Cataract Surgery

What Could Possibly Go Wrong?

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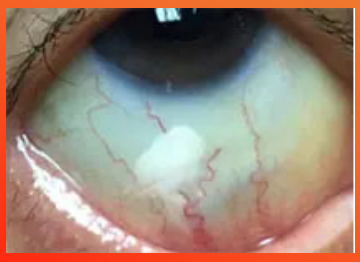

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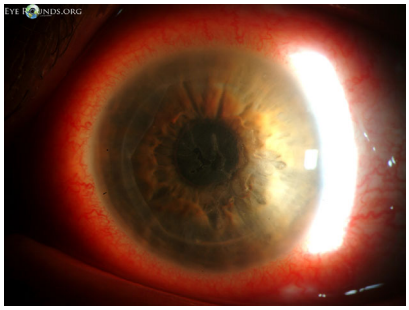

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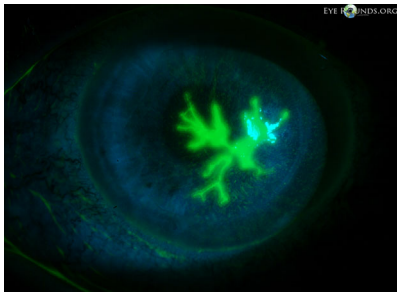

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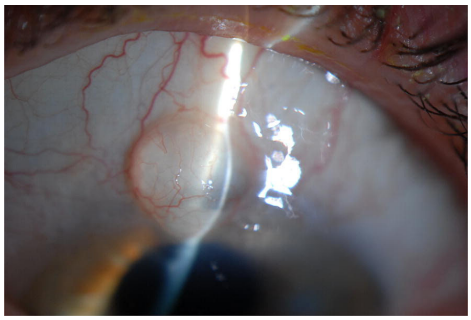

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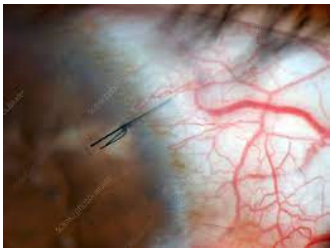

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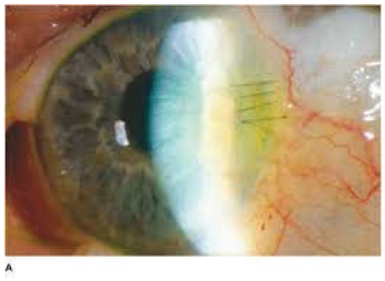
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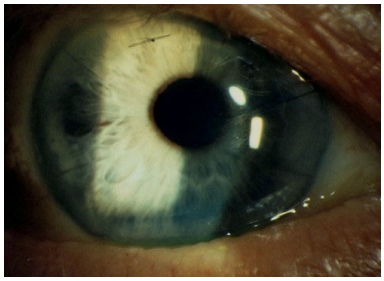

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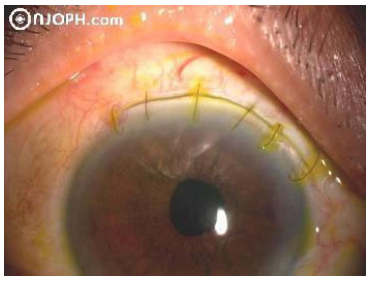
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phaco wound burn!
phaco tip pushed against the incision wall
phaco wound burn!
Cataract Coach

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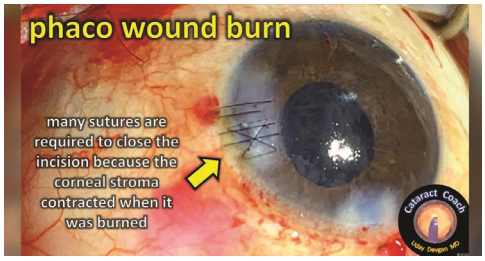

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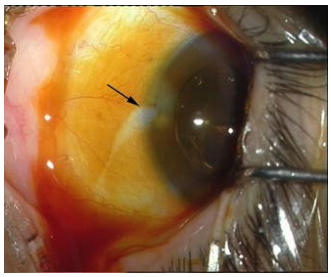

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Management of the wound leak

- Reduce corticosteroid
- Topical antibiotic
- Cycloplegia
- Patching (for persistent leak, low IOP, shallow AC)
- Contact lens
- Aqueous suppressant
- Glue – cyanoacrylate, fibrin
- Suture repair
  - AC flat
  - Persistent low IOP
  - Obvious wound gape
  - Iris prolapse

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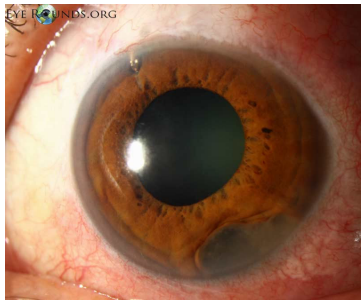

