



Common Eye Diagnoses and their Acronyms

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Acronyms in Ophthalmology?

Laser PT

VA

***What is the
ophthalmologist
trying to tell me?***

IOFB

CFB

XT

YAG PCO

Why should a GP care about this?

- A good specialist's letter should never use jargon
- So why should a GP want to understand this terminology?

Why should a GP care about this?

- These abbreviations are used for the commonest conditions
 - Learning about these abbreviations is useful for your own eye health skills
- GP wants to understand communication written between eye care providers
- GP may be asked to read an optometrist's report to complete a vision certification

Learning objectives

- Demystifying the communication from eye care providers
- Review eye assessment for GPs
 - History, Vision, Fluorescein, Ophthalmoscopy
- Review commonly abbreviated conditions
 - Use this to revisit assessment and management
 - FB, AAU, PVD, AMD, GCA...
- Cases
 - Blurry vision

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Services offered:

- Cataract surgery
- Refractive surgery
- Eye injections for Macular degeneration and Diabetes
- Glaucoma
- Blepharoplasty, Ectropion, Entropion

Practice Locations:

- East Melbourne
 - Melbourne Eye Centre
- Cheltenham
 - Cheltenham Eye Centre
- Warragul
 - Retina Specialists Victoria
- Public Consultant:
 - RVEEH, Austin, Northern



Eye Assessment

Refresher



Eye Assessment – History Traps

-



Eye Assessment – History Traps

- Sx: Red, Pain, Blur, Watering
- Side: Which eye vs Both
- Assoc: Headache, Pain, Red
- Dur: Intermittent v Constant
- Onset: Sudden v Suddenly noticed
 - What were you doing when started?



Eye Assessment - Vision

- **VA**
 - **OD/RE**
 - **OS/LE**
 - **s**
 - **c**
 - **ph**



Eye Assessment - Vision

- **VA** (Visual Acuity)
 - Test each eye separately
 - Right (**OD/RE**) then Left (**OS/LE**)
 - 3,4,6 metre charts
 - Report in **6/...** (6 m conversion)
 - **s** (without glasses)
 - **c** (corrected with glasses)
 - **ph** (pinhole 1-2 mm)
 - PH accounts for refractive error (glasses)

Eg: VA c RE 6/6, LE 6/12



Eye Assessment - Vision

What to report if the patient can't get the top letter?

- **6/60** (top letter)
- **3/60** (at 3 m), **1/60** (at 1 m)
- **CF** (Counting Fingers at 1 m only)
- **HM** (Hand movements only)
- **PL** (Perception of Light only)
- **NPL** (No Perception of Light)



Eye Assessment - Vision

- Driving standards Australia
 - Private licence:
 - **6/12 BEO** (Both Eyes Open)
 - Commercial:
 - **6/9 BEO** (Both Eyes Open)
 - 6/18 each eye minimum



