

# WHAT IS PEDIATRIC CATARACT ?



- Paediatric cataracts occur due to some disturbance in the normal growth of the lens

**CONGENITAL CATARACT**

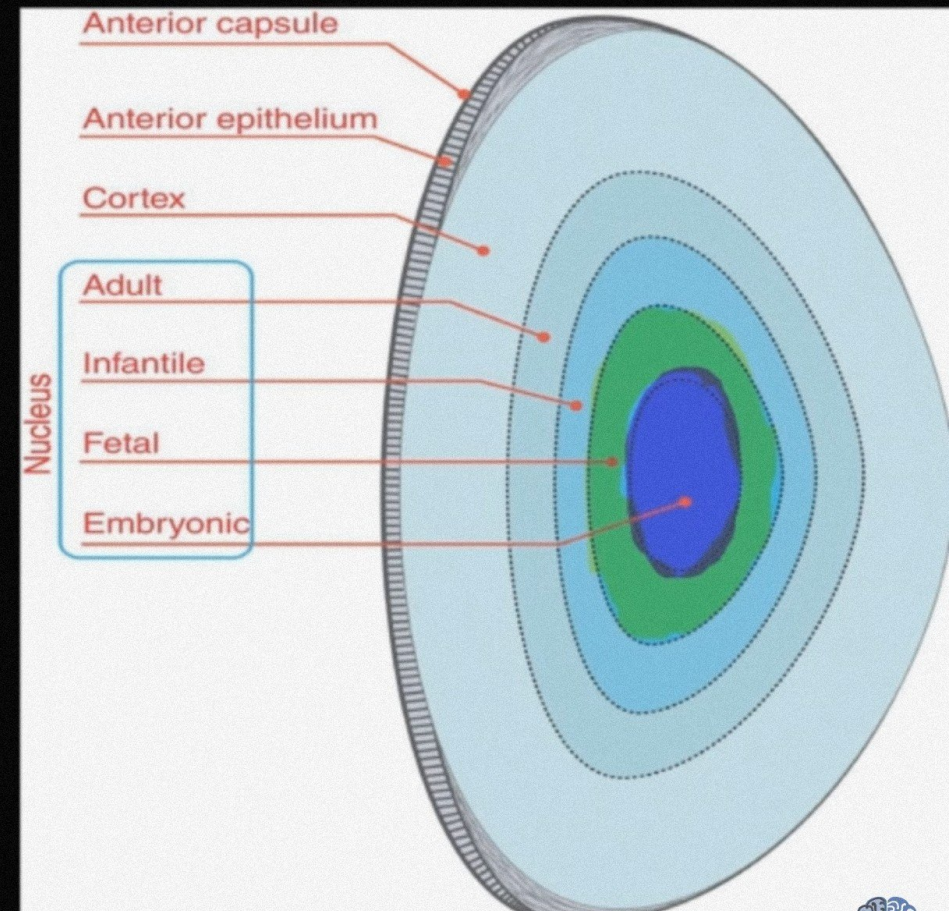
**DEVELOPMENTAL CATARACT**





# CONGENITAL CATARACT

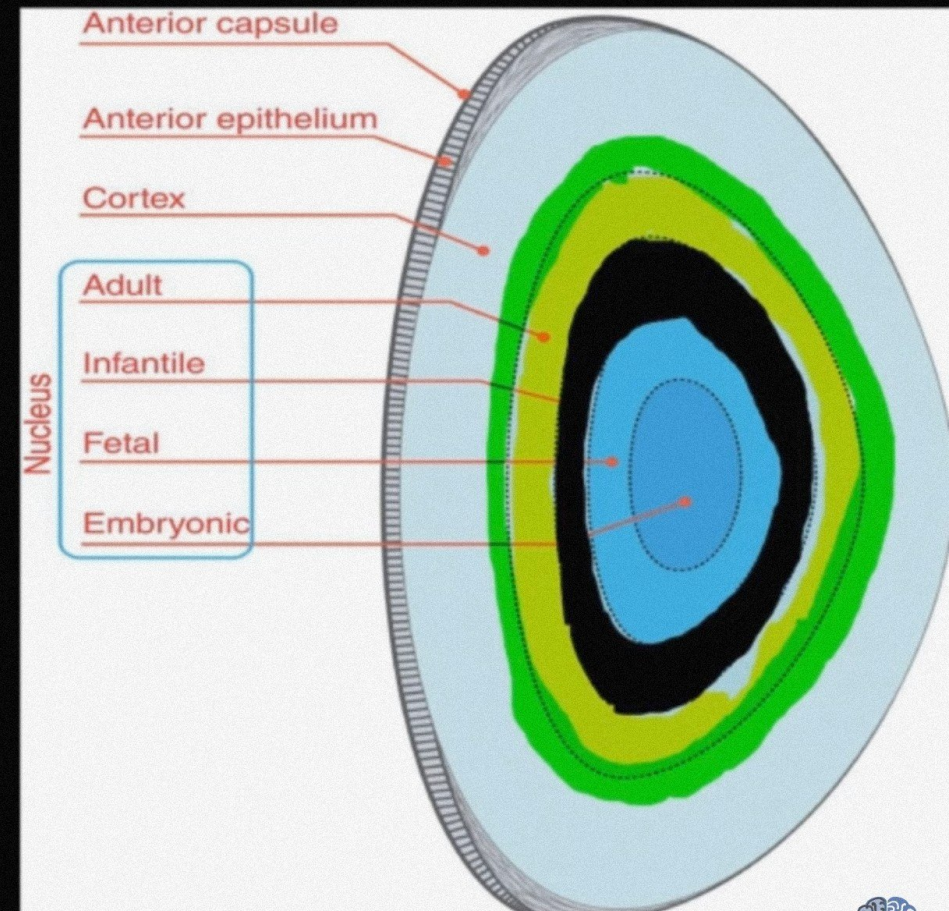
- When the disturbance in lens growth occurs **before birth**.
- Opacities are present at birth but usually diagnosed within **FIRST** year of life .
- Limited to either **EMBRYONIC** or **FOETAL NUCLEUS**





# DEVELOPMENTAL CATARACT

- When the disturbance in lens growth occurs from infancy to adolescence
- Opacities involve the **INFANTILE** or **ADULT NUCLEUS** , Deeper parts of cortex or **CAPSULE**.





