

Cataract Enhanced Scheme

Post-Operative Assessment

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Overview

- Structure of routine post-operative assessment
- Slit lamp examination
- Fundoscopy
- Administration

Post-operative Assessment

- History: any problems (pain, blurred vision, flashes & floaters)
- Visual acuity: unaided, best corrected
- Refraction
- Slit lamp examination

Slit Lamp Exam

- Conjunctival redness
- Corneal clarity and wound integrity
- AC activity
- Intraocular pressure
- Pupil abnormality
- IOL Implant position and capsular transparency



Fundoscopy

- Undilated: if VA good and clear view
- Dilated: if poor VA, poor view, or listing other eye
- Macula: cystoid macular oedema, (AMD)
- Vitreous: PVD and pigment cells
- Retina: retinal tear, retinal detachment, retinal haemorrhages

Administration

- Fill in forms
- Spectacle prescription = refractive result, even if no specs prescribed
- List other eye: Y/N
- Keep 1 copy, return other to hospital with invoice

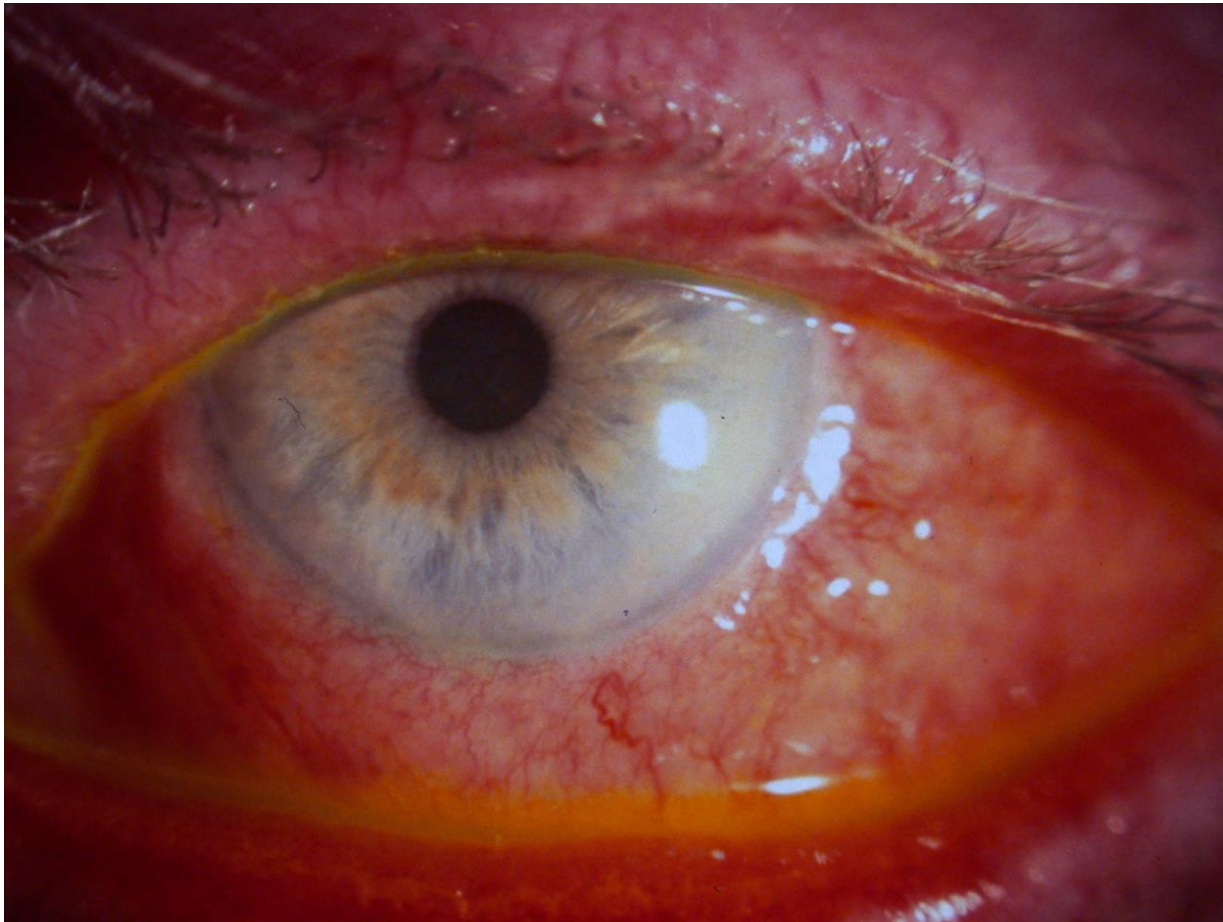
Potential Complications

- Eyedrop sensitivity / allergy
- Corneal oedema & wound-related issues
- Raised IOP
- Iritis and iris-related issues
- Capsular opacification and phimosis
- Cystoid macular oedema
- Retinal tears and detachment
- Endophthalmitis
- Refractive surprise