Eye Assessment - Pupils

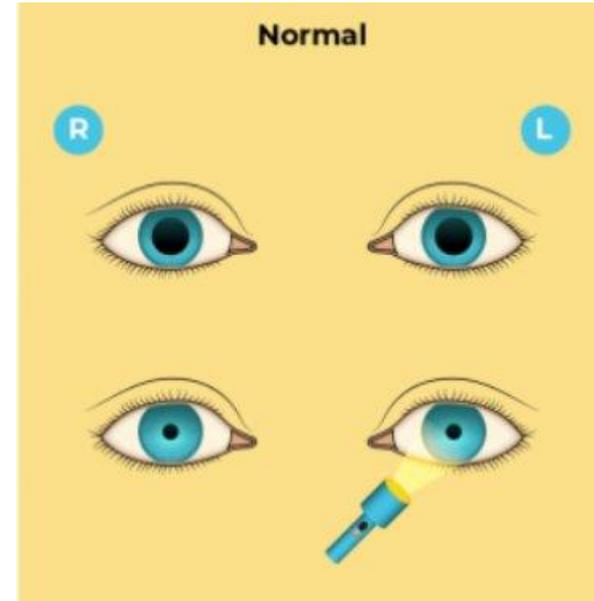
- **PEARL**
- **RAPD**

Eye Assessment - Pupils

- **PEARL**

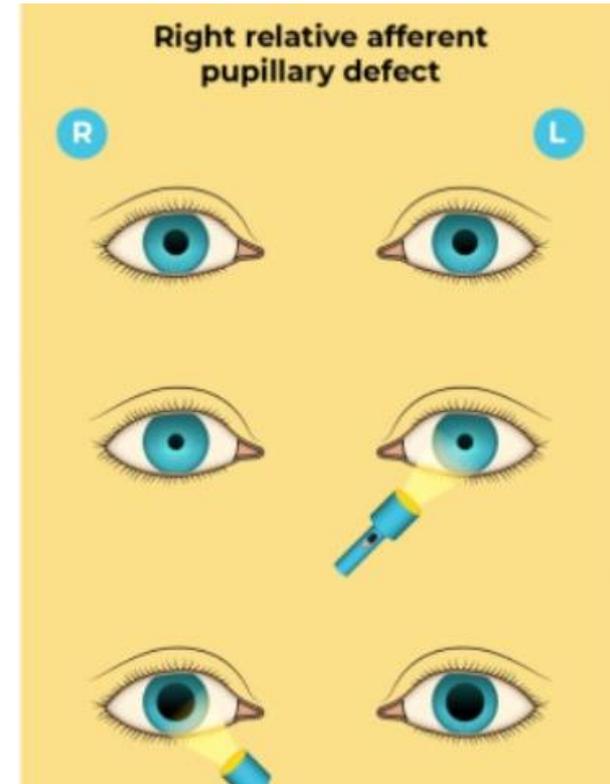
- Pupils Equal And Reactive to Light

- Symmetric pupils
- Direct light reflex
- Consensual light reflex



Eye Assessment - Pupils

- **RAPD**
 - Relative Afferent Pupil Defect
 - = 'Swinging light test'
- Brightness sensitivity
 - = Subjective version
 - "If this eye is 100% bright, How bright is this one?"
 - 80% - 100% is normal
- Unilateral sensory problem
 - = Optic nerve or Total retina
 - *Not:*
 - Cataract
 - Vitreous haemorrhage
 - Glasses error



RAPD



(Eye Assessment – IOP)

- IOP



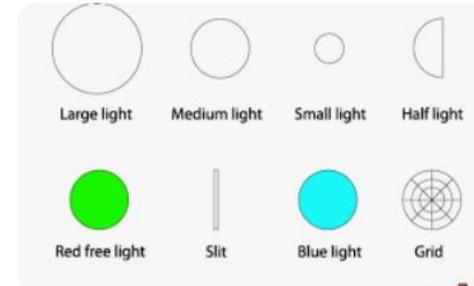
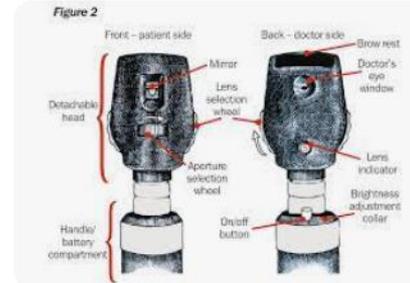
(Eye Assessment – IOP)

- **IOP:** Intra-Ocular Pressure
 - Normal: 10-20 mmHg
 - Painful only if:
 - Acutely IOP >40