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# UNILATERAL Or BILATERAL CATARACT?





# UNILATERAL PEDIATRIC CATARACTS



**OCULAR ANOMALIES/  
LOCAL DYSGENESIS**

**RADIATION EXPOSURE**

**TRAUMA to eye**

**IDIOPATHIC**





# UNILATERAL PEDIATRIC CATARACTS



- **NOT** Inherited
- **MOSTLY not** related to systemic disorders
- **NOT** related to METABOLIC DISORDERS





# UNILATERAL PEDIATRIC CATARACTS



**OCULAR ANOMALIES/  
LOCAL DYSGENESIS**

**POSTERIOR SEGMENT  
PATHOLOGY**

**TRAUMA  
RADIATION EXPOSURE**

**IDIOPATHIC**





# UNILATERAL PEDIATRIC CATARACTS



**OCULAR ANOMALIES/  
LOCAL DYSGENESIS**

- Persistent Fetal Vasculature
- Posterior Lenticonus
- Posterior Segment Tumor
- Posterior Segment Pathology,
- Retinal Detachments Of Any Cause
- Uveitis

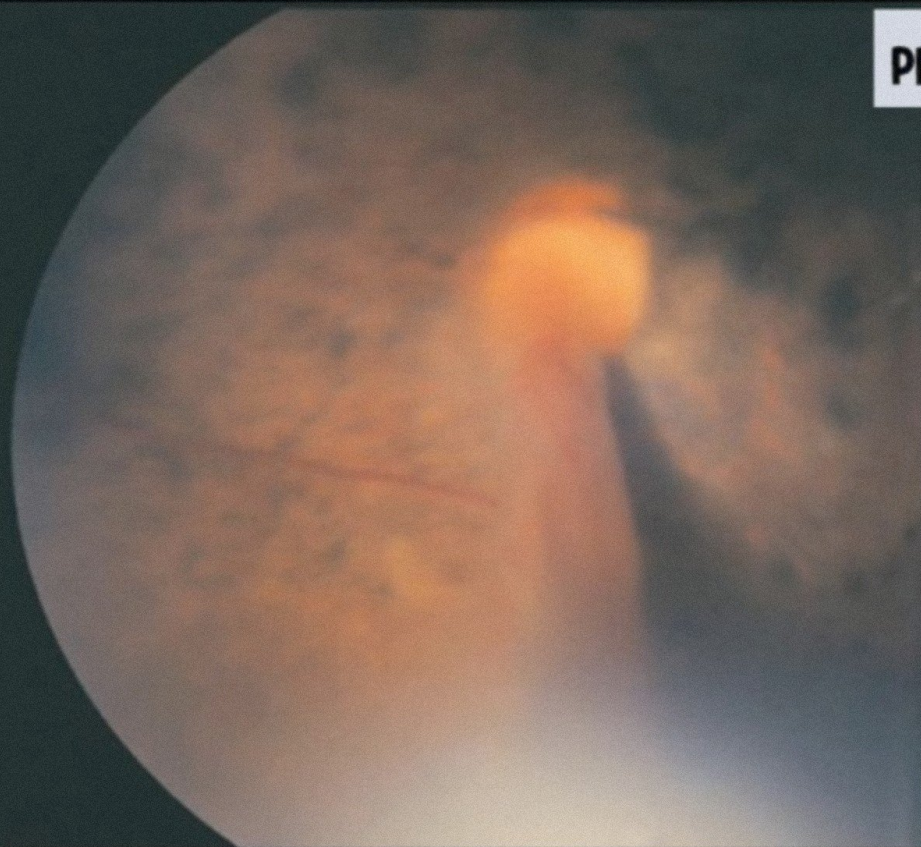




# OCULAR ANOMALIES/ LOCAL DYSGENESIS



PRIMARY PERSISTENT HYPERPLASTIC VITREOUS ( PHPV)