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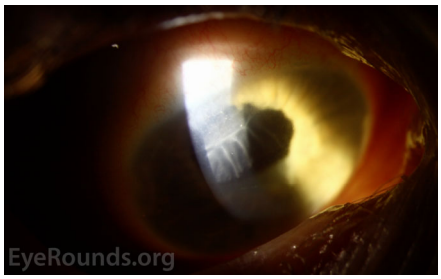

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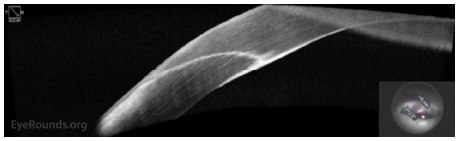

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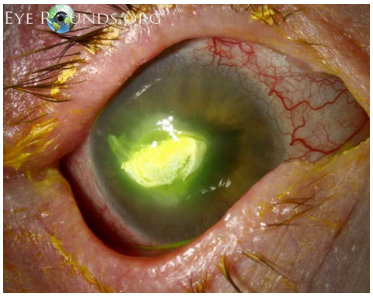

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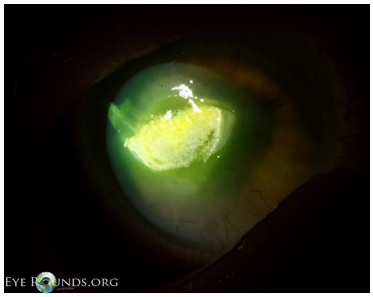

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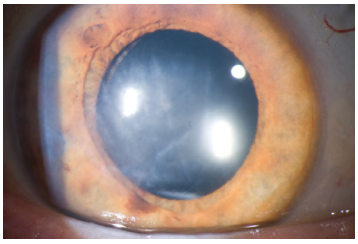

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Corneal Edema

- Ultimate pathway – compromised endothelial pump
  - Direct trauma (instruments, lens fragments, ultrasound)
  - High IOP
  - Toxicity (detergents, preservatives, antibiotics)
  - Inflammation
- Treatment
  - Osmotic agents for temporary relief
  - Address underlying cause
  - Time – may take months to improve
  - Corneal endothelial transplant

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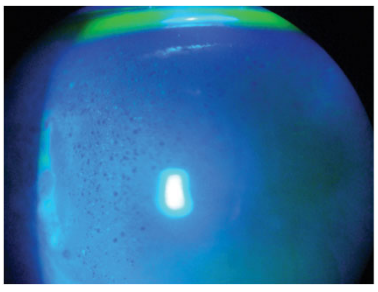

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Elevated IOP after cataract surgery

- Early causes – retained viscoelastic, inflammation, blood, pigment
- Later causes – Uveitis/UGH, Corticosteroid, Lens fragments, vitreous prolapse
- Acute treatment includes topical IOP reduction
  - Beta blocker
  - Carbonic Anhydrase Inhibitor
  - AC tap
- When necessary, remove inciting cause

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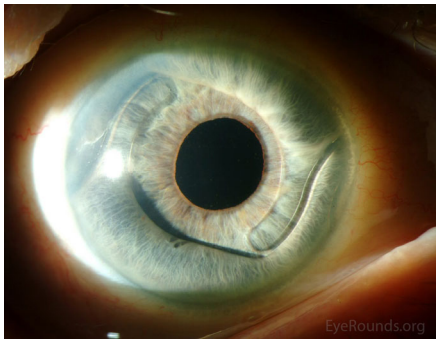

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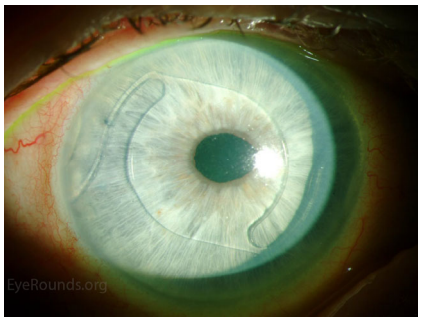

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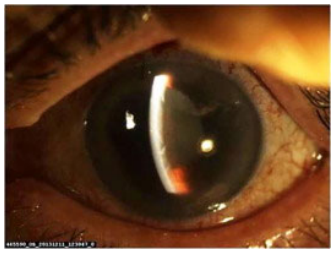

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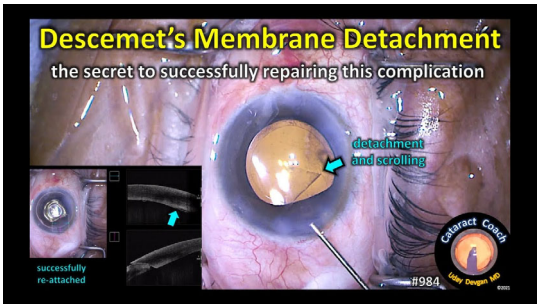

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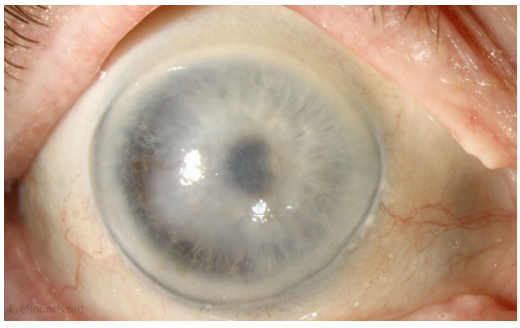