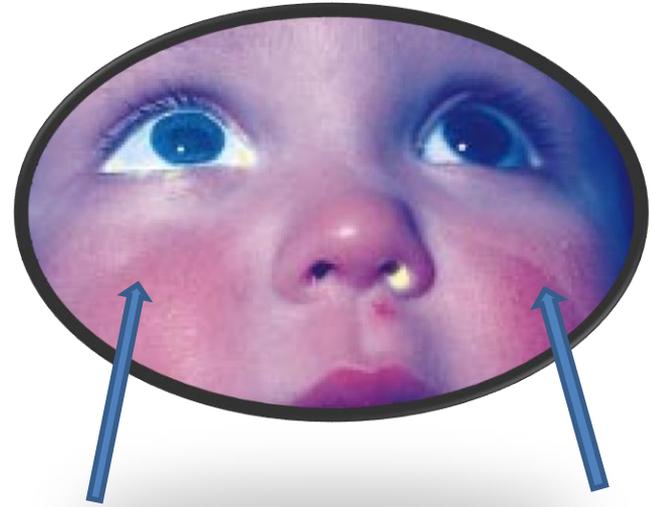
Eye Assessment – Fluorescein

- Applying:
 - Smallest amount needed only
 - Cobalt Blue light (handheld ok)
- Use for:
 - **FB** (Foreign body)
 - Abrasion
 - Drainage (disappearing dye test)



Eye Assessment – Fluorescein

- Disappearing Dye Test
 - Fluorescein bilaterally
 - Wait *5 min*
 - If minimal drained likely NLDO (Nasolacrimal duct obstruction)



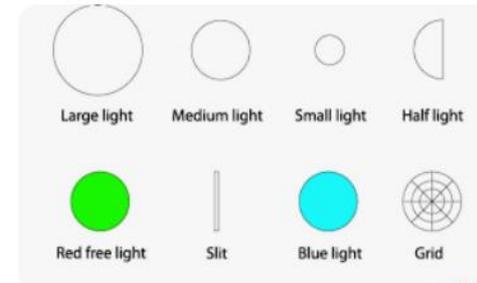
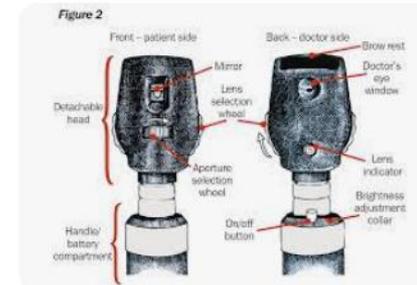
Right Obstructed Nasolacrimal Duct

