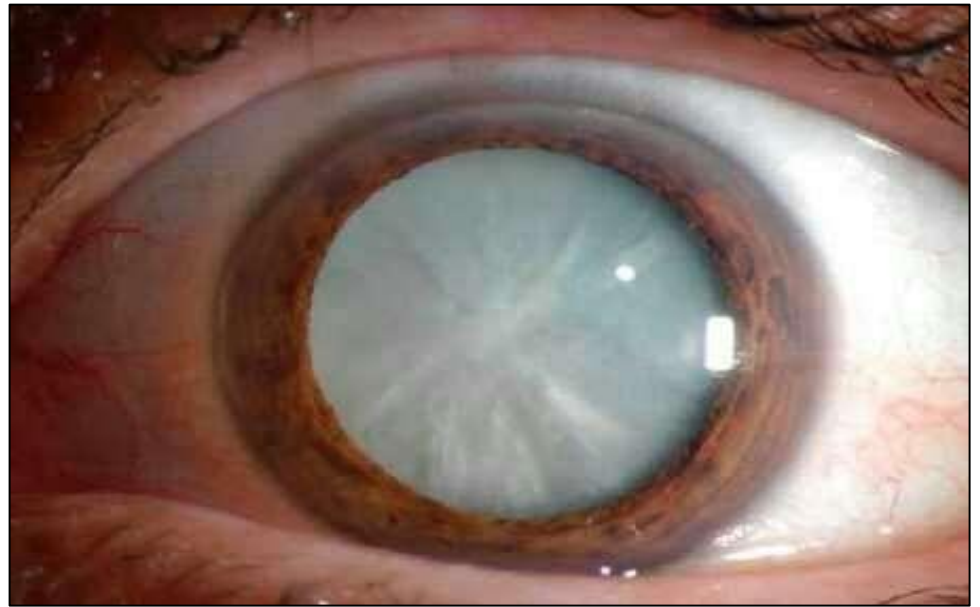


WORKUP OF CATARACT PATIENTS



❑ PRE-OPERATIVE ASSESSMENT

- HISTORY
- OCULAR EXAMINATION
- OCULAR INVESTIGATIONS
- LABORATORY INVESTIGATIONS

❑ HISTORY

- Ocular Symptoms Like Blurring of vision , coloured halos, diplopia.
- Duration And Progression.
- H/O Of Previous Intraocular Disease.
- H/O Previous Cataract Surgery.
- H/O Intraocular Injuries.

- H/o of all systemic diseases, current medications patient is on.
- Medications relevant to eye surgery:
 - Systemic alpha blocker
 - Antiplatelets and anticoagulants
 - Antihypertensives like diuretics
 - Long term steroids
 - Drug allergy to sulfonamides and other antibiotics

□ OCULAR EXAMINATION

- Visual acuity-distant and near vision and BCVA.
- Head posture & ocular posture-cover-uncover test
- Extra Ocular movements
- **Lid and adnexa**- blepharitis, ectropion, entropion, lagophthalmos.
- **Conjunctiva**- congestion , scarring, symblepharon



- **Cornea**- stromal opacity and prominent arcus senilis
 - Decreased endothelial count as in corneal guttae.
 - Specular microscopy and pachymetry
 - Endothelial deposits and keratic precipitates- to r/o uveitis or glaucoma.
-
- **Anterior Chamber**-Shallow (intumescent of lens or forward displacement by posterior pathology.
Gonioscopy to rule out the angle abnormalities.



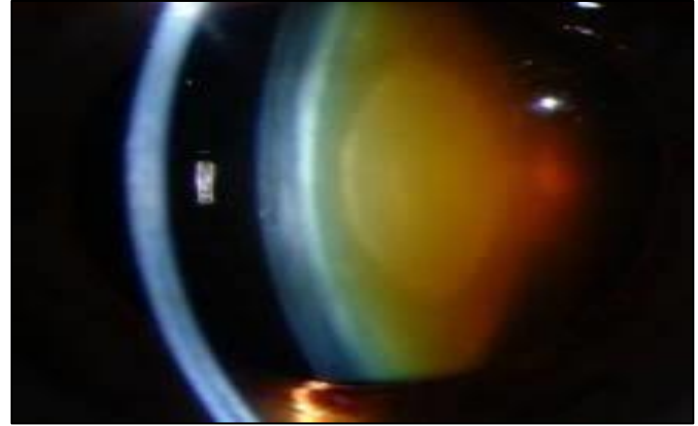
- Pupil -
- Reacting promptly to light-both direct and consensual
- Presence of RAPD-Implies substantial additional pathology
- Readily dilating with mydriatics.



