

## 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:

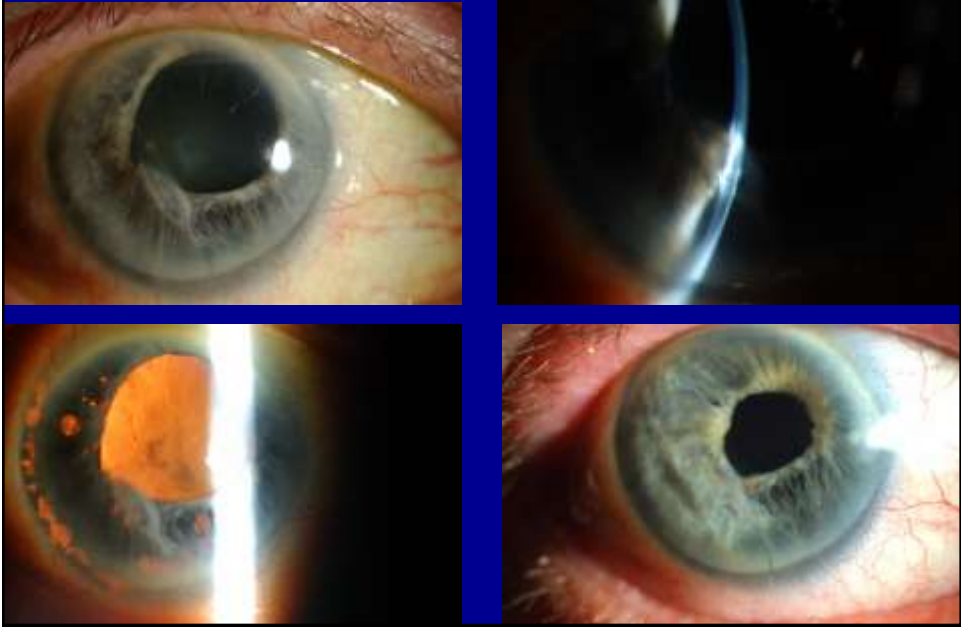
- Adult: multi step procedure
- Children: Primary repair with IOL implantation ( risk of Amblyopia ( < 50 % achieve good visual outcome)

- Patients should be warned about the potential visual outcome and the high risk for intraoperative problems

## Surgical approach

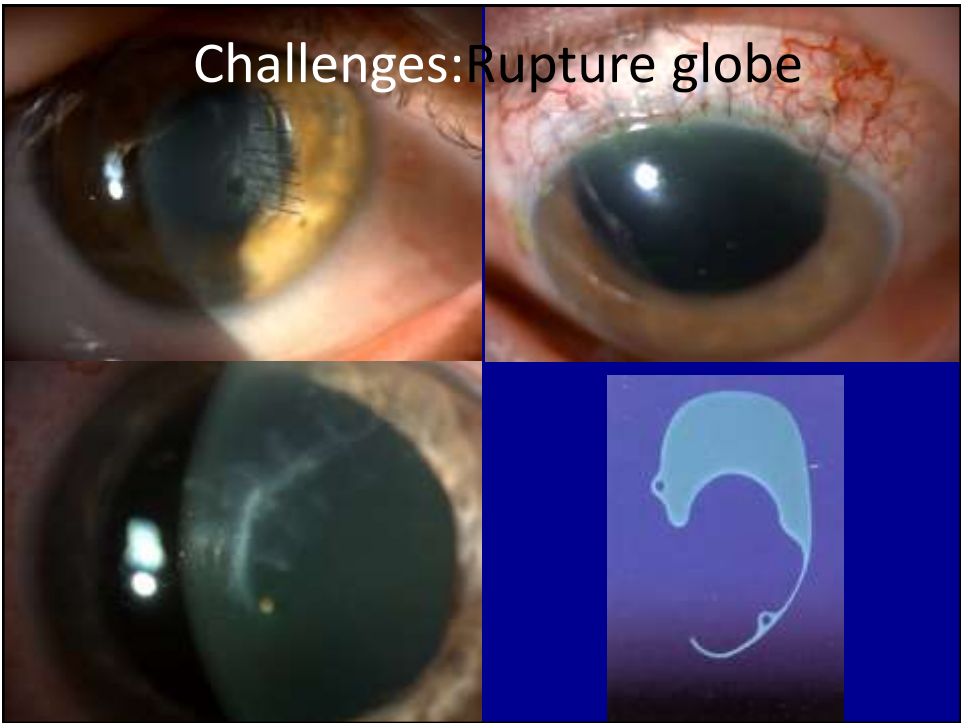
- Bimanual aspiration
- Limbal or pars plana membranectomy
- Phacoemulsification
  - Tension ring , sutured IOL, aniridia lens