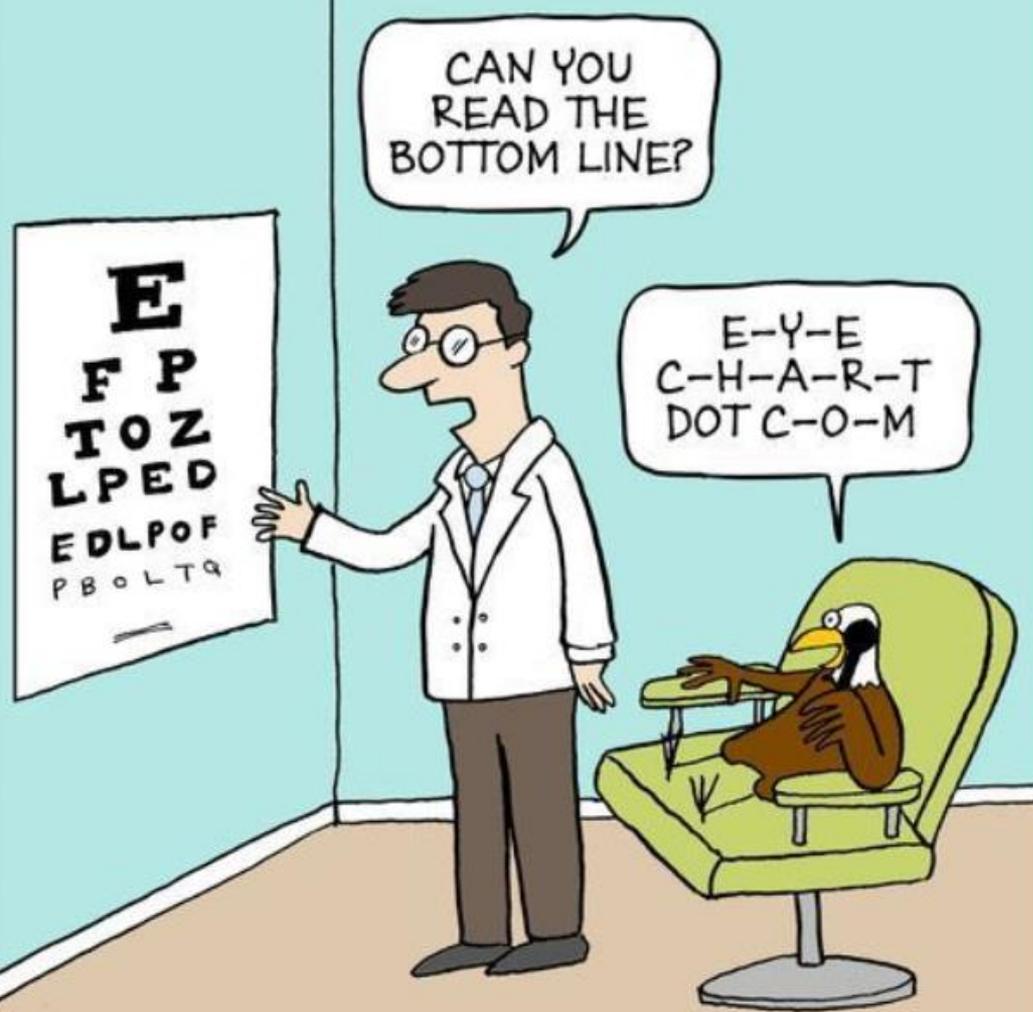
Normal



Eye Assessment – Ophthalmoscopy

- Direct ophthalmoscope
 - Just getting a view is useful information!
 - Hazy view (media opacity) from:
 - Cataract
 - Vitreous haemorrhage





Demystifying Diagnoses

Common Diagnoses & their Acronyms

- Trauma – CFB, PEI, IOFB
- Epiphora – DED, PEE, SPK, NLDO
- Anterior segment – MK, CL, AAU, POAG, PI
- Lens – NS, CLO, PSCC, IOL, PCO, YAG
- Vitreous – PVD, RRD
- Retina – AMD, CNV, NPDR, PDR, BRVO, VEGF
- Neurological – GCA, CRAO

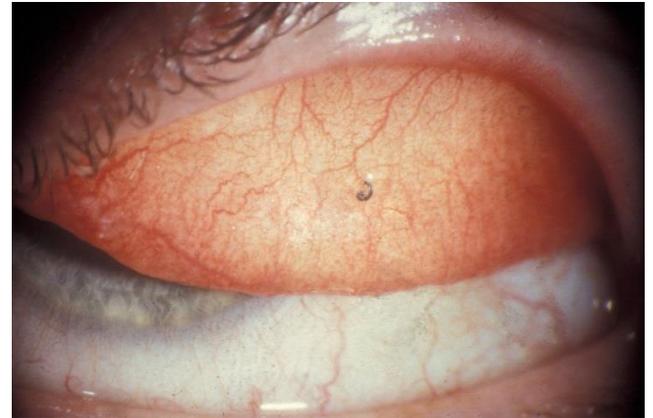
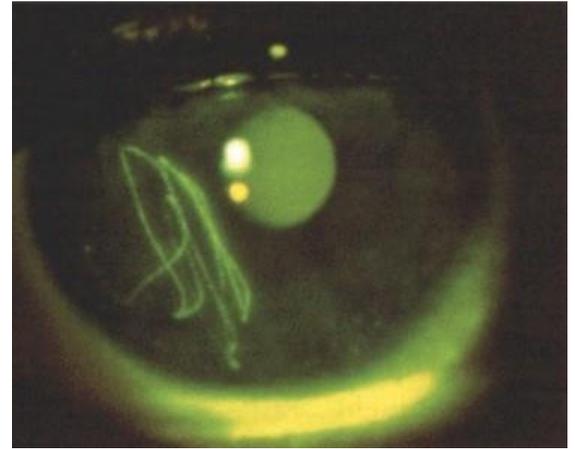
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Trauma