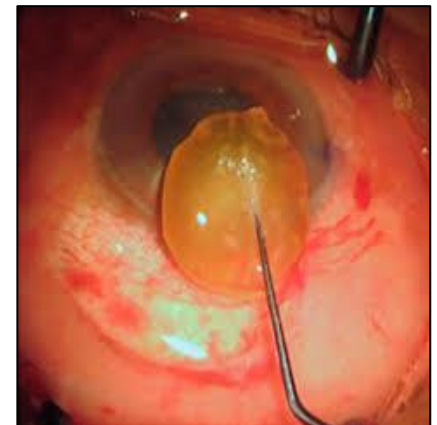
Undilated pupil



Dilated pupil

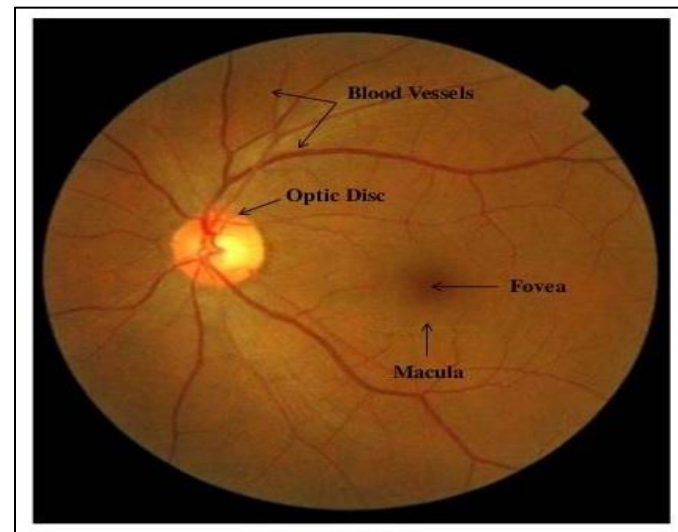


- Lens-
- Size of lens nucleus and grading of nuclear sclerosis- for planning size of incision and type of surgery
- Nuclear cataracts are harder and need more power with phaco.
- Posterior polar cataract-prevent posterior capsular dehiscence and subsequent vitreous disturbances- avoid hydrodissection.
- Examine zonules and look for Pxf as well.



❑ FUNDUS EXAMINATION

- A thorough fundus examination is important.
- Retinal and optic nerve function must be assessed pre-operatively.
- Pathology such as ARMD, RETINAL DETACHMENT Can adversely affect visual outcome.
- In eyes with very dense opacity, when fundus cannot be seen 5 tests are of value.





Direct ophthalmoscope



Indirect ophthalmoscope

➤ In eyes with very dense opacity, when fundus cannot be seen these tests are of value:

1. PROJECTION OF LIGHT
2. POINT LIGHT DISCRIMINATION
3. MADDOX ROD
4. ENTOPTIC VIEW OF RETINA
5. USG B SCAN
6. FOVEAL ERG

❑ INTRAOCULAR PRESSURE and SAC SYRINGING

- Can be raised due to swollen lens.
- Primary glaucoma can be pre-existent.
- If uncontrolled pressures , perform a trabeculectomy followed by cataract extraction/combined procedure.
- Lacrimal sac syringing to r/o dacrocystitis.



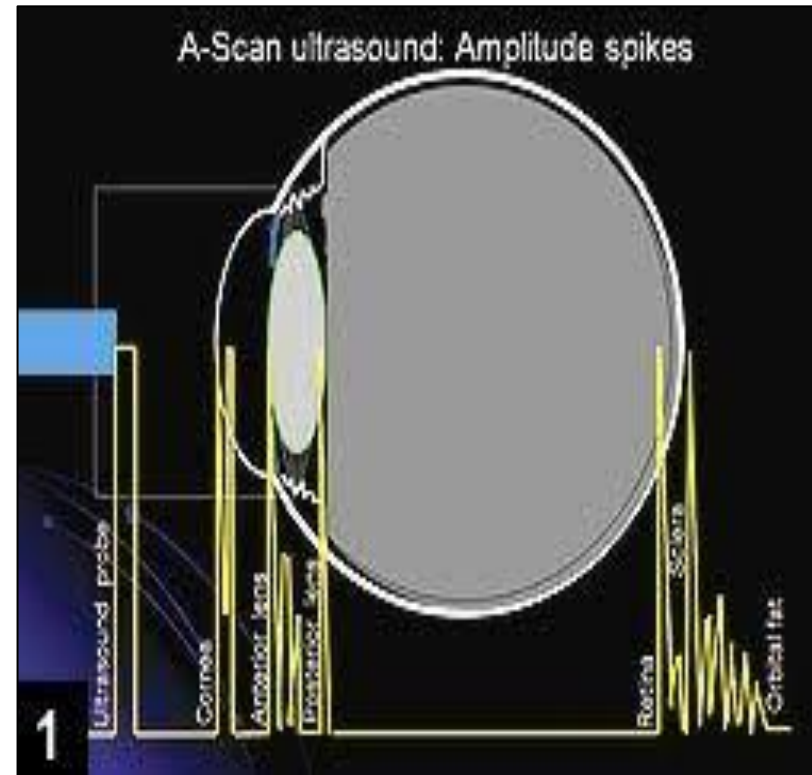
❑ REFRACTIVE ERROR and IOL POWER



- Its critical to obtain patients pre-operative refractive status in order to guide IOL implant selection.
- Biometry facilitates calculation of lens power likely to result in desired post-op refractory outcome.
- ✓ It involves 1.Keratometry 2.A -SCAN 3.Axial length.



- To calculate IOL power use SRK formula (Sanders, Retzlaff & Kraff)
 - **$P = A - 2.5L - 0.9K$**
- P : Lens implant power for emmetropia (D)
- L : Axial length (mm)
- K : Average keratometric reading(D)
- A : Constant specific to the lens implant to be used
- That A = 113 for AC lenses & 119 for PC lenses.



❑ LAB INVESTIGATIONS

- ✓ CBC, RBS, HIV, HCV, HBsAg, CXR, ECG
- ✓ URINE R/M, LFT, RFT, APTT, PT-INR-in patients with individual risk factors or planned for general anaesthesia.
- ✓ Pre-anaesthetic check-up.

➤ Pre-op prep:

- Consent for surgery.
- Preop-antibiotic eye drops QID-3days prior to surgery.
- Antianxiety Rx if patient apprehensive
- Preparing eye by trimming lashes.
- Asked to take a normal meal, sleep, bath, continue systemic medications.

THANK YOU