Eyedrop Sensitivity / Allergy

- Most common with neomycin in maxitrol; also chloramphenicol, preservatives; very rarely to steroid component
- Red, sore, itchy
- Sub-tarsal follicles
- Skin rash

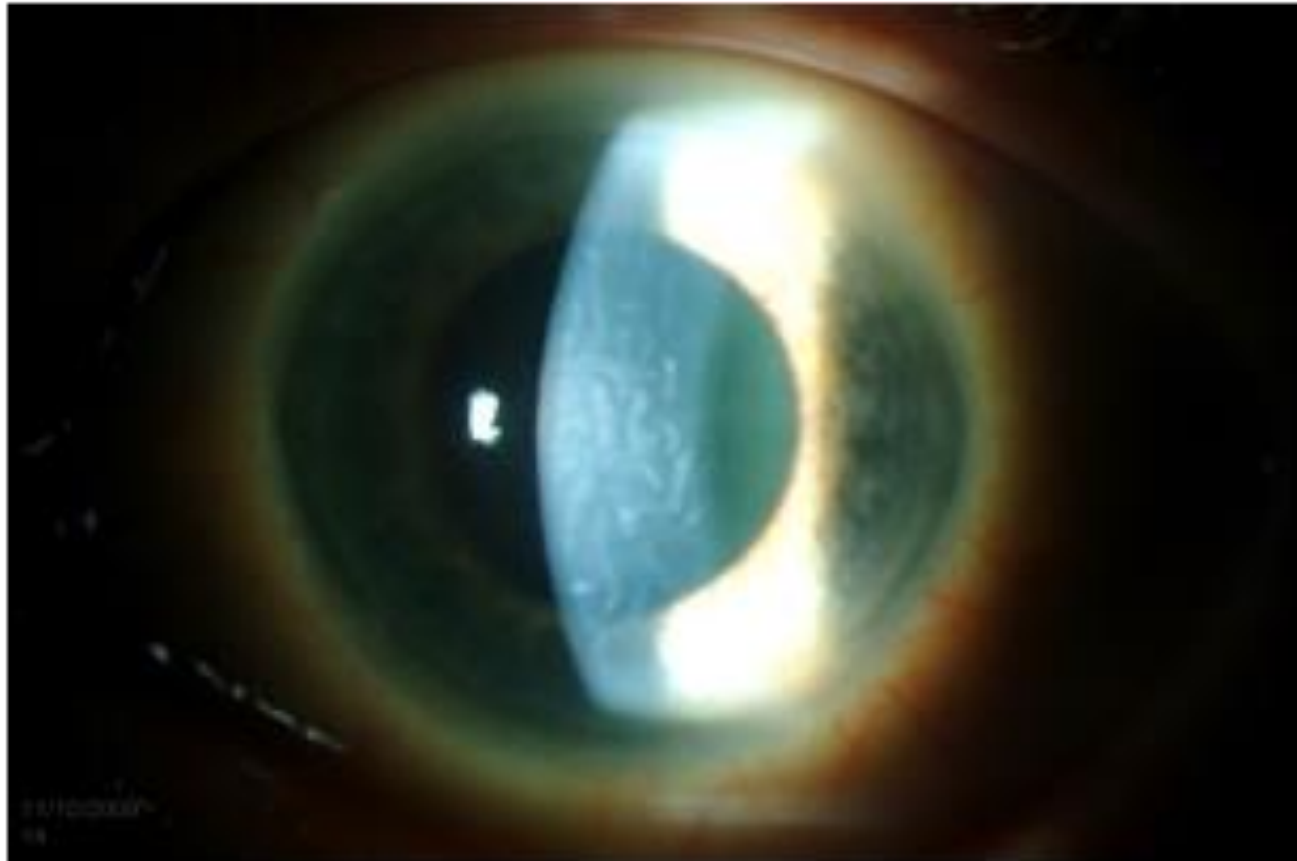
● ● ● | **Drop Allergy**



Corneal Oedema

- Intra-operative endothelial trauma
- More likely if prior endothelial problems: corneal guttata, Fuchs dystrophy
- Widely varying degrees
- Common in first few days
- Mild oedema may persist few weeks
- Rarely permanent, requiring corneal graft

