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Cataract

Learning Objectives



Define cataract



Describe the types of Age-related cataract



Describe the pathogenesis and complications of cataract



Describe the management of cataract

Learning Objectives

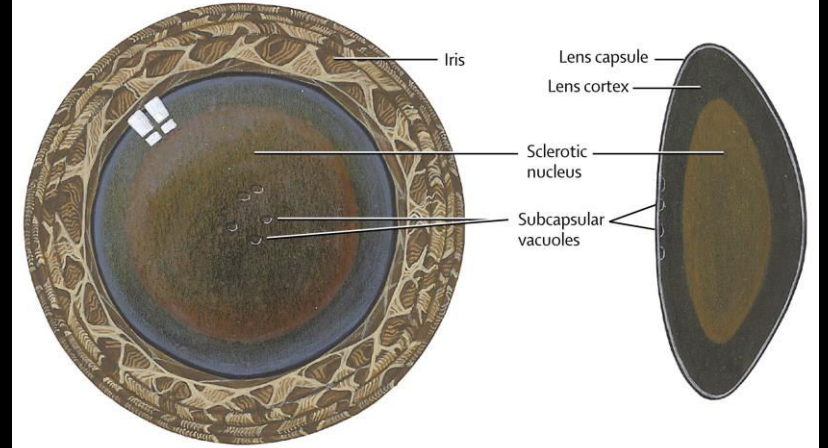


Define cataract

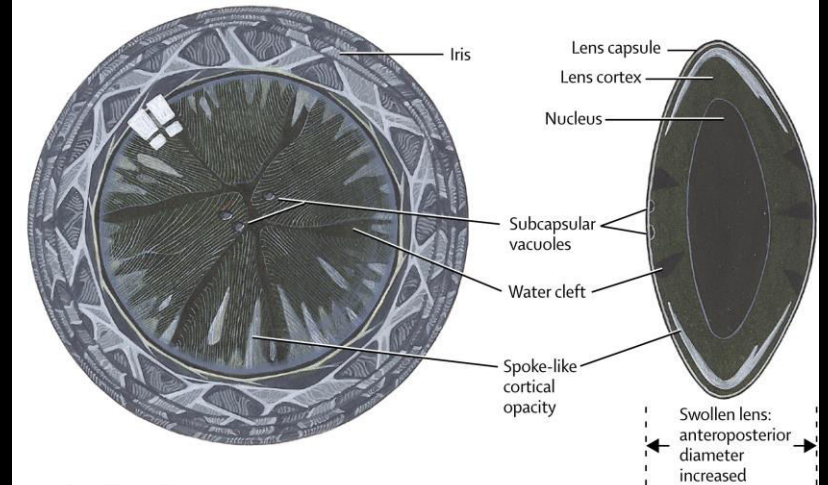
Opacification of the crystalline lens or capsule