# OCULAR ANOMALIES/ LOCAL DYSGENESIS



## LENTICONUS

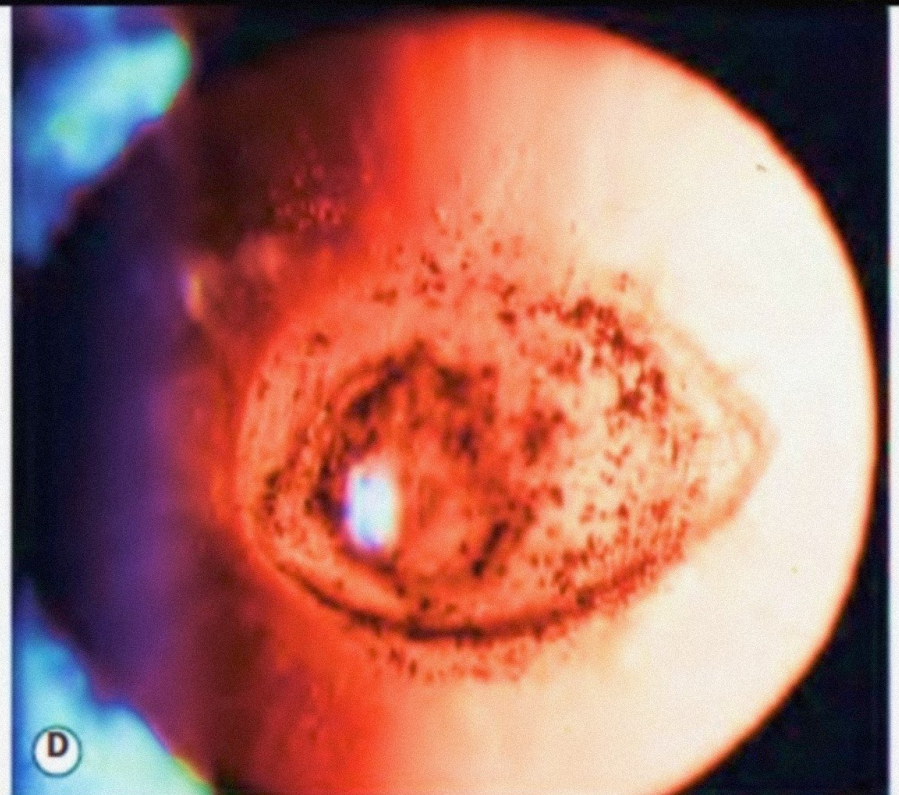
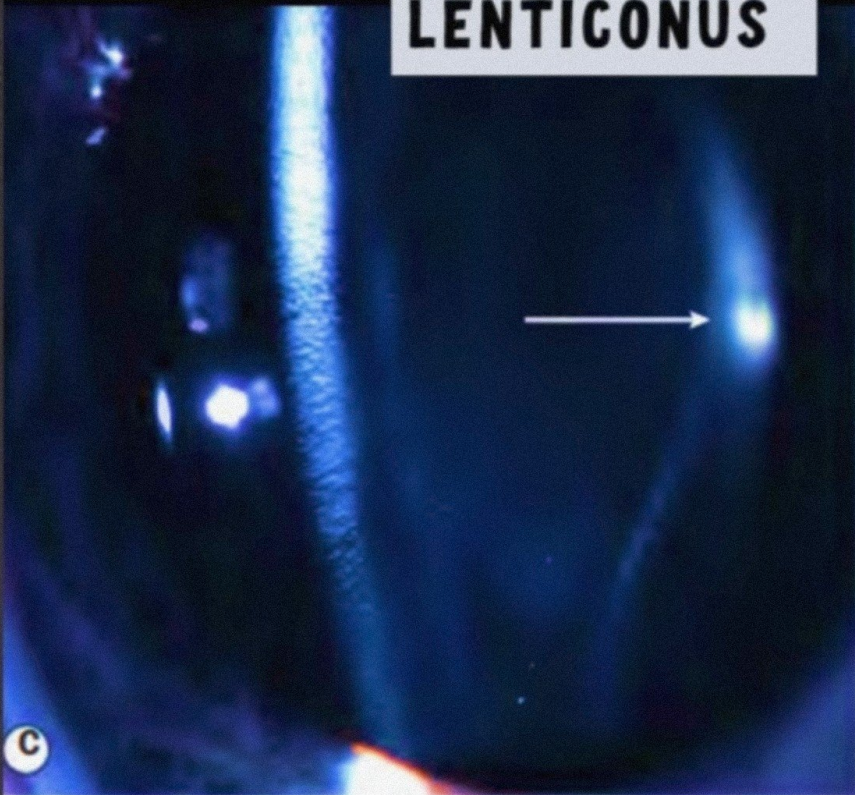




Figure 1: Ocular examination demonstrating posterior lentiglobus simulating an egg