Challenges: penetrating injuries

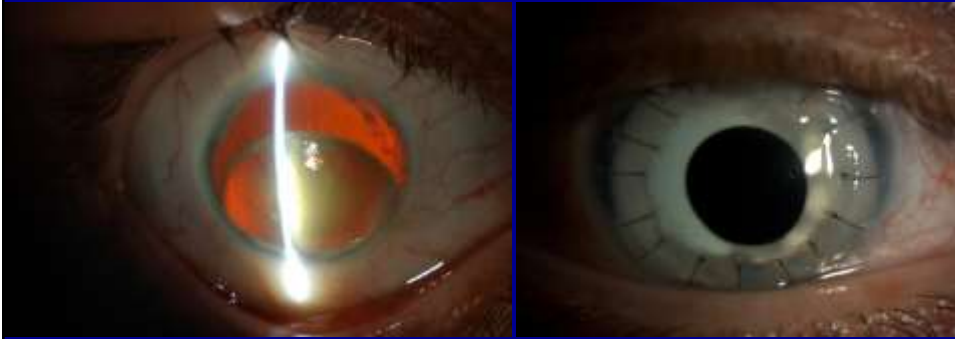


Challenges: Penetrating injuries



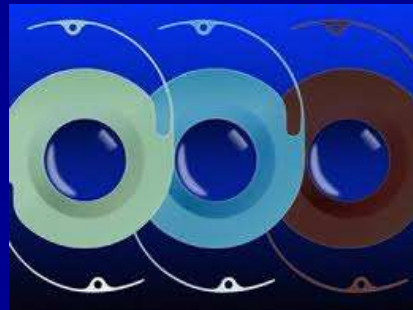


## Challenges: Blunt trauma



## 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



96 G

## Rigid aniridia Lenses

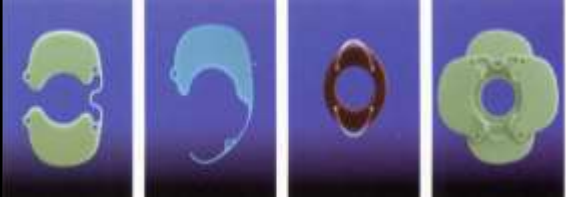
### Artificial Iris Segments on Capsule Tension Rings

- 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

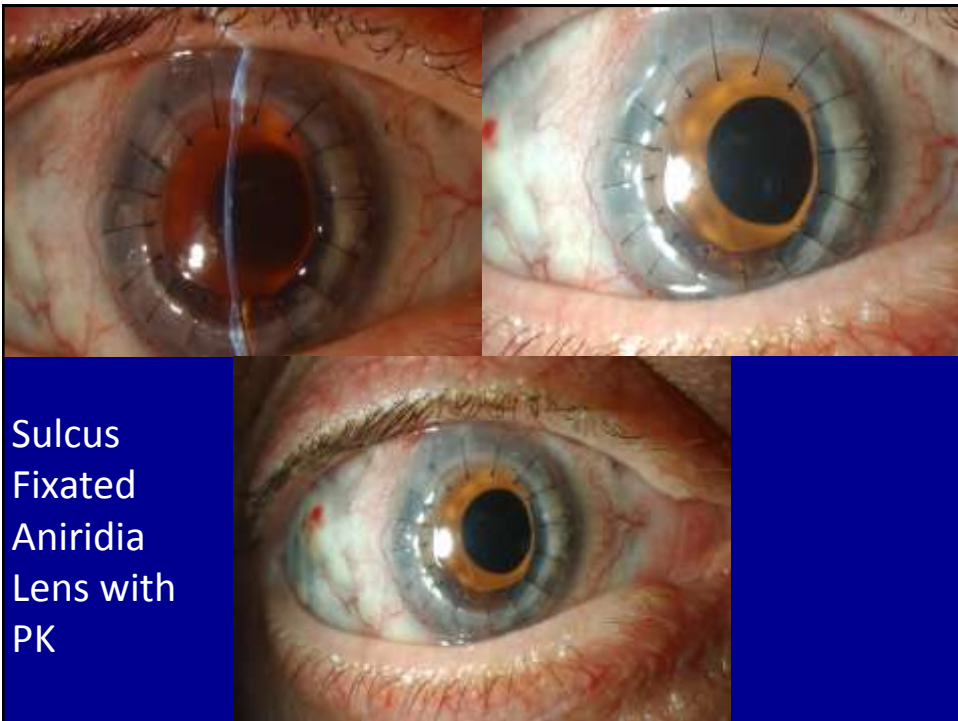
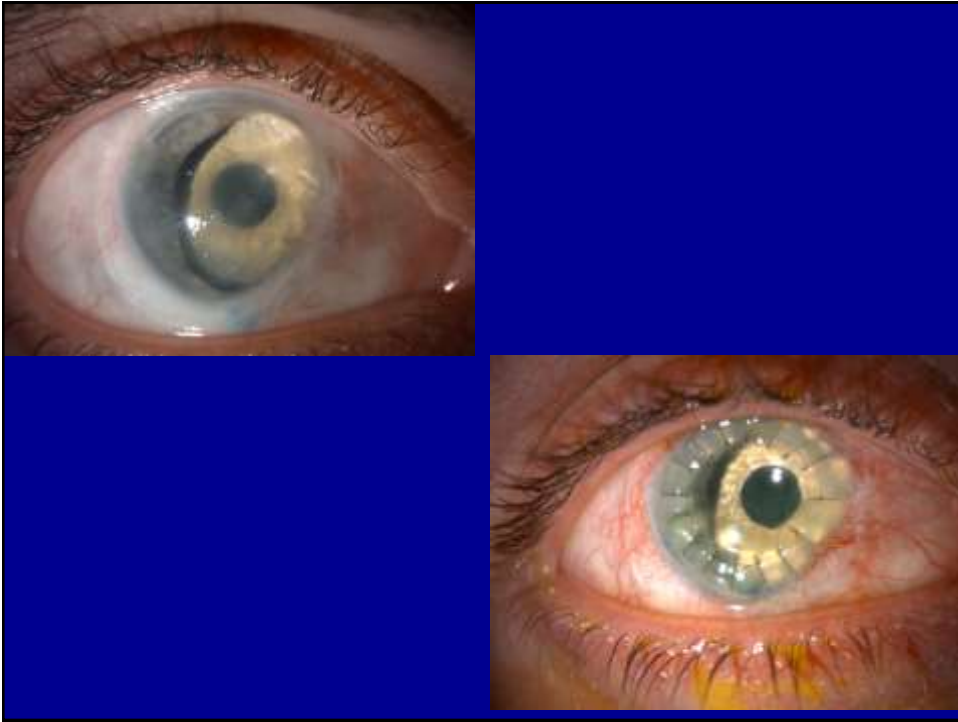