Types of Age-related cataract

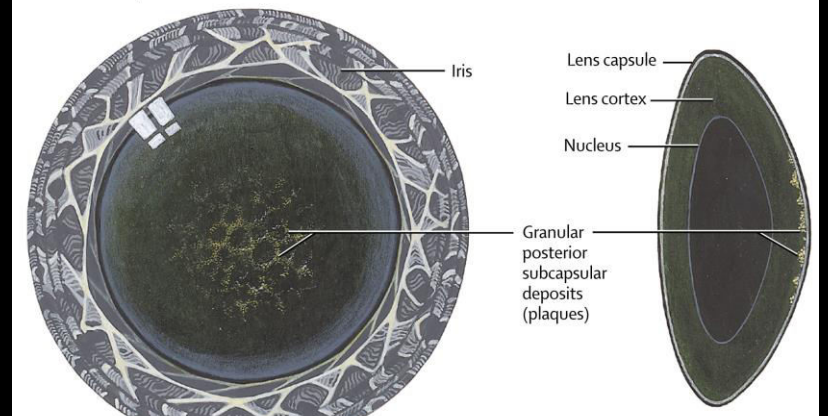
- Nuclear
- Cortical
- Subcapsular



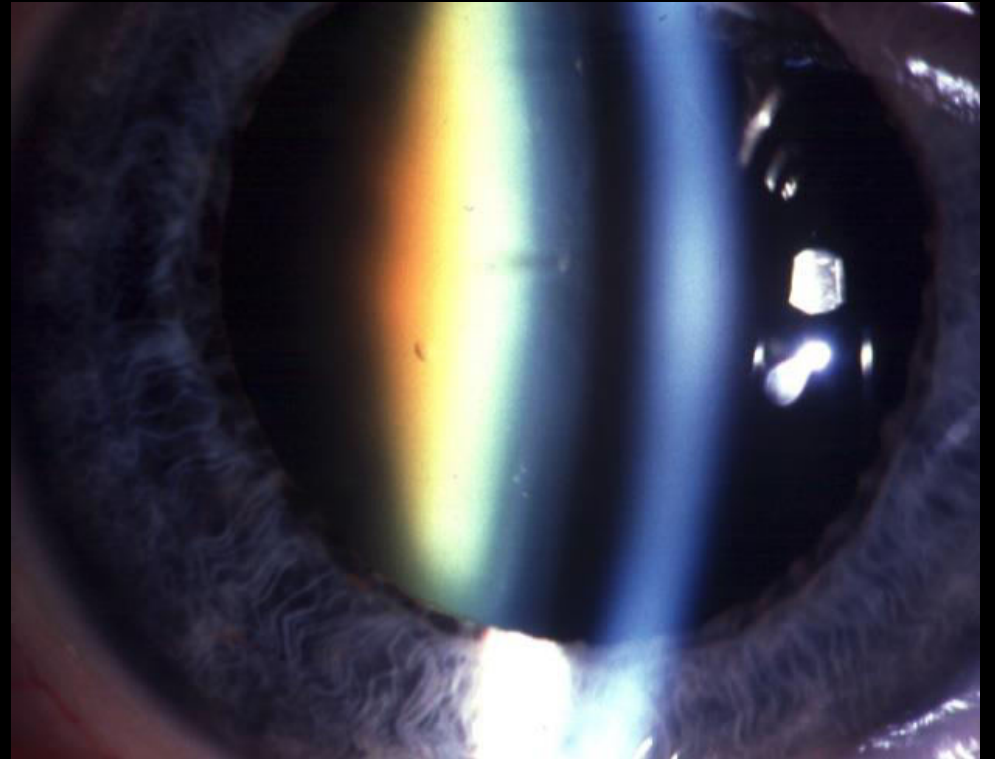
Cortical



Posterior subcapsular



Quiz



Pathogenesis

- Multifactorial
 - Genetic
 - Environmental
 - Metabolic

Complications

- If left untreated can lead to:
 - Visual impairment
 - Reduced contrast sensitivity
 - Color vision
 - Glare
 - Double vision
 - Secondary glaucoma