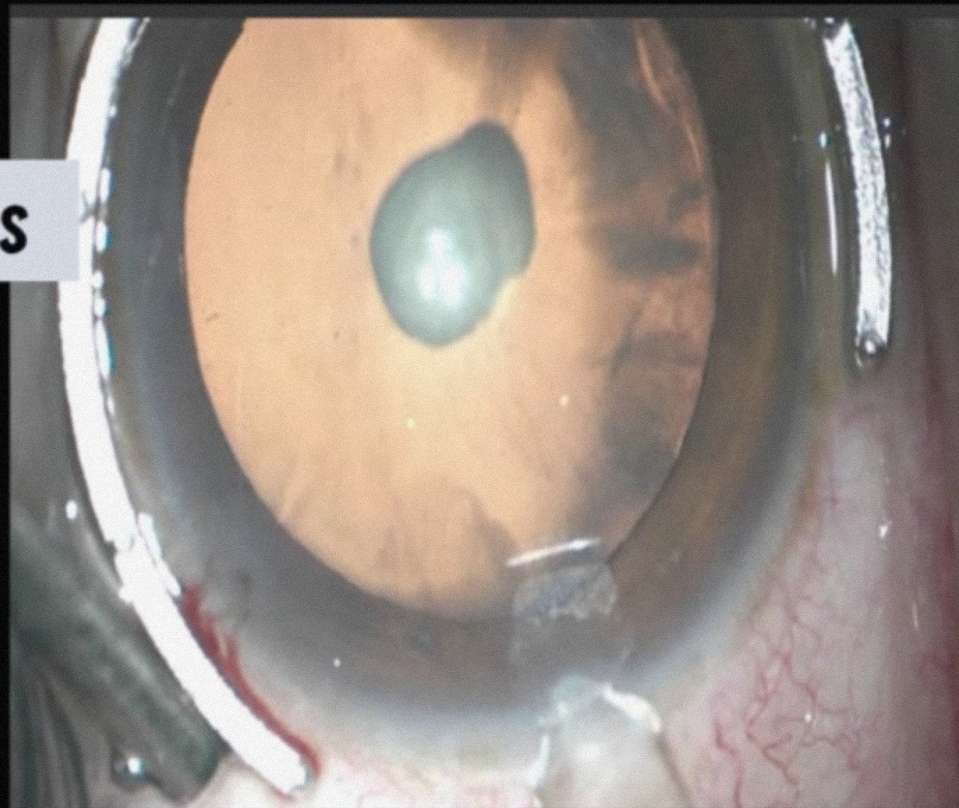


**LENTIGLOBUS**

**Posterior lentiglobus**

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Department of Ophthalmology, Postgraduate Institute of Medical Education and Research, Chandigarh, India