Corneal Oedema



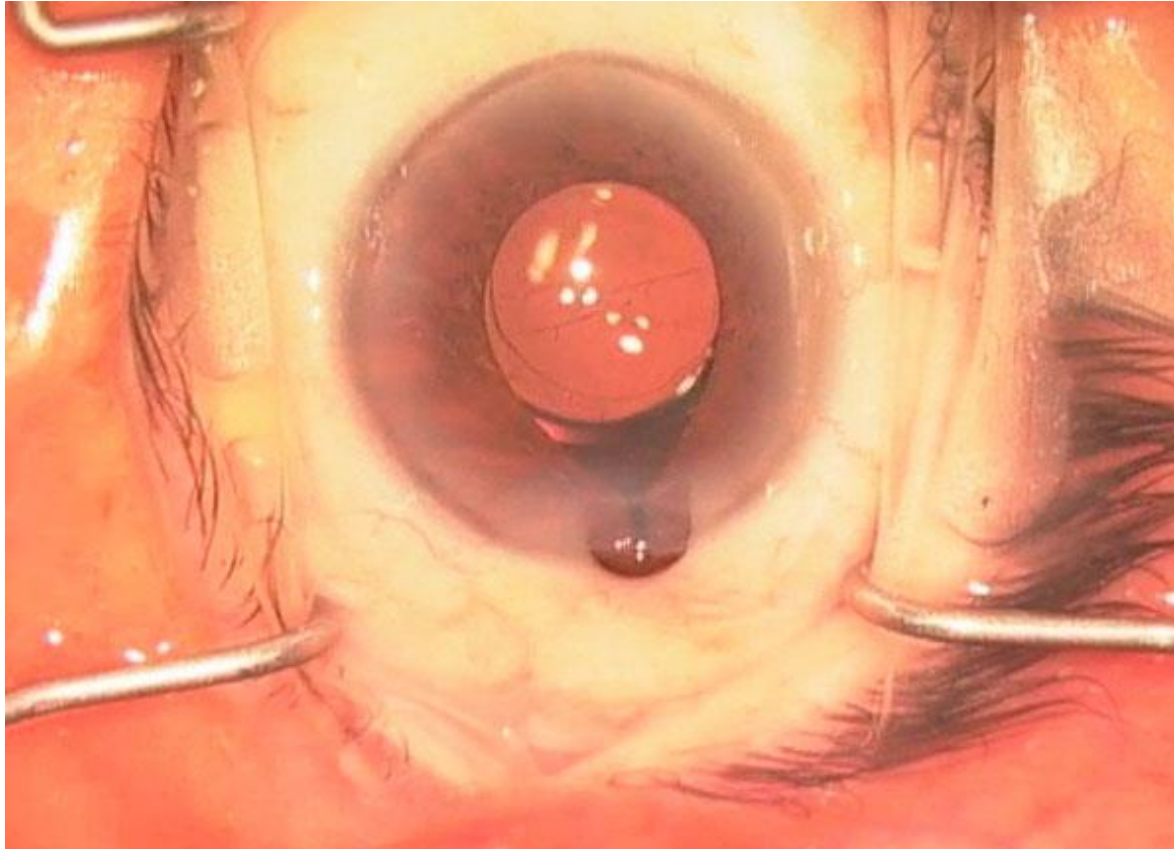
Corneal Oedema

- Blurred vision, mild discomfort
- Cornea reduced transparency
- Focal (esp near wounds) or diffuse
- Cornea may be visibly thickened
- Descemet's membrane folds
- CHECK IOP

Wound Problems

- Wound usually not sutured
- Stepped self-sealing wound
- May be asymptomatic
- Major wound problems predispose to infection, inflammation, hypotonous eye problems
- Mild gape to iris prolapse
- May require suturing / BCL

Iris Prolapse





Raised IOP

- Mild degree at 1-2 days postop
- More common in glaucoma and OHT
- May be secondary to uveitis, steroid drop use
- If high, may cause corneal oedema, retinal artery and vein occlusions
- Can be prolonged, leading to optic disc cupping / glaucoma

Uveitis

- Discomfort to painful
- Blurring
- Photosensitivity
- Ciliary Injection
- Cells and flare
- Hypopyon
- Fibrin
- KPs
- Posterior synechiae

Excessive / Prolonged Uveitis

- Always some post-op uveitis
- Problematic when severe or recurs following cessation of drops
- Need to exclude causes e.g. endophthalmitis (propionebacterium), IOL malposition, retained soft lens material, iris trauma