- Pupil diameter
- Partial Iris defects
- Total Iris defects

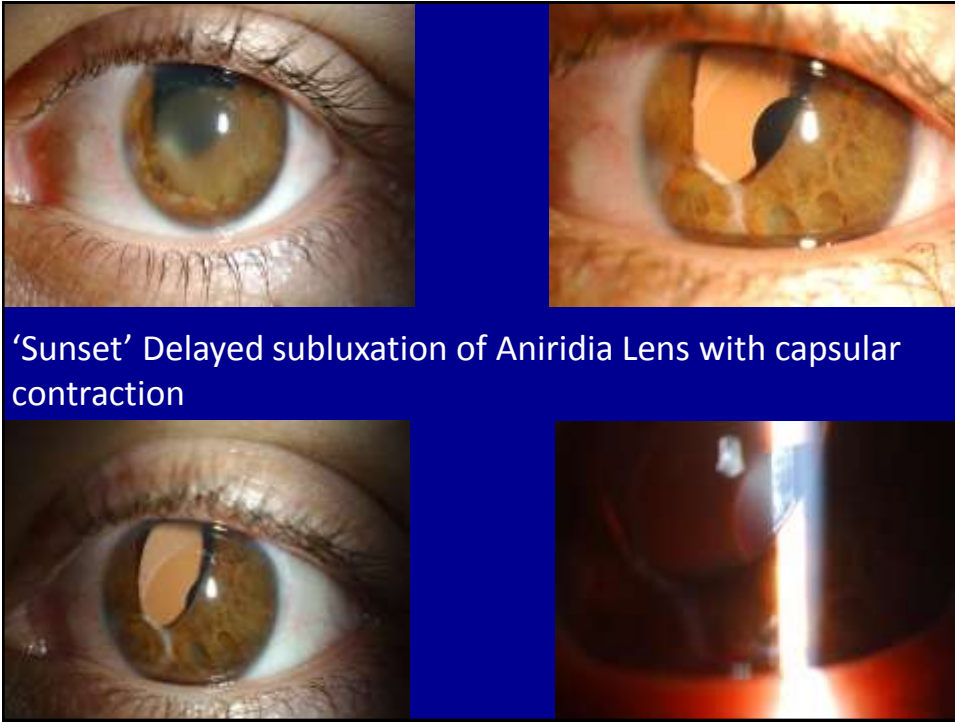
# Rigid aniridia Lenses







Sulcus  
Fixated  
Aniridia  
Lens with  
PK



## 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