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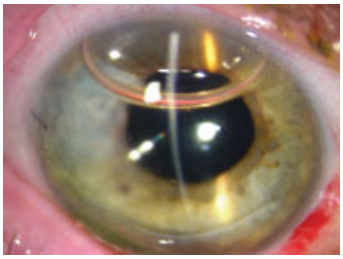

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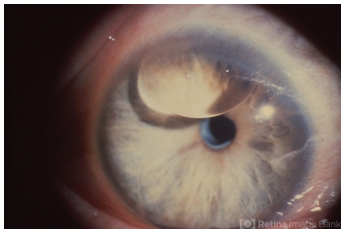

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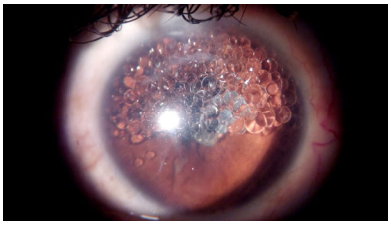

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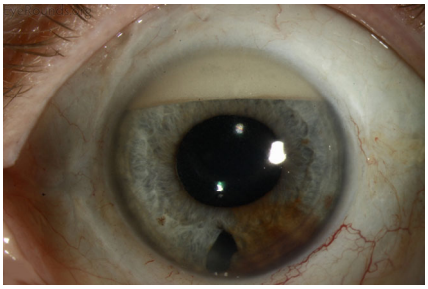

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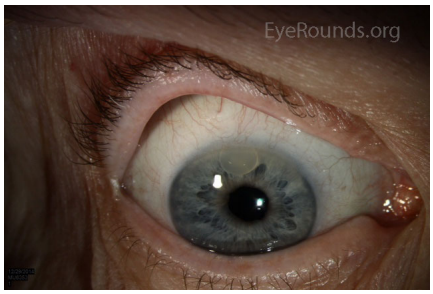

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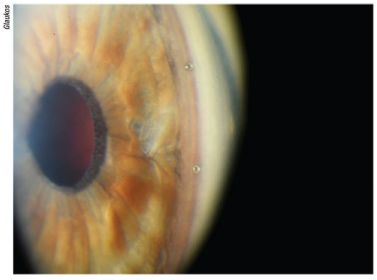

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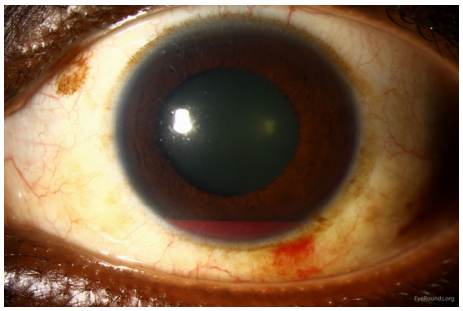

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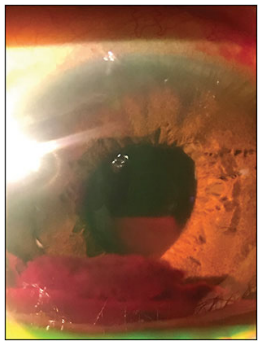

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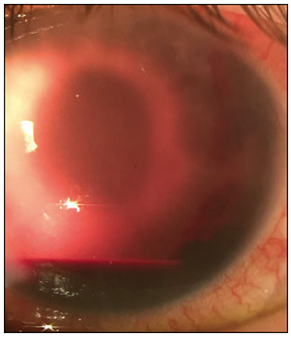

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Hyphema

- Acute causes include MIGS, scleral incisions, iris trauma (including iridectomy, pupil sphincter tears)
- Delayed causes include neovascularization, AC and sulcus IOL trauma
- Treatment
  - observation, control of IOP and inflammation, head elevation, minimize aspirin/NSAID/anticoagulant
  - Evacuation of blood if corneal staining, prolonged IOP, or for PAS avoidance
  - Remove inciting cause – IOL reposition or exchange, vitrectomy if ghost cell origin (tan hyphema)

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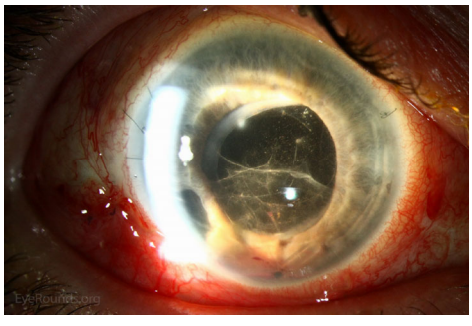

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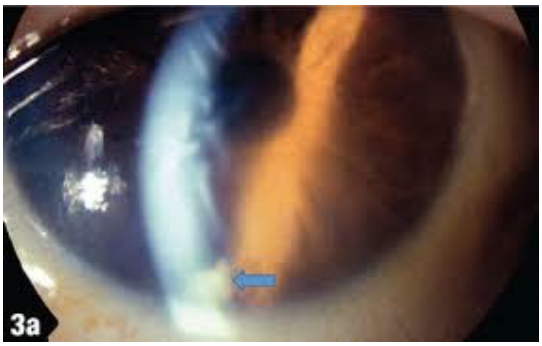