● ● ● | **Uveitis**



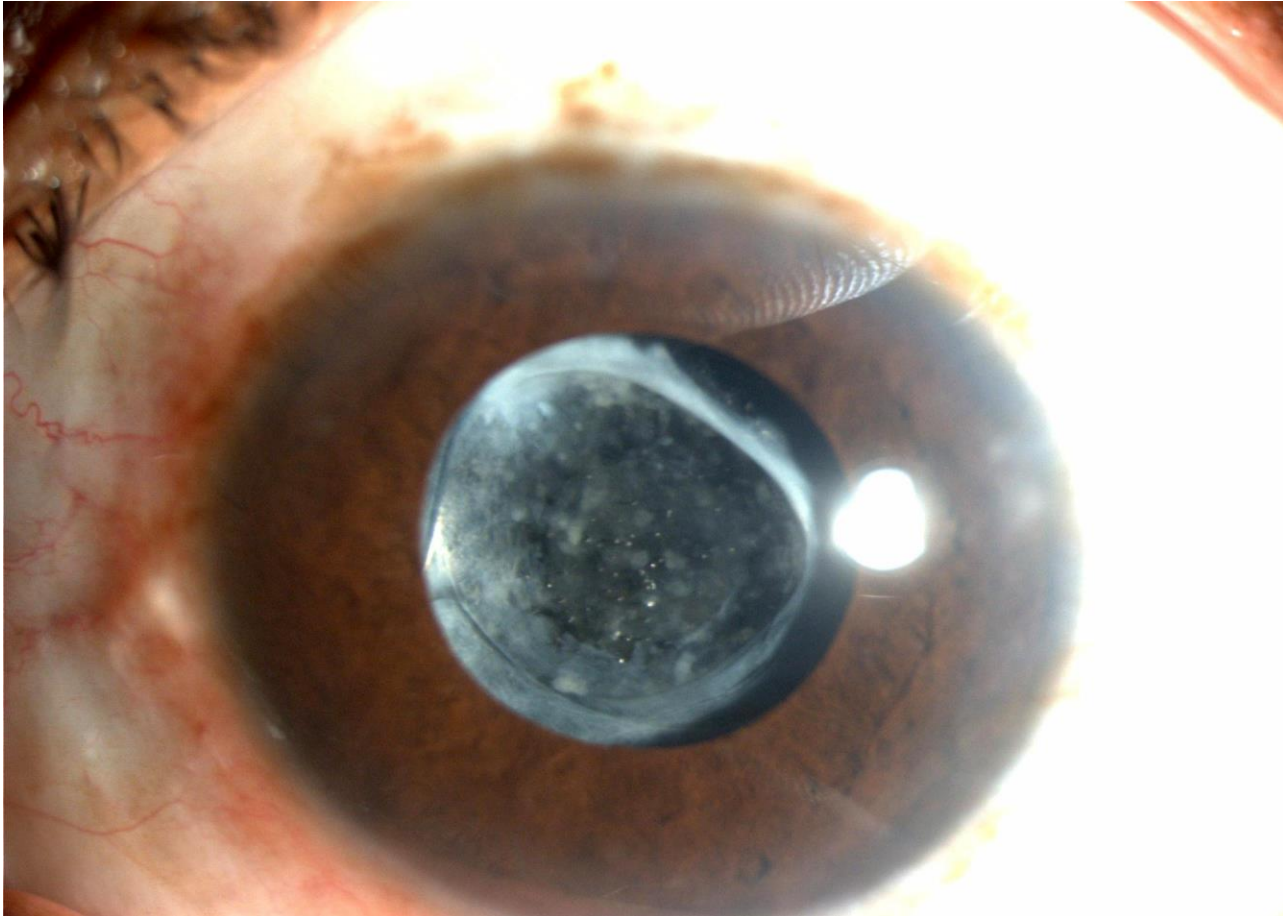
Iris Trauma

- Minor degrees frequent
- Usually symptomatic
- May cause cosmetic problem, monocular diplopia, glare, prolonged uveitis

Posterior Capsular Opacification

- Commonest complication 10-20%
- Some degree in almost all
- Very variable timeframe
- Commonest within 2 years
- More likely in younger patients
- Only treat if symptomatic visual reduction
- Check fundus for other pathology

Posterior Capsular Opacification



YAG Laser Capsulotomy

- Quick and painless
- Usually no complications
- Potential complications are:
 - IOL damage
 - IOL displacement
 - CMO
 - Retinal tear/detach
 - Raised IOP
 - Corneal damage
 - Hyphaema

