Causes

- Blunt or penetrating ocular trauma.
- Infrared energy (glass-blower's cataract)
- Electric shock
- Ionizing radiation

Types of traumatic cataract

- Total
- Soft white with lens material in AC and ruptured capsule
- Rosette
- Membranous
Look for associated complications

- Hyphaema, vitreous / retrobulbar haemorrhage
- Glaucoma: phacolytic, phacomorphic, pupillary block, and angle-recession
- Uveitis, RD, Choroidal rupture, optic neuritis

Management

**Capsule open:**
- Primary lensectomy + IOL implantation +/- vitrectomy

**Capsule intact:**
- Adult: multi step procedure
- Children: Primary repair with IOL implantation (risk of Amblyopia (< 50% achieve good visual outcome))
• Patients should be warned about the potential visual outcome and the high risk for intraoperative problems

Surgical approach

• Bimanual aspiration
• Limbal or pars plana membranectomy
• Phacoemulsification
  Tension ring, sutured IOL, aniridia lens
Challenges: penetrating injuries

Missed FB
Challenges: Rupture globe
Challenges: Blunt trauma

Rigid aniridia Lenses

- 67B: 3mm optic, 12.5 mm D
- 68: 4.5 optic, 12.5 mm D
- 67 G : 5 mm optic, 12.5 mm D
- 67 F: 5 mm optic, 13.5 mm D
- 67L: 5 mm optic, 13.5mm D, peripheral iridotomy

- Bag, sulcus or suture fixated (9-0 Prolene)
- Standard or custom made
Rigid aniridia Lenses (sectoral iris defect)

• Intracapsular insertion incision >3.5mm followed by insertion of IOL

• 3 clock hours defect
• Can insert 2 rings if larger defect

Rigid aniridia Lenses

Artificial Iris Segments on Capsule Tension Rings

• In complete Iris defect

• **Advantage:** small incision

• **Disadvantages:** Brittle difficult to align, can misalign later with capsular contracture
Rigid aniridia Lenses

Iris Prosthetic Systems
(Ophtec)

Rota disc

Pupil diameter
Partial Iris defects
Total Iris defects
Sulcus Fixated Aniridia Lens with PK
‘Sunset’ Delayed subluxation of Aniridia Lens with capsular contraction

Folding aniridia Lenses

- Foldable silicon artificial iris implants
- With or without polymer meshwork
- Sulcus or suture fixated to remaining iris
Folding aniridia Lenses

SUMMARY

• Traumatic cataract poses many challenges

• Surgical outcome depend on careful preoperative assessment

• Aniridia Lenses
  For Partial or Total loss of Iris
  Cosmetic and/or Visual Benefit
  A variety of Options to choose from
  Expense is an issue