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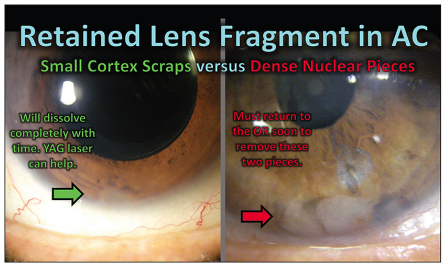

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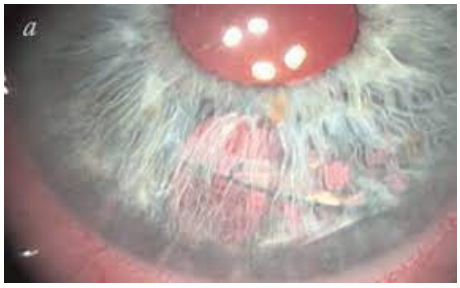

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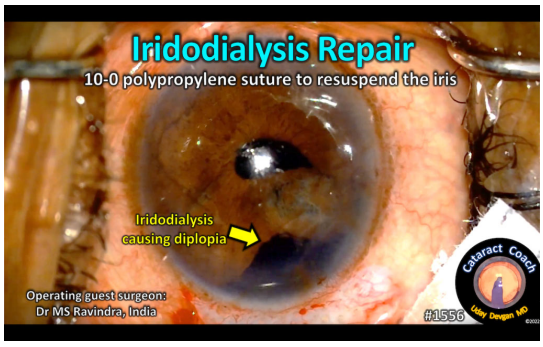

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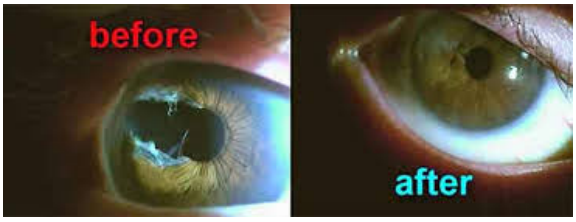

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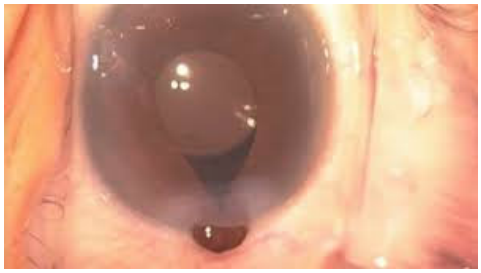

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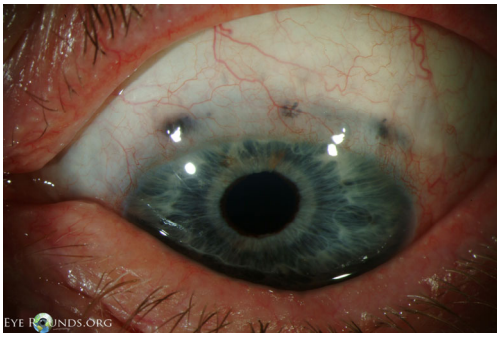

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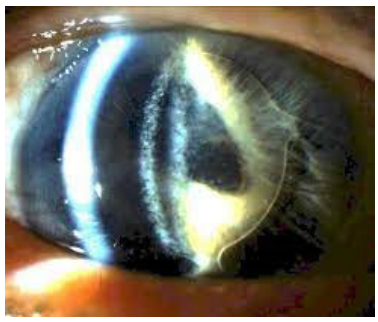

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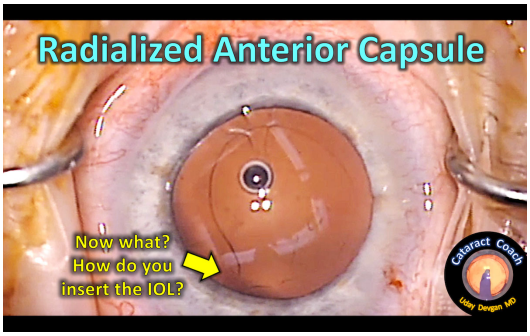

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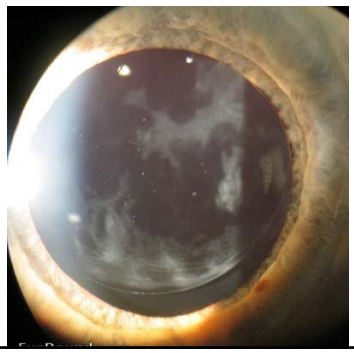

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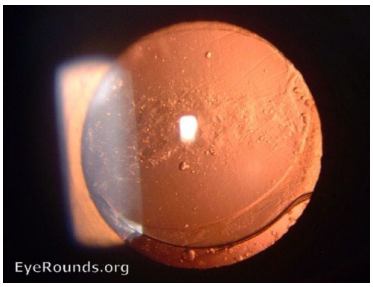