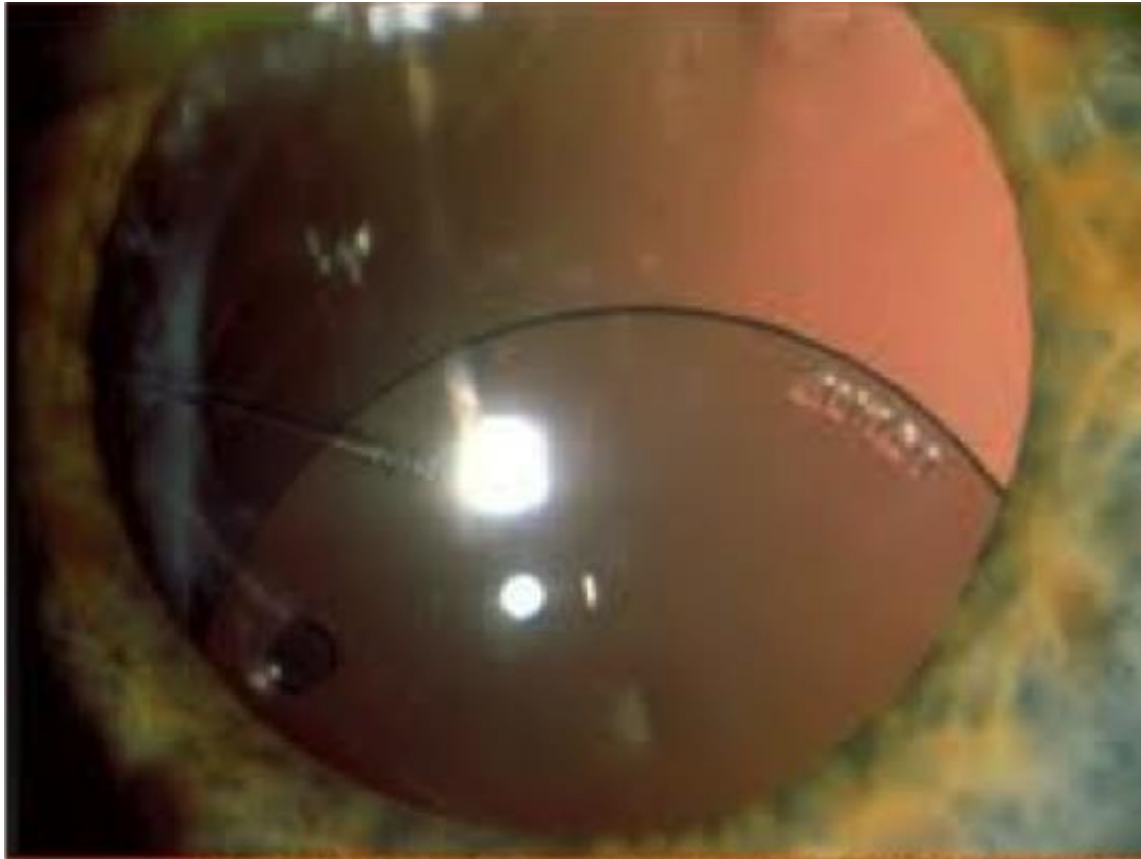
Anterior Capsular Phimosis



IOL Problems

- Rarely serious
- More common if complicated surgery
- IOL usually subluxed: i.e. partially shifted up / down / sideways / tilted
- Reduced VA, increase cyl, monocular diplopia
- More obvious in dilated pupil
- May distort pupil