**POSTERIOR POLAR CATARACT**





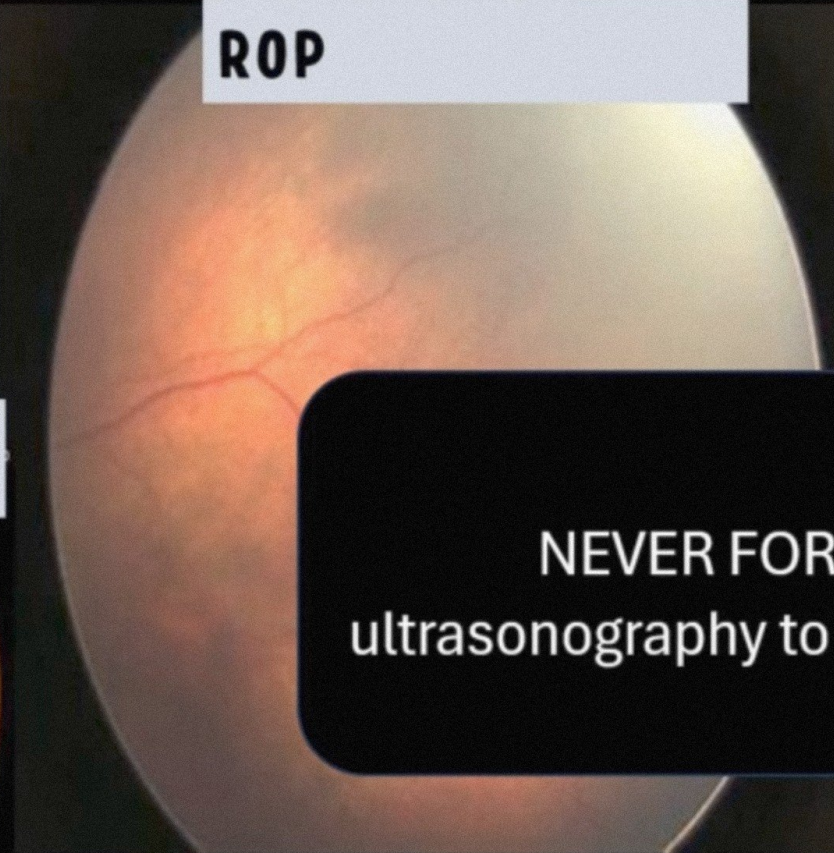
# POSTERIOR SEGMENT PATHOLOGY



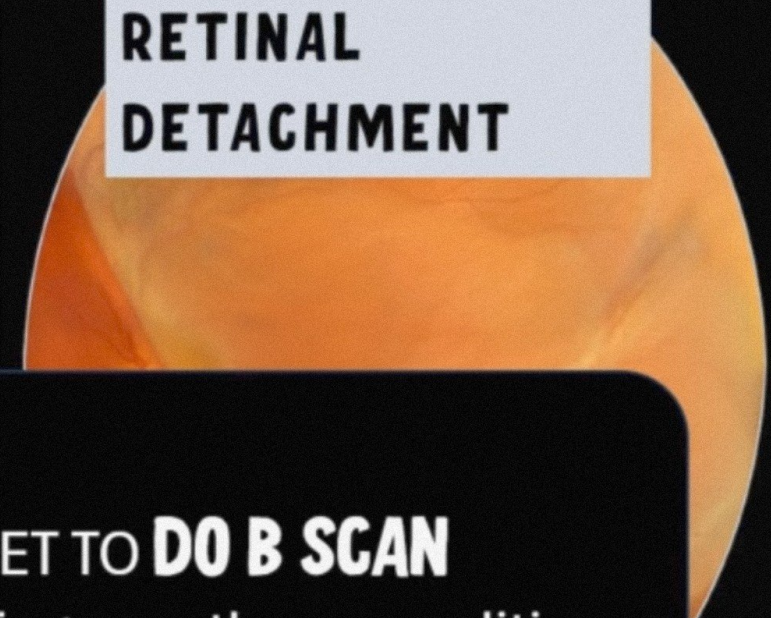
**COATS DISEASE**



**ROP**



**RETINAL  
DETACHMENT**



NEVER FORGET TO **DO B SCAN**  
ultrasonography to diagnose these conditions





# TRAUMA

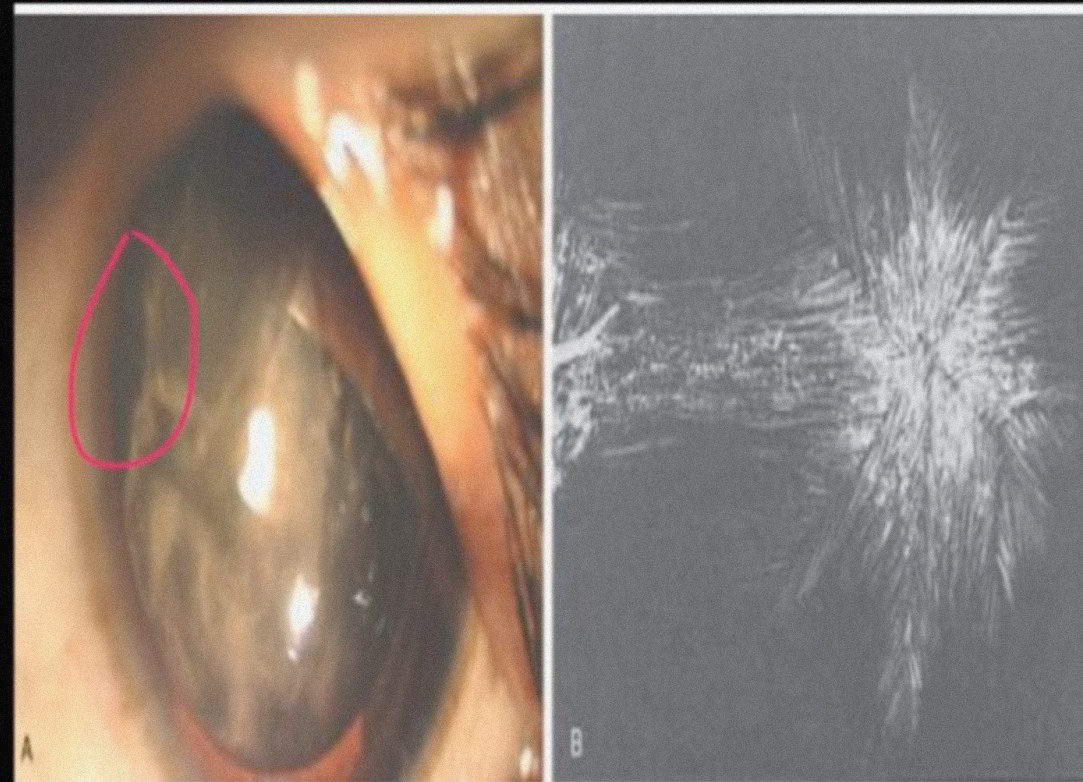
## RADIATION EXPOSURE

- Birth trauma
- Child abuse
- Radiation exposure
- Electric cataract





## TRAUMATIC CATARACT /ROSETTE CATARACT



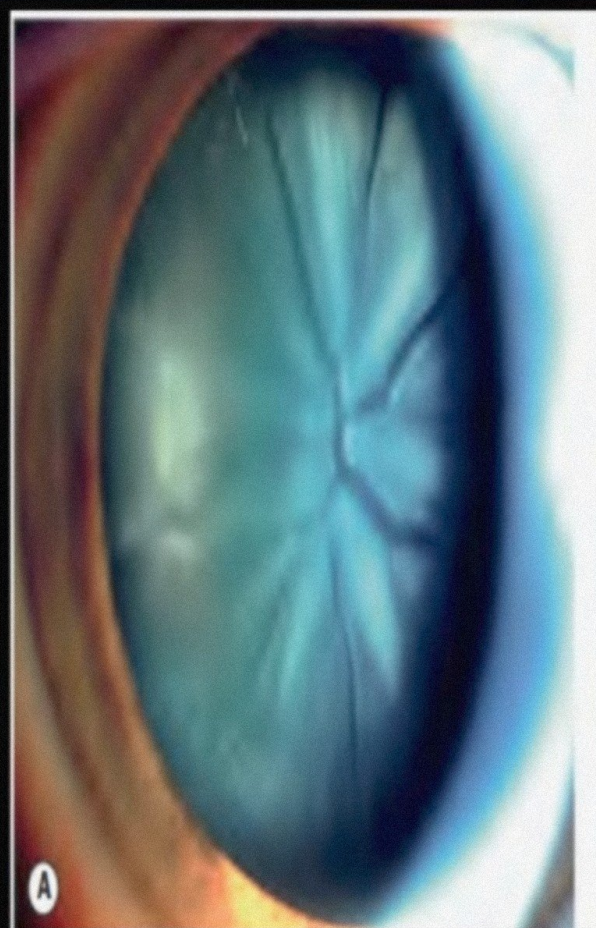
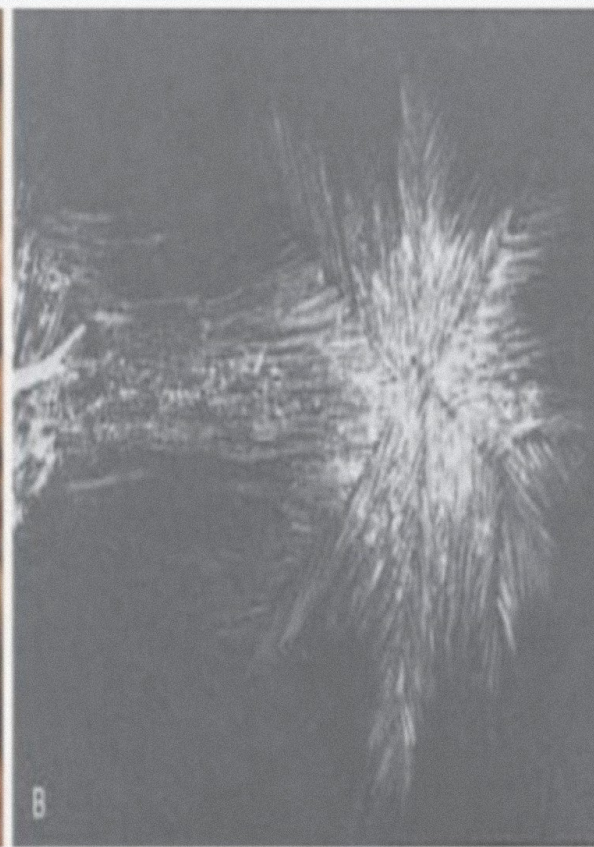
• **FIG. 28.9** (A) Traumatic cataract following a concussional injury, showing a posterior rosette and zonular dialysis to the left. (B)

