WEH

## TRAUMATIC PEDIATRIC CATARACT " 5 PEARLS "

PROF.DR. ABDALLAH K. HASSOUNA, M.D

PROFESSOR OF OPHTHALMOLOGY, AIN SHAMS UNIVERSITY, EGYPT VICE CHAIRMAN, AL WATANY EYE HOSPITAL, EGYPT PRESIDENT, ARVO-EGYPT

### INTRODUCTION

### INTRODUCTION

# Ocular trauma causes 12–46% of all pediatric cataracts



### INTRODUCTION

The 5 Pearls we are going to discuss

- I.Timing of the surgery & IOL implantation
- 2. Capsular Staining
- 3. Posterior Capsulotomy & Anterior Vitrectomy
- 4.Be prepared with micro-scissors, forceps, CTR, iris hooks, etc..
- 5. Close Iris defects promptly

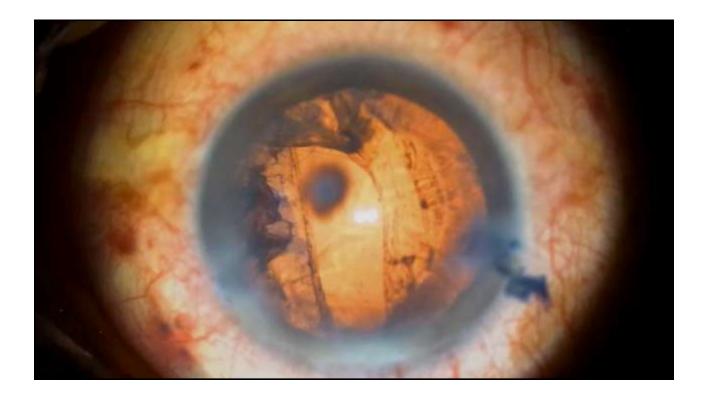
### TIMING OF SURGERY & IOL IMPLANTATION

### TIMING OF SURGERY

- lens capsule rupture with lens material in anterior chamber, is tolerated well in children. A second surgery can be planned after, primary closure of the globe
- A multistep procedure after control of inflammation, with adequate corneal clarity and an appropriate IOL power calculation, should be adopted.
- The timing of cataract surgery and IOL implantation in trauma continues to be debated worldwide, current data suggests improved visual outcome results from intervention at (2-30) days

### IOL IMPLANTATION

- Determination of the correct IOL power prior to surgery may be difficult, if not impossible, for a variety of reasons.
- Often the other eye serves as a guide
- I usually aim at +1.00 diopters
- In case IOL implantation is not possible, it can be placed in sulcus with or without optic capture

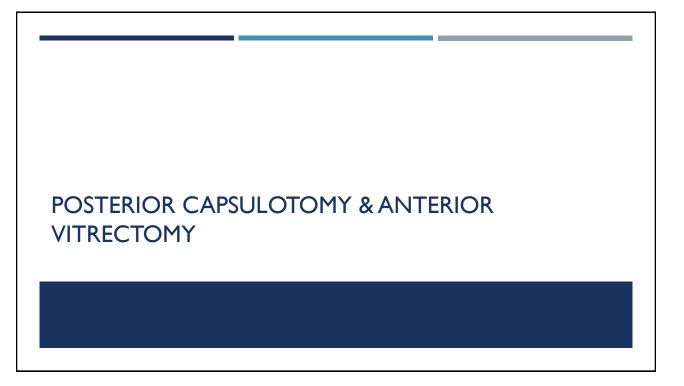


# CAPSULAR STAINING

### CAPSULAR STAINING

It is useful to stain the capsule with trypan blue to increase its visibility, useful in cases with white cataract and ruptured lens capsule





### POSTERIOR CAPSULOTOMY & ANTERIOR VITRECTOMY

- Posterior capsulotomy and anterior vitrectomy can reduce the chance of visual axis opacification.
- A rhexis forceps, or a micro-forceps can be used in doing the posterior capsulorhexis, however anterior vitrectomy cutters did prove to be efficient as well.



### **BE PREPARED WITH YOUR TOOLS**

MICRO-SCISSORS, FORCEPS, CTR, IRIS HOOKS

### BE PREPARED WITH YOUR TOOLS

- Cases with anterior capsular plaque or fibrosis might need microincision scissors and forceps to create an opening.
- Capsular tension ring or Cionni ring might be needed in cases with subluxation.
- In cases of narrow pupil with opened anterior capsule, iris hooks are superior to Malyugin ring





### CLOSE IRIS DEFECTS PROMPTLY

- Iridodialysis and iris tears can be repaired during the surgery by using 10-0 prolene sutures.
- In cases of partial or total aniridia, Aniridia IOLs (ex. Morcher)can be really efficient in improving visual outcome



