

Traumatic – Cataract in Children

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**Ocular trauma is one of leading causes
of unilateral blindness in children.**

Classification of ocular trauma

Ocular trauma



Closed globe injury

1. Contusion
2. Superficial F.B.
3. Lamellar laceration
4. Combination

Open globe injury

1. Rupture
2. Laceration
3. Penetrating injury
4. I.O.F.B
5. Perforating injury

Ocular trauma & cataract

- **Trauma is responsible for 30% of childhood cataract.**

- **Blunt trauma**

Coup → vossius ring

Coup → counter coup → Tr. Cat. (psc-rosette)

Ocular trauma & cataract

- **Sharp injury**

Small –rent → localised cat

Large → total cataract

blunt-trauma/ sharp → white fibrous capsule

Sharp → lens matter in AC.

Associated complication with traumatic - cataract

1. Lens: subluxation, dislocation

capsular defect

Intra lentrellar F.B

2. Glaucoma: phacomorphic

Phacocytic

Angle recession

Associated complication with traumatic - cataract

3. Post. Reg. :

- **RD**
- **Vit. hge**
- **Choroidal rupture**
- **Trophic neuropathy.**

4. Iris:

- **Uveitis.**
- **Pupil**
- **Synechia**

Exam

Before - dilatation

- 1. BCVA**
- 2. Pupillary – reflex**
- 3. IOP**
- 4. Iris : - Transillumination
- Pupillary sphincter**
- 5. Zonules: Phakodonesis**

After - dilatation

- 1. Slit lamp - exam**
- 2. Post segment exam**
- 3. A,B scan US**

Guarded - prognosis

Anatomical and functional outcome is to be thoroughly explained to the patient and patient – relatives.

- 1. Associated – complication.**
- 2. Amblyopia.**
- 3. IOL- implantation.**
- 4. Postoperative complications.**

Traumatic – cataract surgery

- 1. Each case has its own merits.**
- 2. Prepare a good prospect plan one day before surgery which is liable to change.**
- 3. All your facilities, tools and armaments must be ready for surgery.**
- 4. The true plan is applied during – surgery.**

Timing of cataract surgery

- **Cataract surgery and IOL is not preferred at the time of primary repair.**
- **It's preferable to defer until inflammatory response is treated with steroids. (2-8 weeks).**

Exceptions.

- **Too young who is liable to amblyopia.**
- **IOP is uncontrolled and is due to cortex in AC.**
- **Associated vit. hge, RD.**

Surgery of traumatic cataract in children

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1. Synechialysis:

- HV – VE material
- Repositors.
- Vannas scissors.
- Iridectomy may be needed.

Surgery of traumatic cataract in children

2. Anterior capsule management:

- Fight for anterior capsulorrhexis with forceps \pm scissors

3. Hydrodissection :

- Avoided if PC opening is suspicious.

Surgery of traumatic cataract in children

4 .Post capsule & vitreous management

- Better avoided in traumatic cataract especially in older children.

Exception:

1. Already opened
2. Vitreous in AC
3. Plaque in the PC
4. Too young to cooperate at YAG-laser.

Surgery of traumatic cataract in children

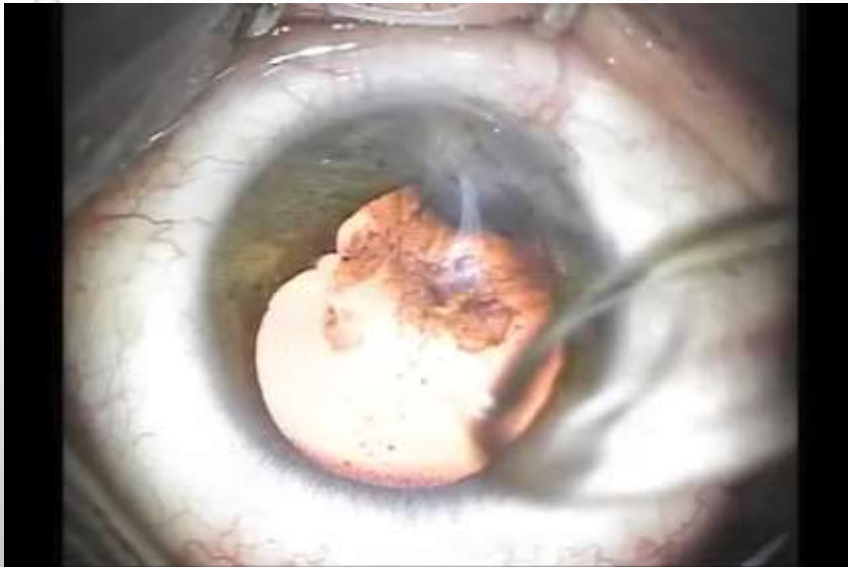
5. IOL - implantation

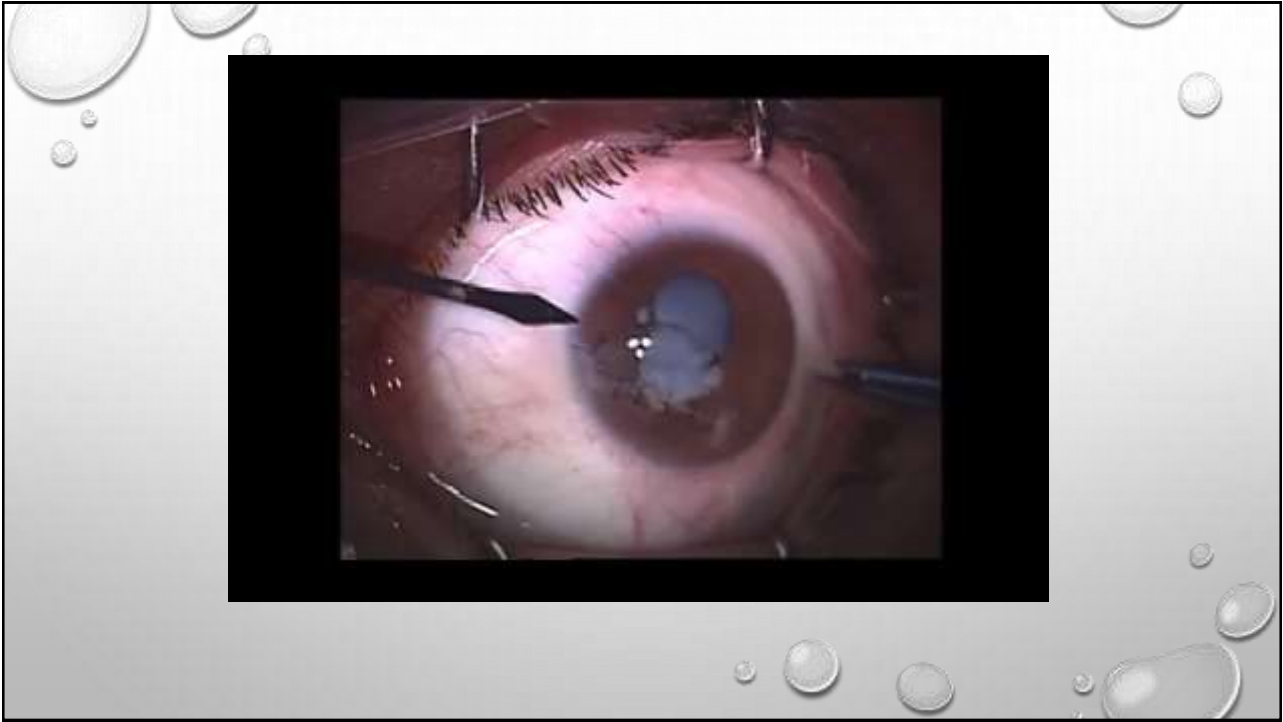
May be deferred to another session:

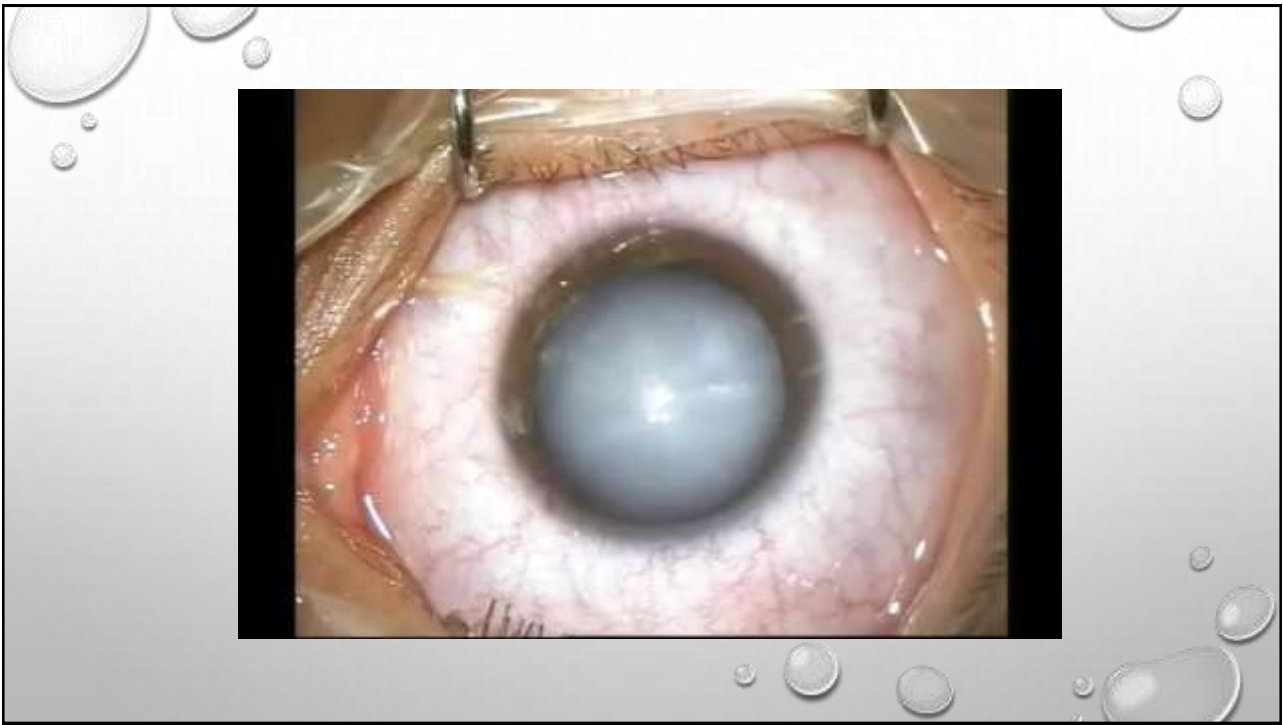
e.g. No capsule

No suitable situation

No suitable IOL







Golden - Rule

PCO:

- **Occurs too early in traumatic – cat. (postop.)**
- **Its too thick and fibrosed.**
- **Must be detected and treated early.**

Postoperative medication

1. **Of utmost importance in traumatic –cataract in children.**
2. **Short course of systemic steroid may be indicated.**
3. **Antiglaucoma measures may be needed.**
4. **Close follow up for longer period is needed.**

Removal of corneal sutures

- **Removal of sutures of primary repair is mandatory if healing is complete.**

Postoperative comp.

- **PCO.**
- **Pupillary – membrane.**
- **Pupillary capture.**
- **IOL-ppts**
- **Poor visual outcome.**

Golden rules

1. **Traumatic cataract in children, every case has its own merits.**
2. **Plan of surgery is tailored according to the situation during surgery.**
3. **Your tools, instrumentation, IOLs, VES and CTR must be ready.**
4. **Prognosis is guarded, don't give promise.**
5. **Cataract surgery is deferred (2-6 weeks) after primary repair.**

6. **Post capsulotomy & vitreous work is avoided except it's mandatory.**
7. **PCO: must be detected early and attacked early.**
8. **Postoperative medications for longer periods and aggressive.**
9. **Close and longer follow up.**
10. **Keep an eye on the post segment.**