Lens material in AC through ruptured lens capsule





# TRAUMATIC CATARACT / ROSETTE CATARACT



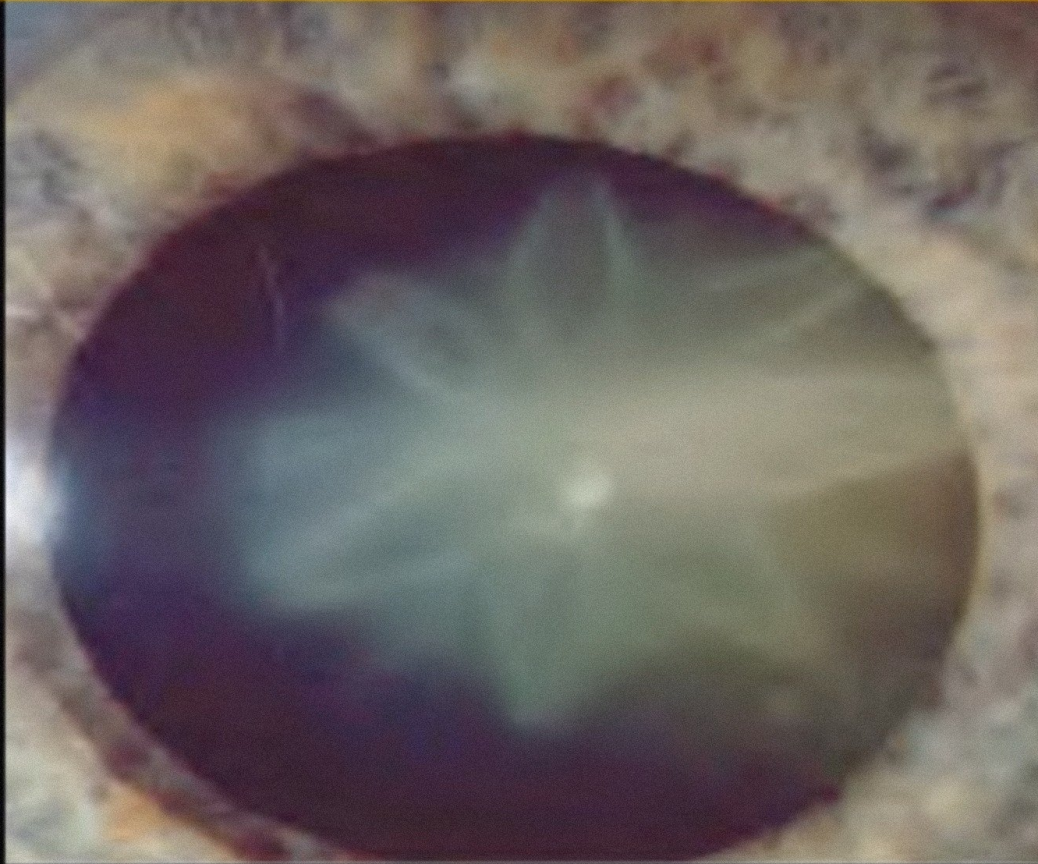
Lens material in AC through ruptured lens capsule

• **FIG. 28.9** (A) Traumatic cataract following a concussional injury, showing a posterior rosette and zonular dialysis to the left. (B)