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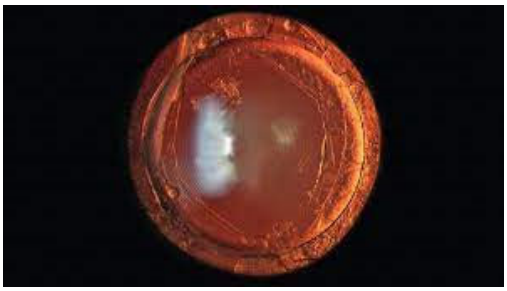

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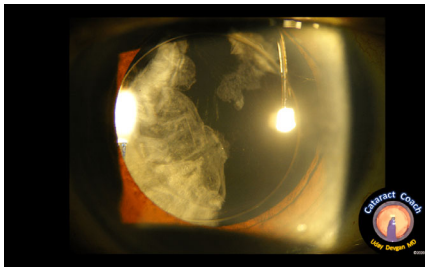

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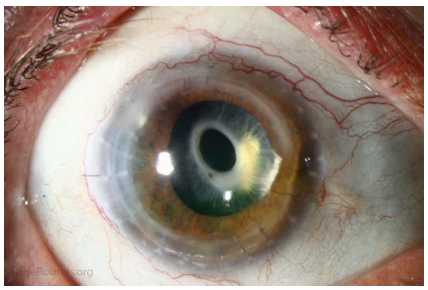

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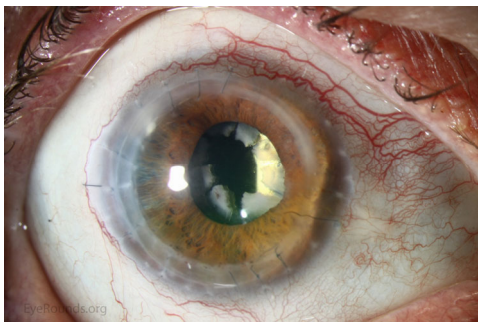

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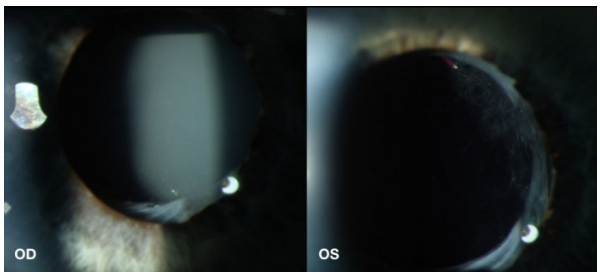

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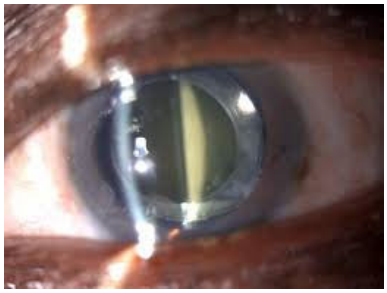

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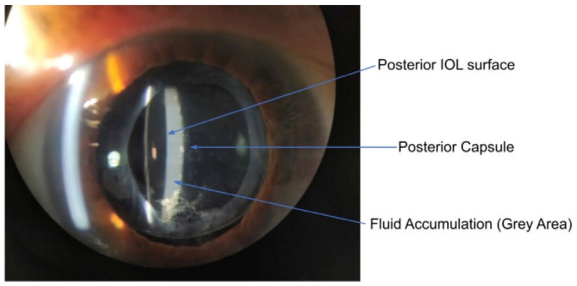

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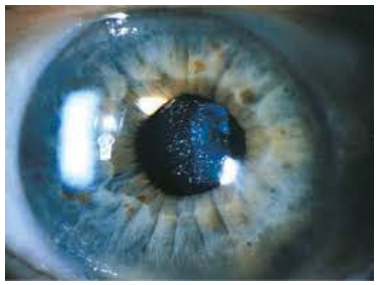

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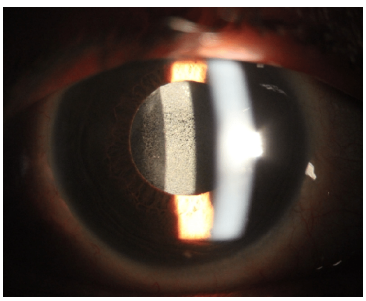

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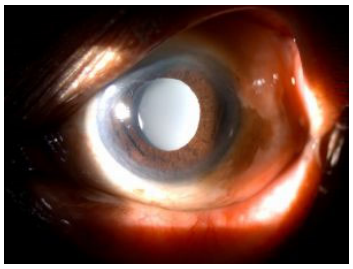

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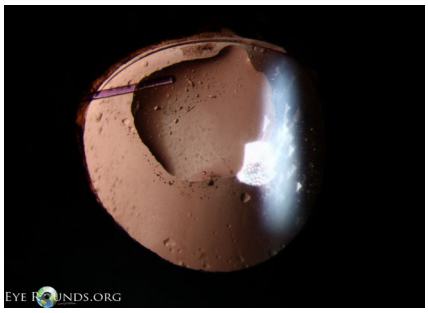