Pre-op assessment

Aims of pre-op assessment

- Confirm diagnosis
- Determine prognosis
- Plan surgery



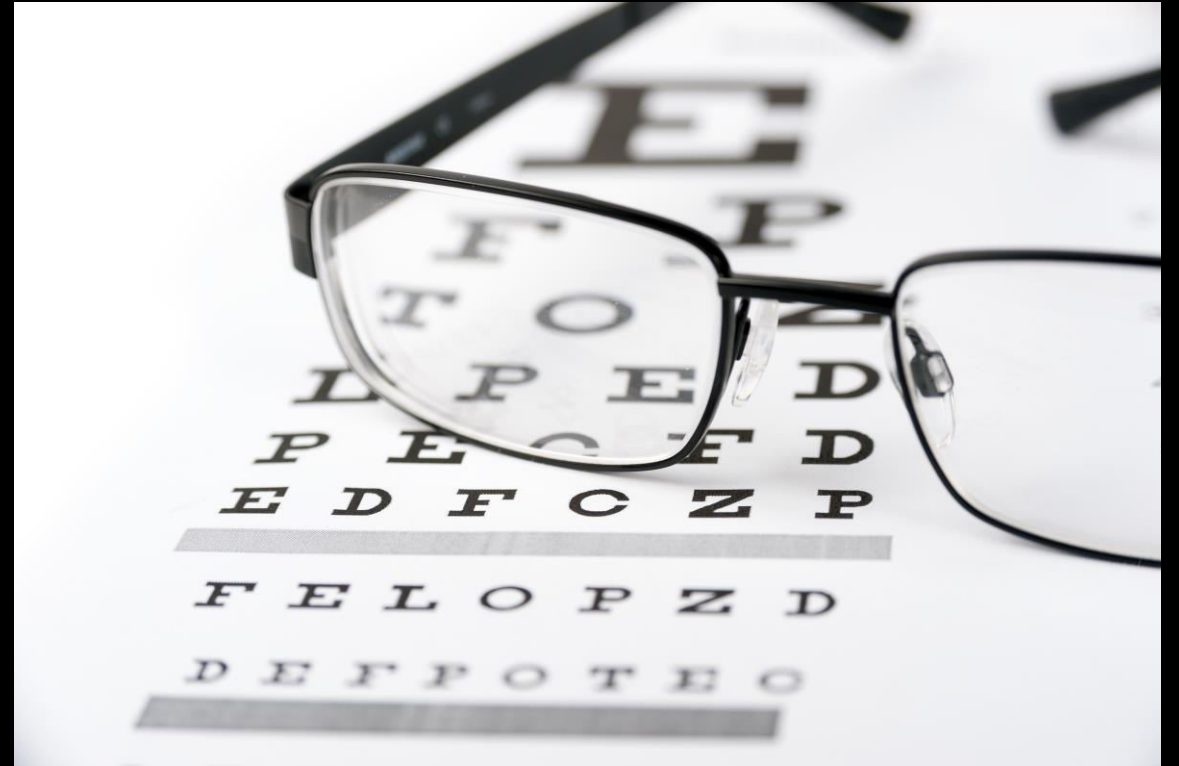
Confirm diagnosis

- Ensure visual loss is due to cataract
- Check:
 - VA
 - Pupil reaction
 - Red reflex
 - IOP
- Remember: Glaucoma is also a common cause of gradual loss of vision in older people



Determine prognosis

- Identify co-morbidity
 - Diabetes
 - Glaucoma
 - ARMD
 - Previous trauma
 - Corneal opacity
 - Amblyopia



Determine risk

- Identify risk factors for complications
 - Corneal opacity
 - Shallow AC
 - Small pupil
 - Stuck pupil
 - Pseudo-exfoliation
 - Uncooperative patient



Indications for surgery

- VA is sufficiently poor that surgery is likely to improve it
- Patient has symptoms of poor vision, which will be relieved by cataract surgery
- Patient experiences limitations in normal activities because of poor vision
- Complications of cataract – uveitis, glaucoma