● ● ● | **Displaced IOL**



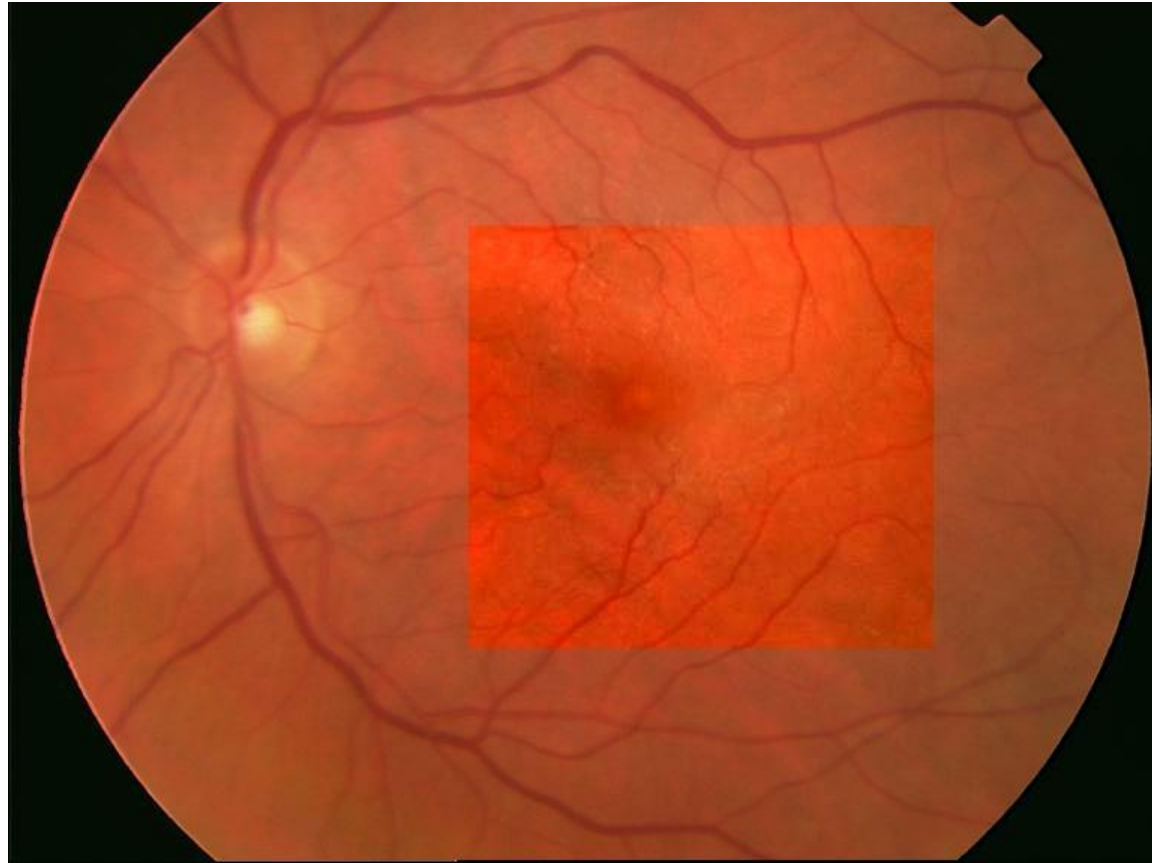
Cystoid Macular Oedema

- Sub-clinical forms very common
- Reduced VA, usually delayed onset (week 3, occasionally months)
- More common in diabetics, other retinal disease, excess uveitis, vitreous loss / capsule rupture, prostaglandin analogue eyedrops