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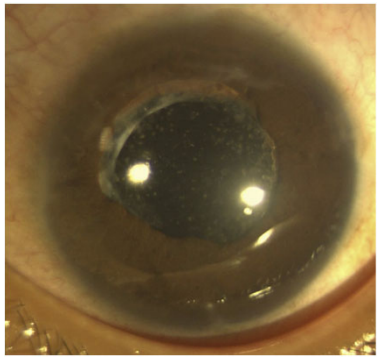

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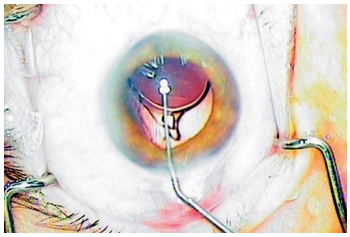

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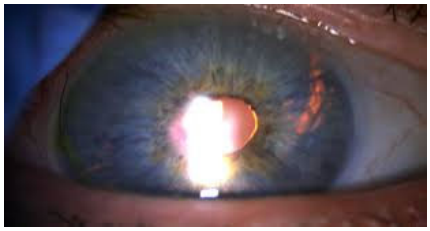

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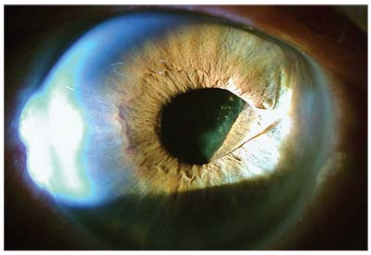

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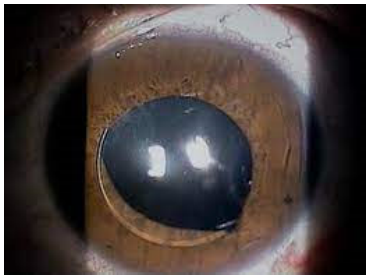

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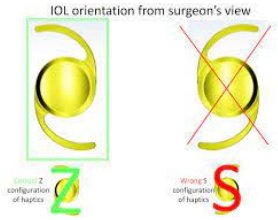

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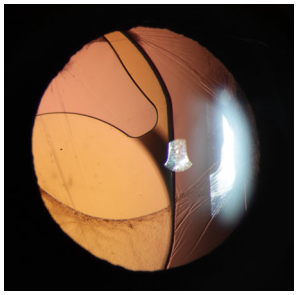

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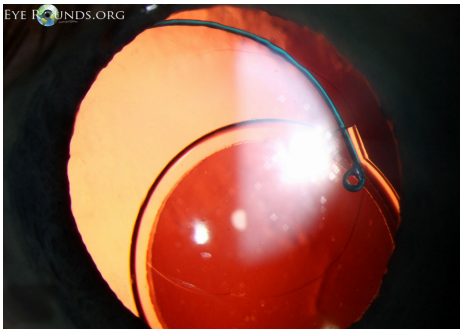

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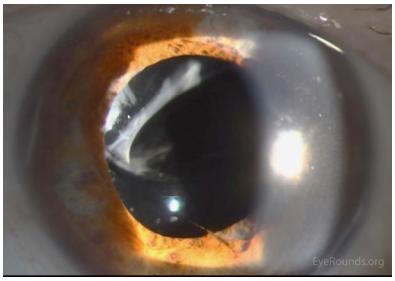

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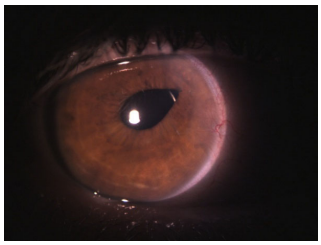

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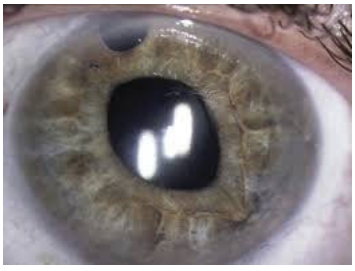

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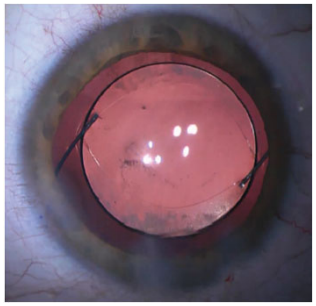

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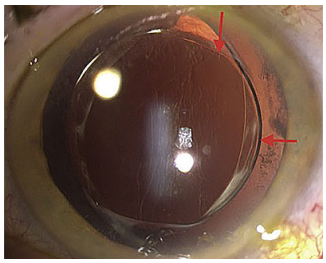

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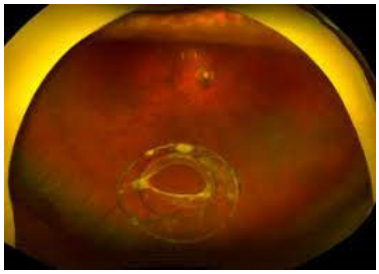

