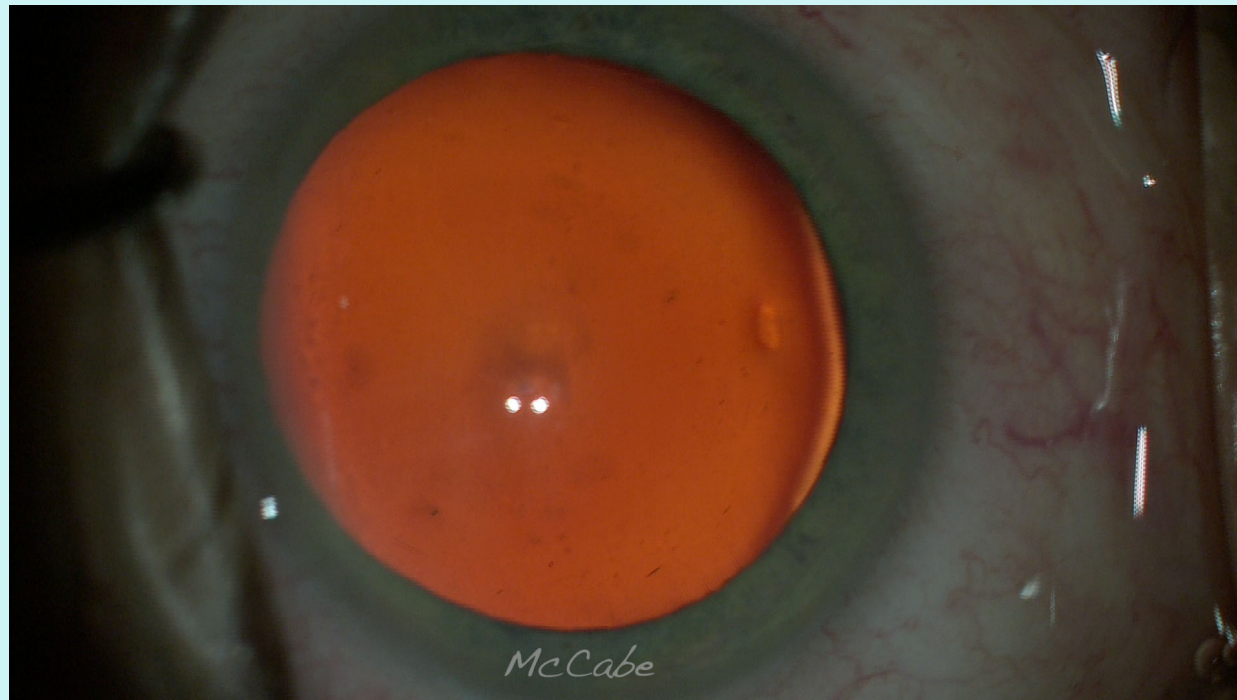
- Pupil expander used as capsule support
- CTR
- Ahmed segments with 5-0 prolene



Ahmed segment/hooks/CTR



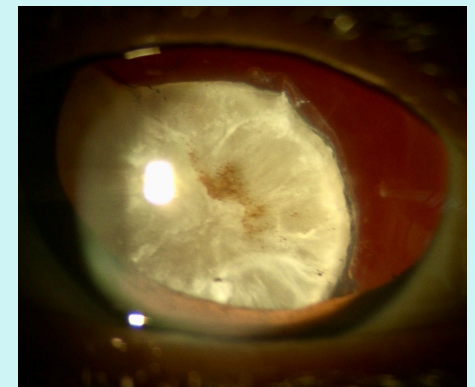
CTR in the bag, IOL in the sulcus with
optic capture



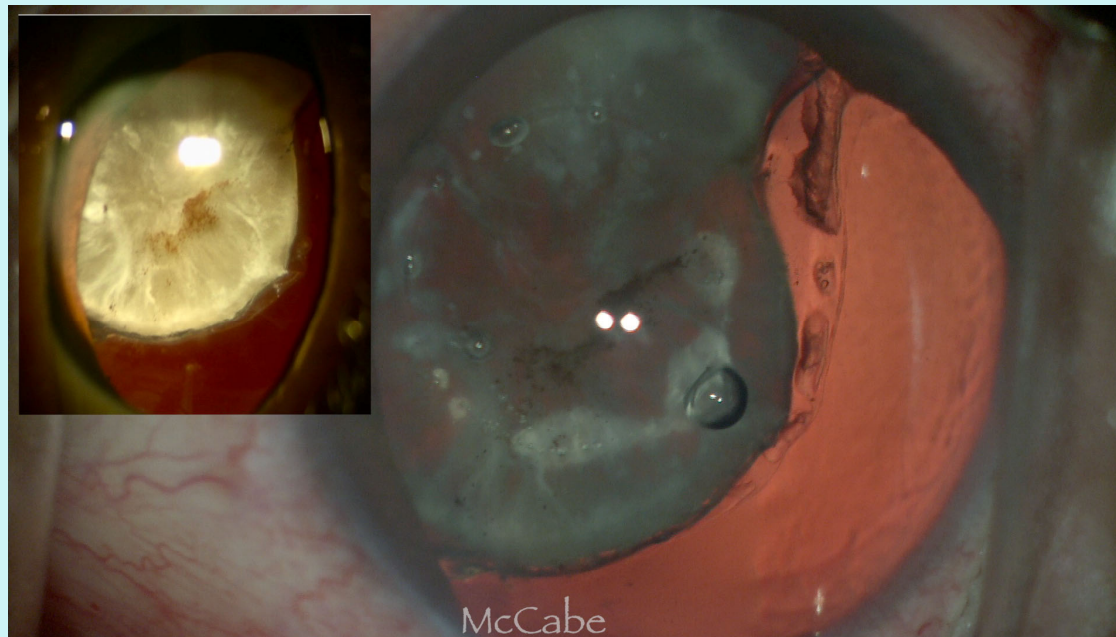
Severe Capsular Compromise

- Few zonules or very weak zonules
- No capsule
- Large anterior to posterior tear
- IOL exchange for dislocated lens
- Secondary IOL in aphakic patients

- ACIOL
- PCIOL
 - Iris fixated
 - Scleral Fixated
 - Sutured (9-0 prolene vs. gortex)
 - Glued
 - Yamane technique



Post Bungee Cord Injury



5 Pearls

Have proper instruments, suture, rings, segments and extra dispersive and cohesive viscoelastic on hand

Have appropriate back up plan(s) in mind

- Back up lenses calculated for the AC, sulcus, or sutured/iris or scleral fixation
- Have sulcus power conversion chart on hand
- Have manual LRI chart available if toric placement not possible

Have Miochol or Miostat on hand

Learn/practice several suturing techniques...

BE PREPARED!



Thank You!