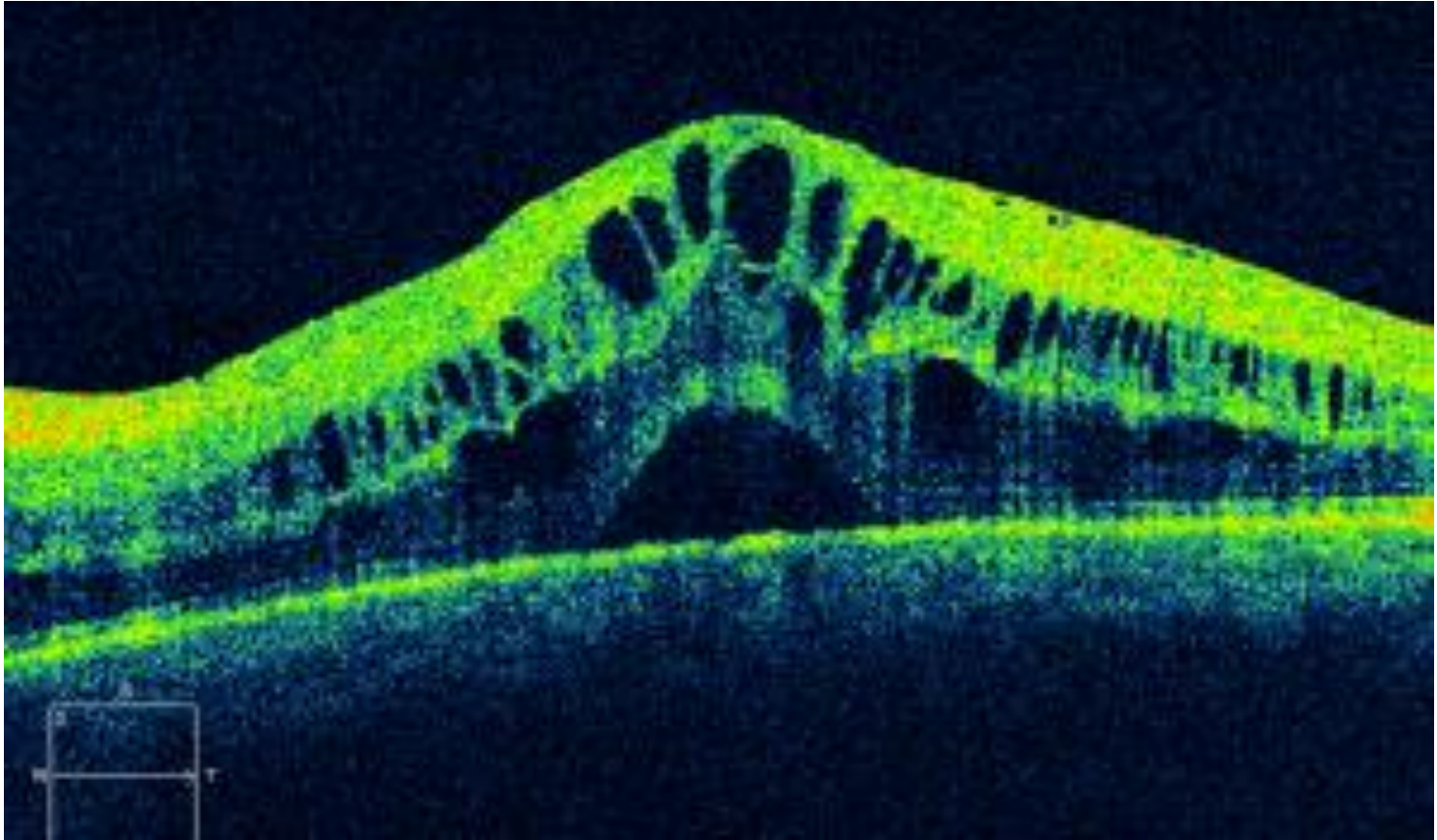
Cystoid Macular Oedema

- Reduced VA
- Occasionally Amsler distortion
- Thickened macula
- Cysts at macula
- Can be confirmed with OCT/
fluorescein angiography
- Usually resolves spontaneously
- Treatments available

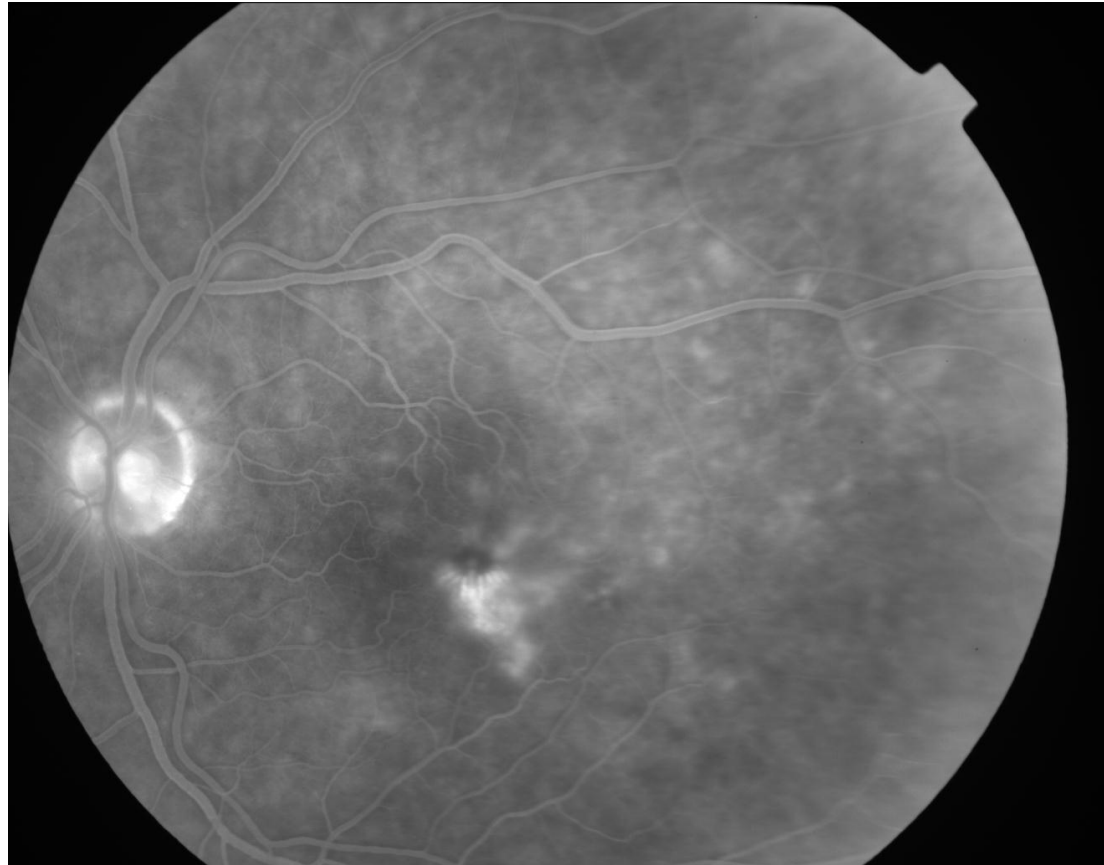
Cystoid Macular Oedema



Cystoid Macular Oedema



Cystoid Macular Oedema



Retinal Tears and Detachment

- Flashes and floaters: usually PVD, common onset after cataract surgery
- Must check retina including periphery
- More common in myopes, posterior capsule rupture and vitreous loss
- Pigment cells “tobacco dust” in vitreous
- U-shaped retinal tear
- RD: VA down or scotoma