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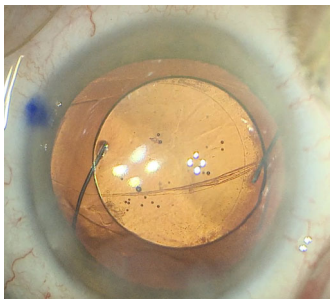

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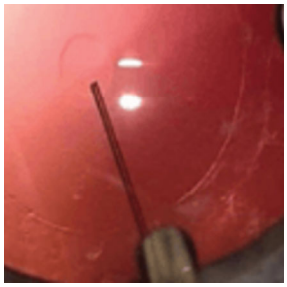

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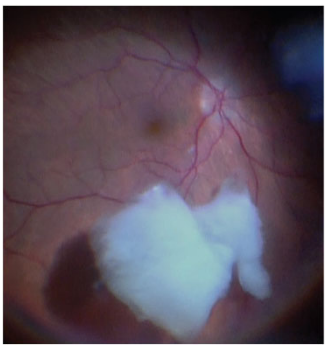

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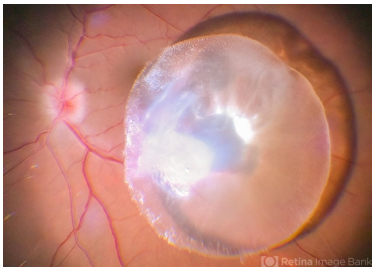

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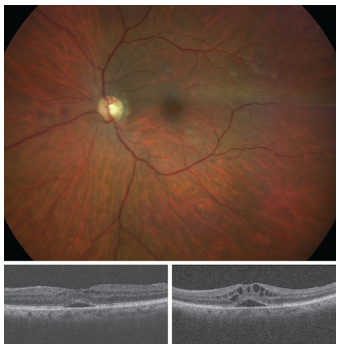

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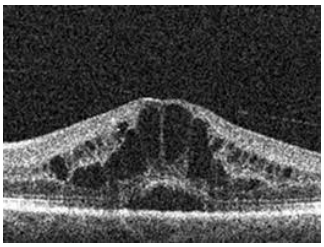

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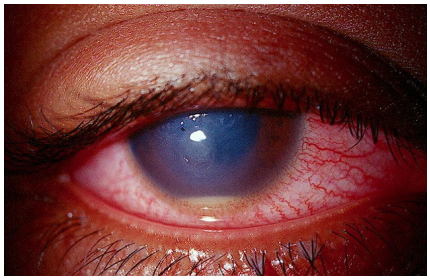

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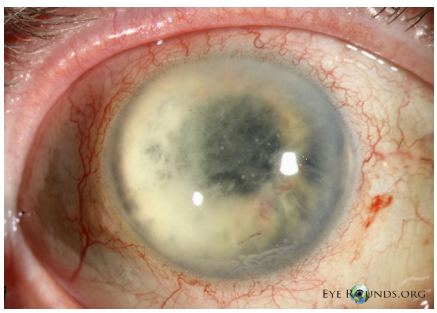

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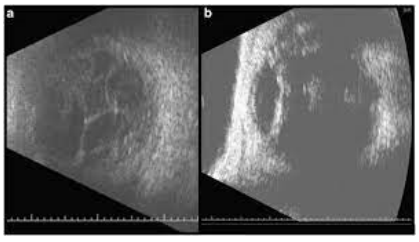

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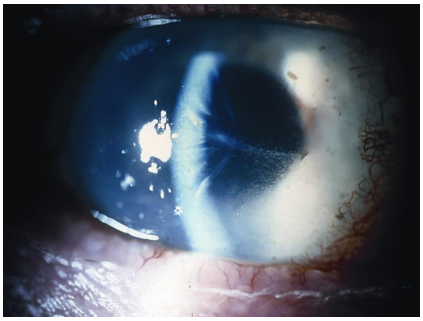
Figure 1. Diffuse limbus-to-limbus corneal edema.

91



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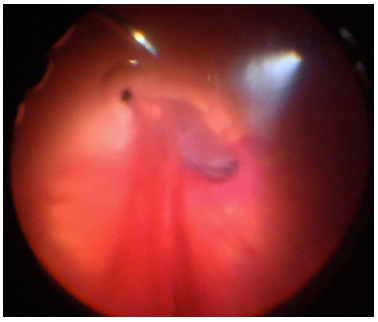
TASS or Endophthalmitis?