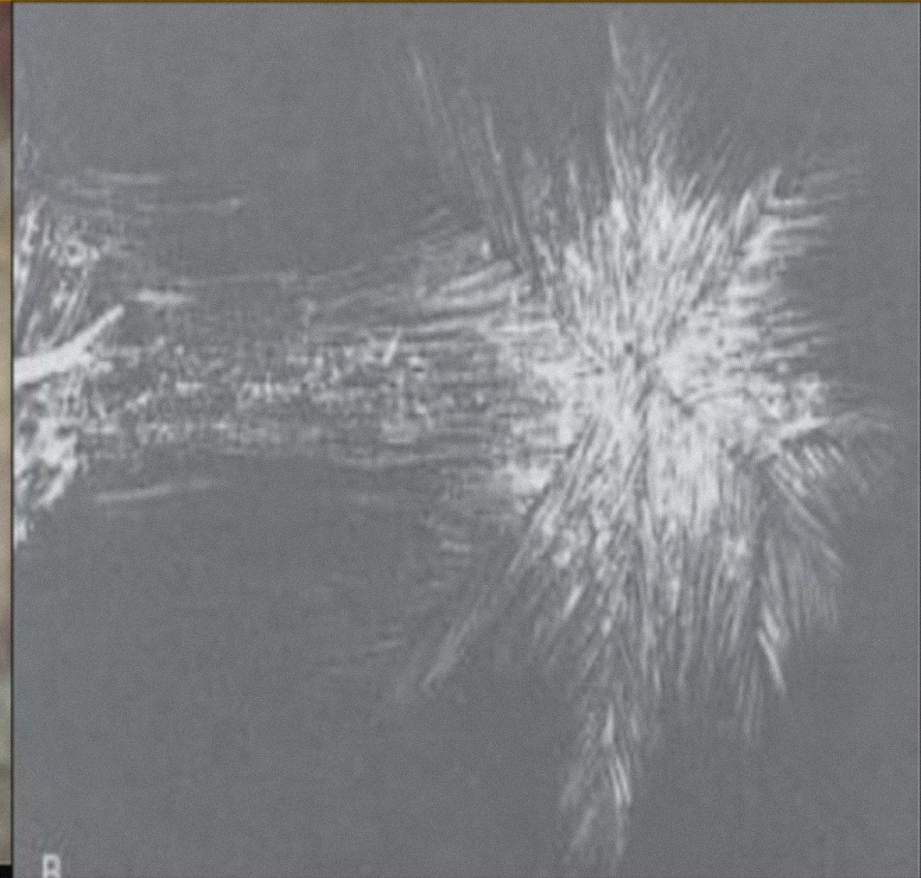




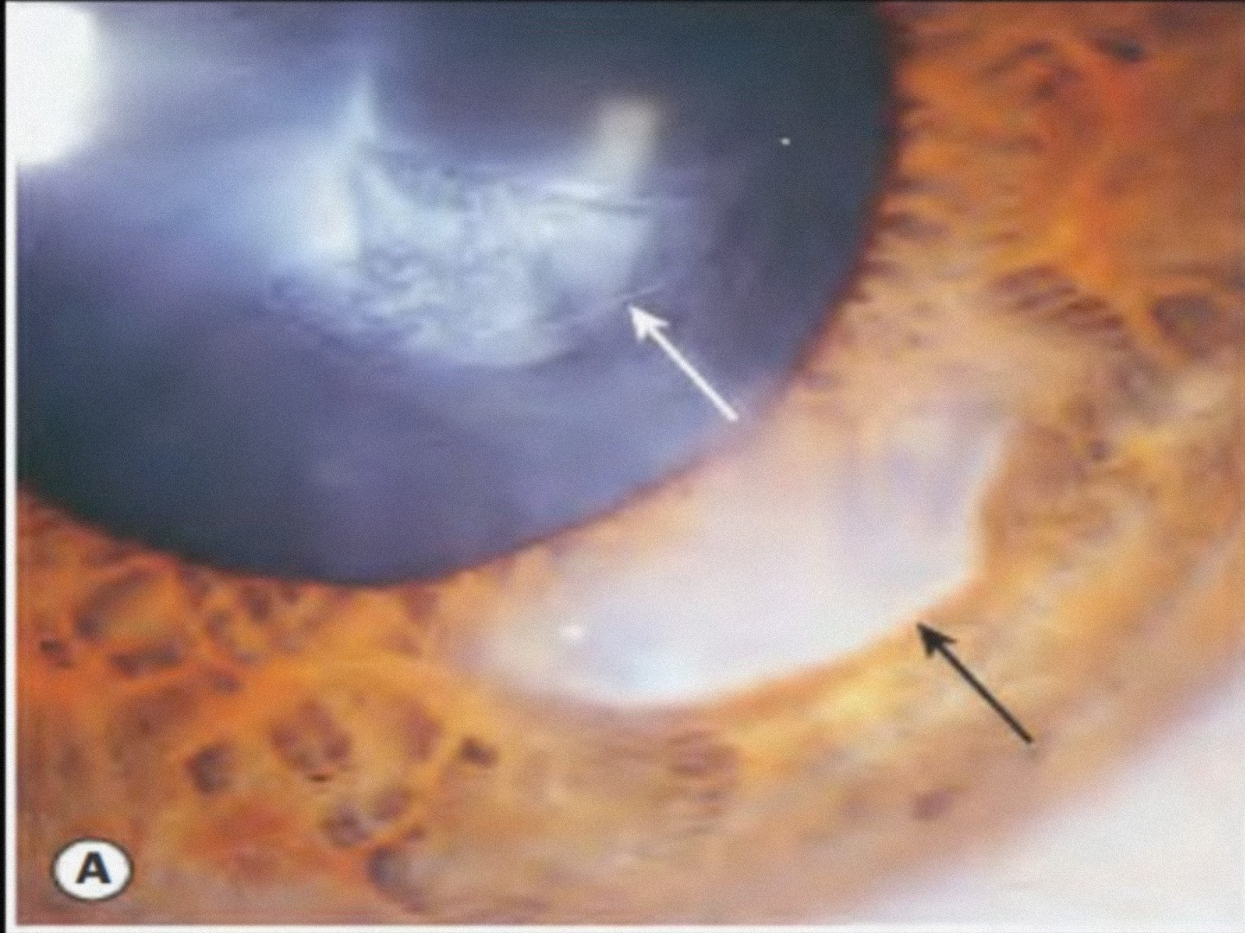
# TRAUMATIC CATARACT /ROSETTE CATARACT



Blunt trauma with flower shaped  
cataract







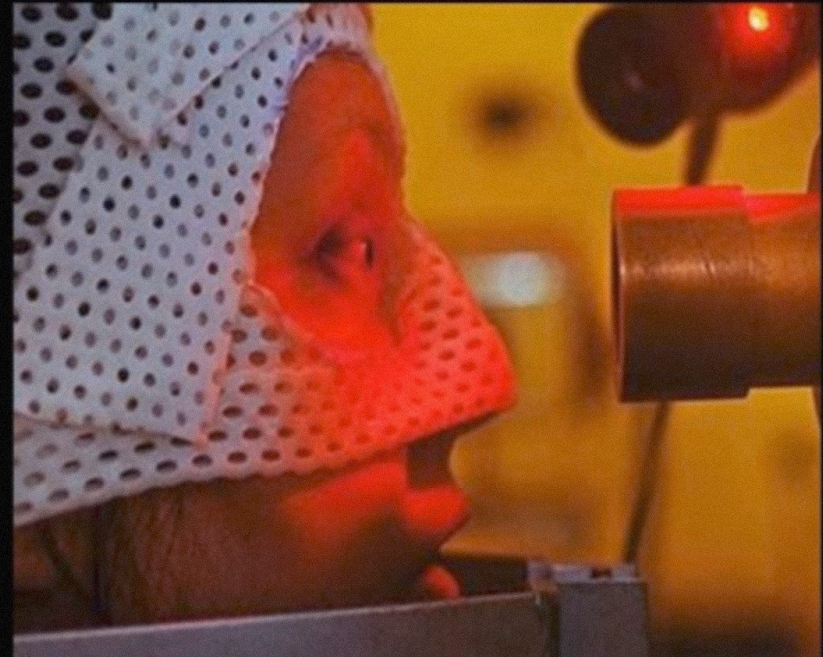
**Penetrating trauma** : indicating cataract formation at the site of entry wound into lens , and corresponding corneal tear.





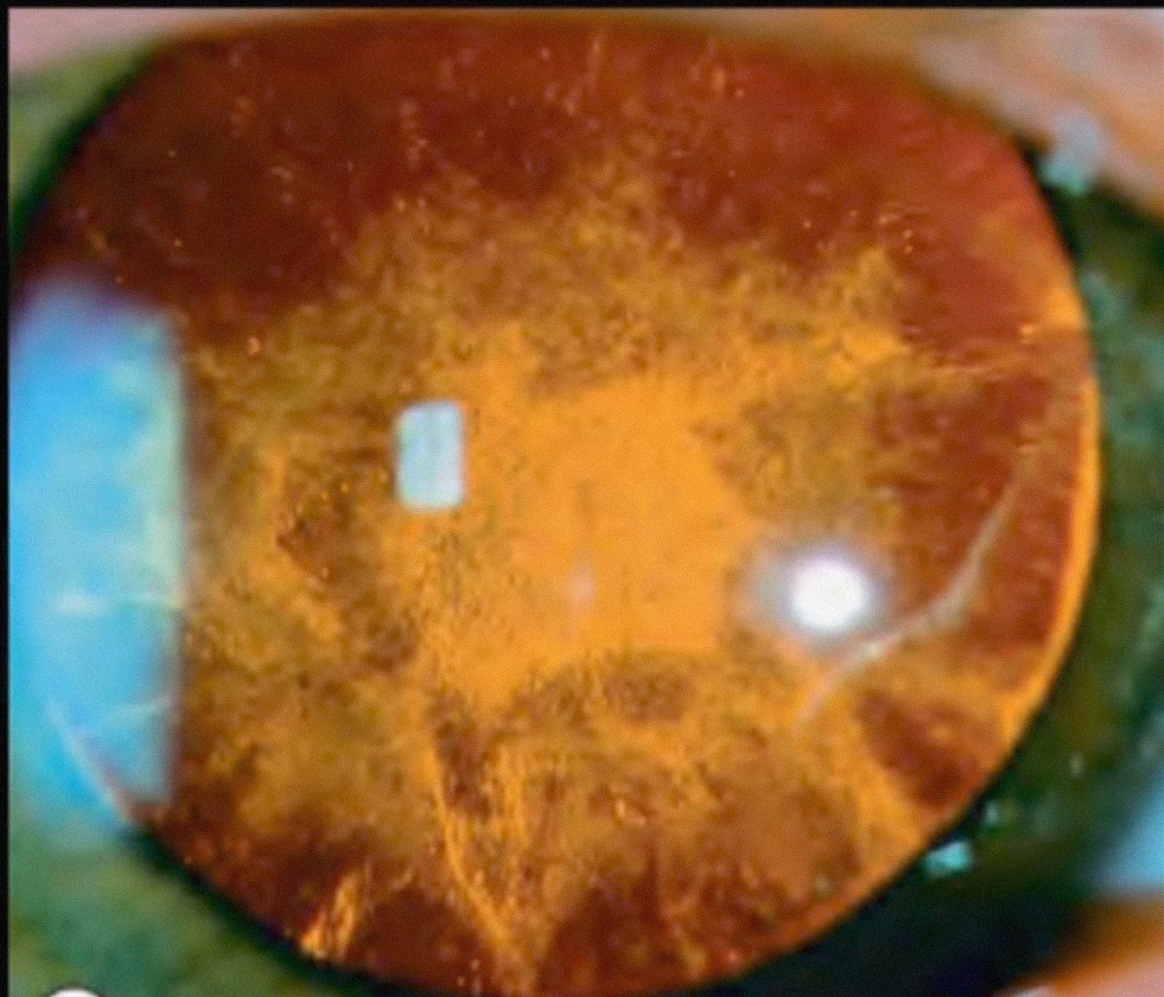
# RADIATION CATARACT

- Direct action of the rays on the **dividing cells and developing fibers** of the lens itself.
- Starts near the **equator** shortly after radiation.
- They resemble those of heat cataract in appearance.
- Maturation of the cataract may occur fairly **rapidly**





# IONISING RADIATION CATARACT





# ELECTRIC CATARACT

- Flash of lightning or the short-circuiting of a high-voltage current.
- The cataract usually starts as **punctate, subcapsular opacities** and matures rapidly.