Retinal Tear



Retinal Detachment



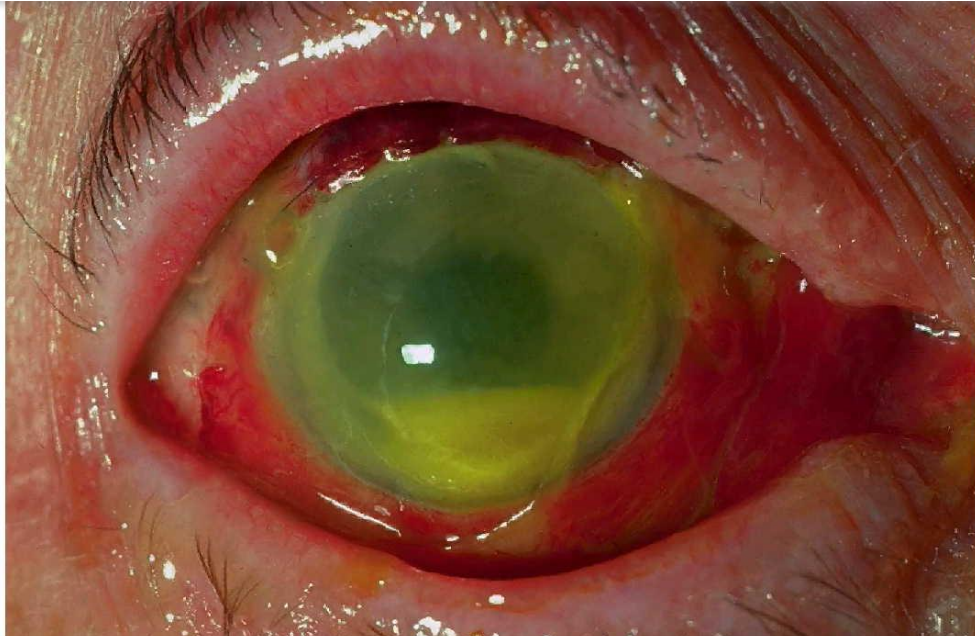
Endophthalmitis

- Most feared post-operative complication
- Infection inside globe
- Incidence: 1:1000
- More common in ill / systemic infection, diabetics, complicated surgery
- Onset in first 2 to 10 days post-op
- Painful red eye with worsening VA
- Severe uveitis, hypopyon, fibrin, vitreous haze

Emergency

- Immediate referral
- Intra-ocular sampling
- Intra-ocular antibiotics
- Intensive systemic and eye drop medication
- High rate poor visual outcome despite intensive treatment

Endophthalmitis





Refractive Surprise

- 90% achieve within 1D of aim
- Most planned mild myopia (-0.2D)
- Interim anisometropia common
- **Cannot guarantee postop refraction**
- Pre-op astigmatism may remain
- Not helpful to tell patient bad outcome especially in context of a happy patient!



Refractive Surprise

- Causes: wrong IOL; IOL in wrong place (e.g. AC, sulcus), subluxed IOL, wound problems, CMO, bad luck
- If extreme, refer back
- Explore refractive options (e.g. monovision, tolerable glasses prescription, CL, refractive surgery /laser, IOL implant exchange)

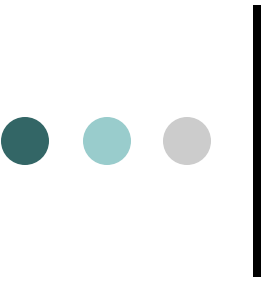


Re-referral

- Emergency (immediately): Endophthalmitis
- Urgent (that day / next day): retinal tear / RD, serious wound closure problems, IOP >40, marked uveitis
- Soon (within 1 week): IOP > 26, marked corneal oedema, marked IOL displacement, persistent uveitis, severe DR, drop allergy, flashes / floaters
- Routine: PCO, CMO, Refractive surprise, glaucoma, floaters, unexplained poor VA, unhappy patient

How to Refer

- Acute Clinic –
Mon to Fri 01582 718320
- Call Ophthalmic Nurse Practitioners
via bleep (Switchboard)
- Weekends & Out-of-hours
01582 491166
bleep on-call ophthalmologist



Thank you



Luton and Dunstable
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NHS Foundation Trust