- TASS
  - Rapid onset usually < 24 hours
  - Diffuse corneal edema
  - Fibrin (maybe hypopyon)
  - Clear vitreous
  - Rapid response to steroid
- Infectious Endophthalmitis
  - Onset days to weeks
  - Lid swelling and edema
  - Pain
  - Heavy cell/Hypopyon

93



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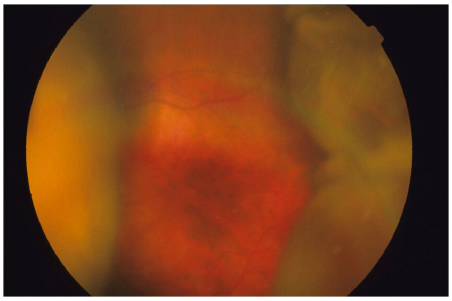

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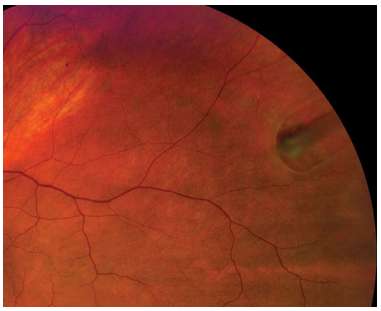

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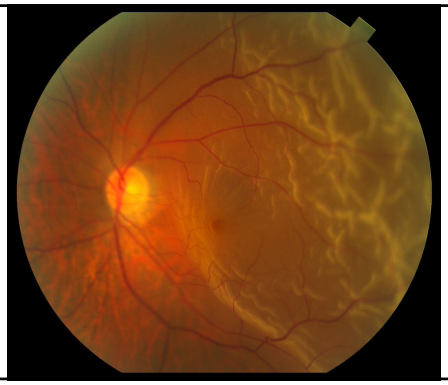

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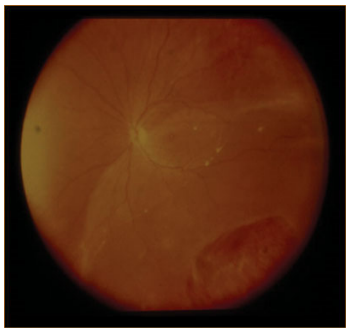

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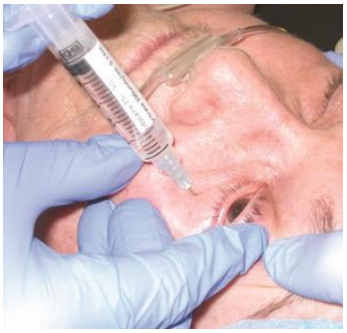

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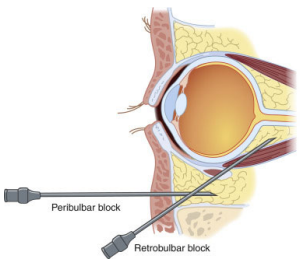

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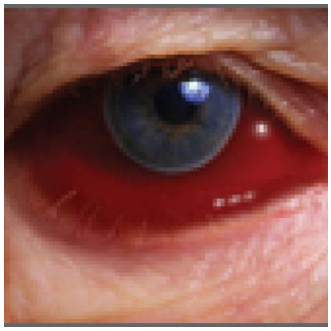
Complications of Peribulbar and Retrobulbar Injections

- Lid edema and bruising
- Suconjunctival hemorrhage and chemosis
- Retrobulbar hemorrhage
- Strabismus
- Retrobulbar optic neuropathy
- Globe perforation
- Oculocardiac reflex
- Brainstem anesthesia

102



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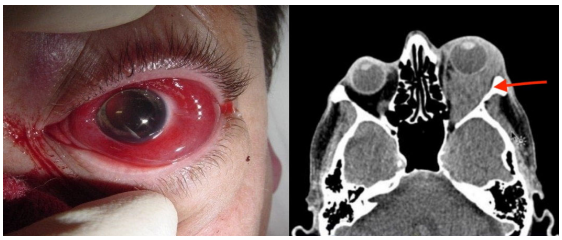

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20/Unhappy – Things to Consider

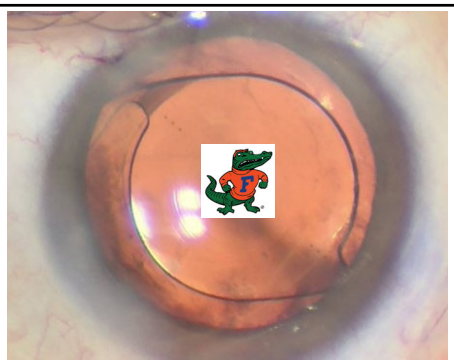
- Refractive error (power and cylinder) vs. expectations
- Ocular surface disease
- Irregularities on corneal surface (review corneal topography)
- IOL decentration or tilt, toric lens alignment
- Posterior capsule opacities (especially for multifocal lenses)
- Macula OCT

105

Complications – Doctor/Patient Relationship

- Give Love, Compassion and Reassurance
- Be honest
- Avoid speculation
- Availability is critical – run to, not away
- All are on the same side
- Open and frequent communication between surgeon and Optometrist

106



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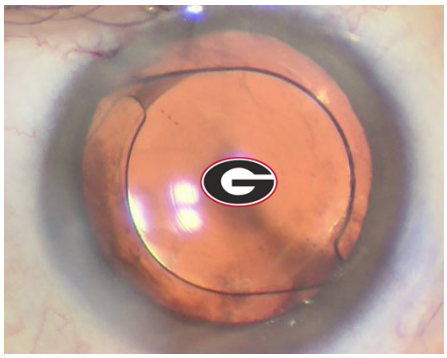

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