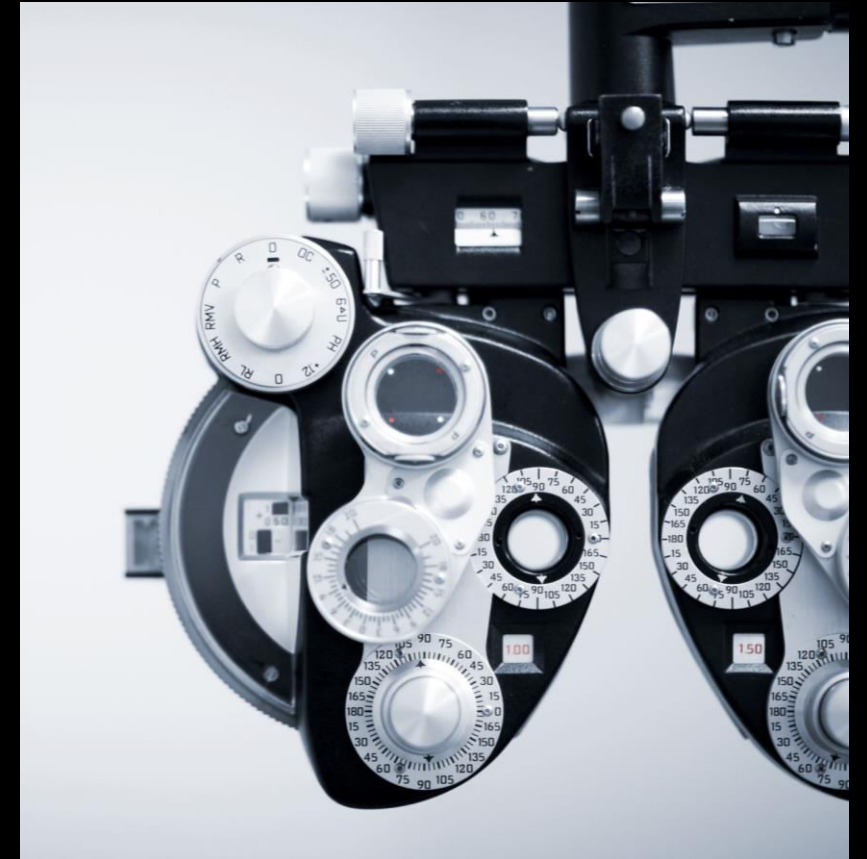
Plan surgery

- Choose the appropriate operation, based on:
 - Eye examination
 - Surgeon skills
 - Available equipment
- Prepare patient accordingly



Biometry

- Determining correct power of IOL for individual patient.
- Keratometry measures power of cornea
- A-scan / Laser interferometer measures length of eye
- Calculate correct power of IOL to focus light on retina, using regression formula



Cataract
surgery

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Retrobulbar

Peribulbar

Sub-tenon's

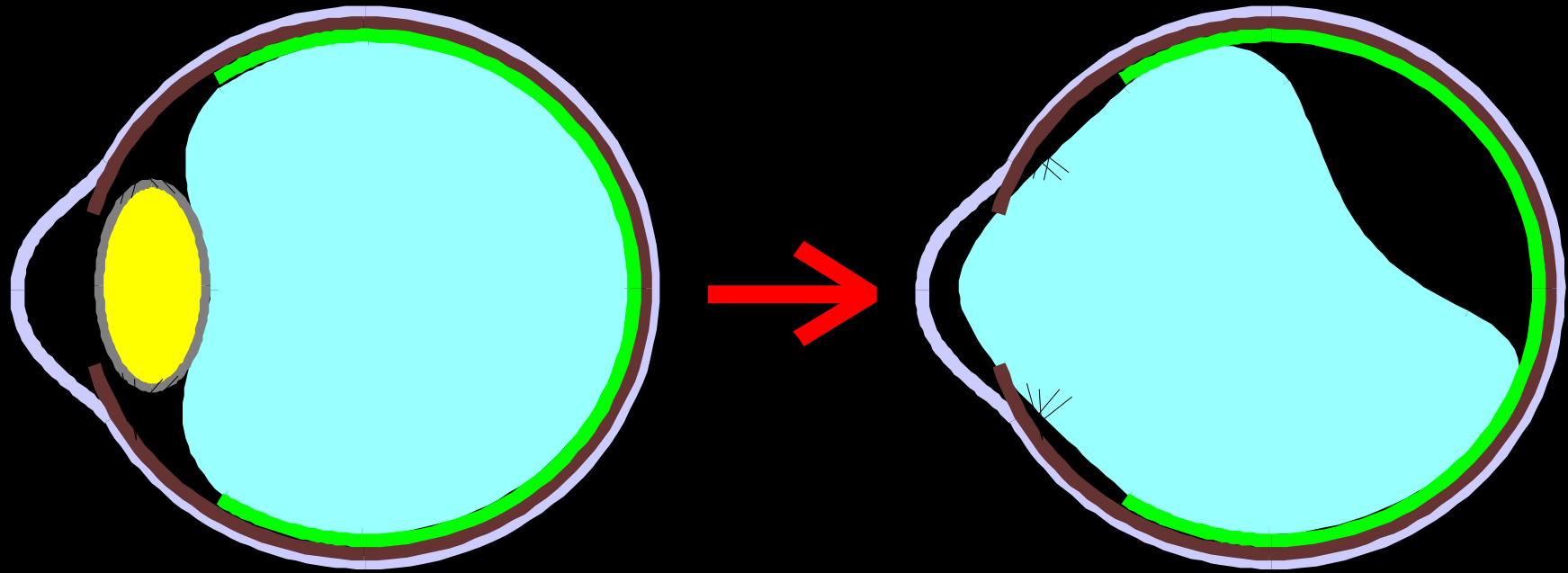
Topical

General

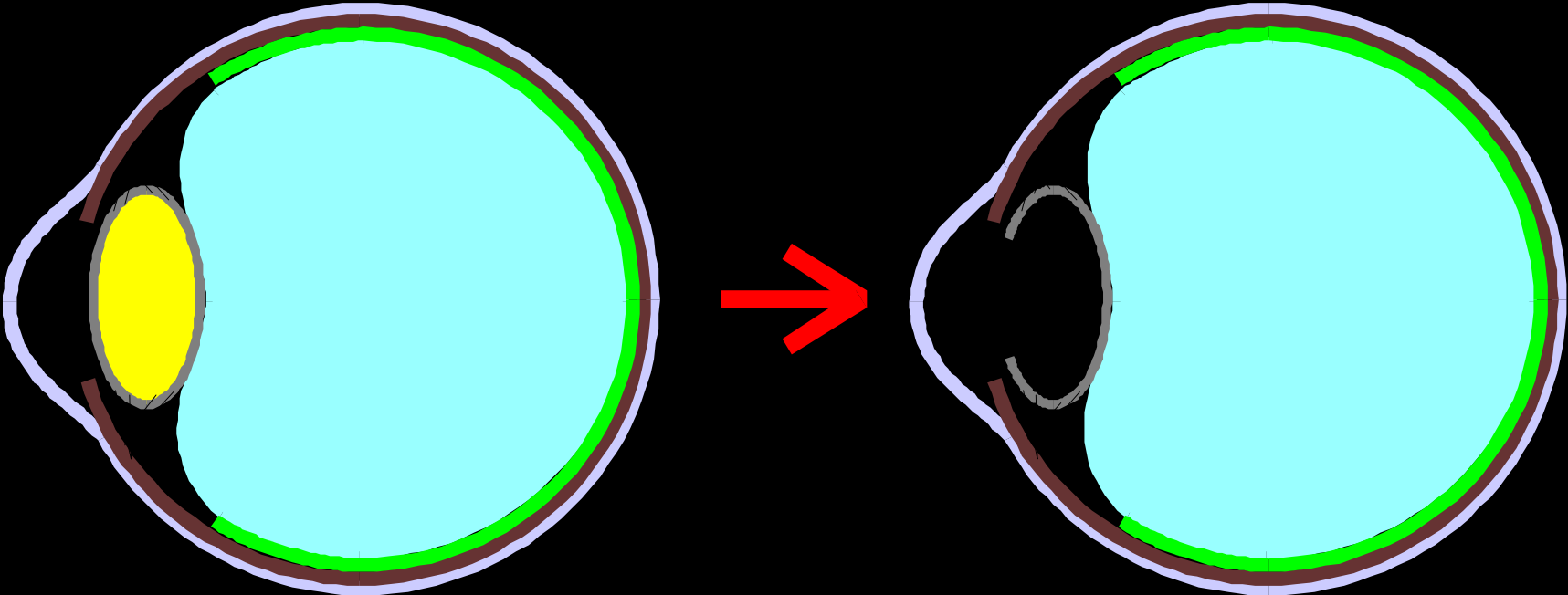
Introduction

- Surgical techniques to remove a cataract:
 - Intracapsular (ICCE)
 - Extracapsular (ECCE)
 - Suture less / MSICS (ECCE)
 - Phacoemulsification (Phaco)
 - FLACS

ICCE



ECCE



Phacoemulsification



Summary

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Describe the pathogenesis and complications of cataract



Describe the management of cataract

Any questions



Thank you everyone





Next

Cataract Surgery Complications