CFB

– STFB

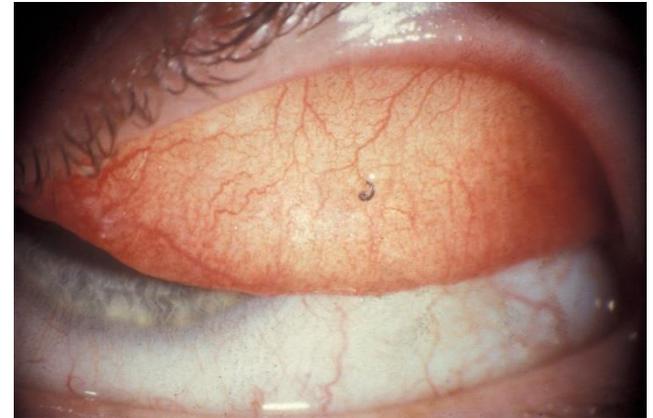
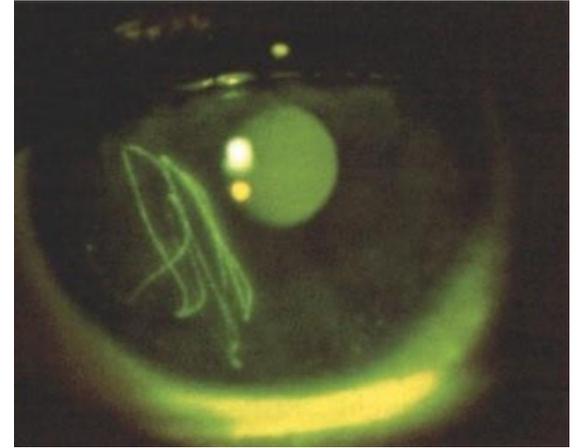


Trauma

CFB = Corneal Foreign Body

– STFB = Subtarsal FB

- Sudden onset
 - While: gardening / grinding / showering
- Constant, Pain with blinks
- All pain relieved with anaesthetic drop
- Mx: Remove, Chlorsig QID 5/7

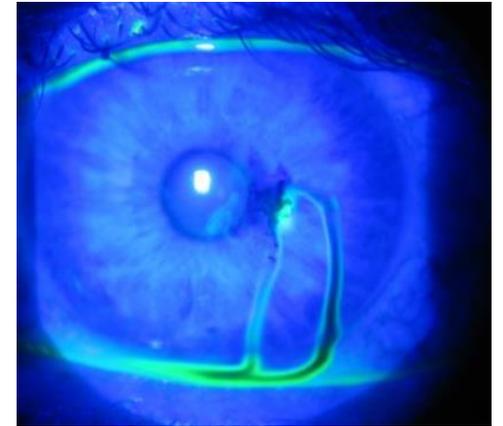


Trauma

PEI



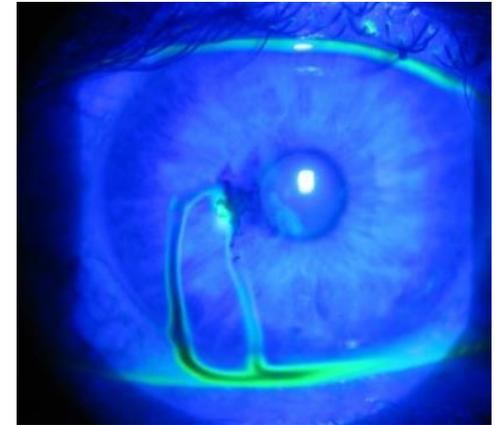
IOFB



Trauma

PEI = Penetrating Eye Injury

- History
 - Sharp trauma
 - Hammering metal
 - Peaked pupil, Iris prolapse
 - Seidel fluorescein diluting
- IOFB: Intraocular FB
- Mx: Emergency Dept
 - Surgery < 6 hours

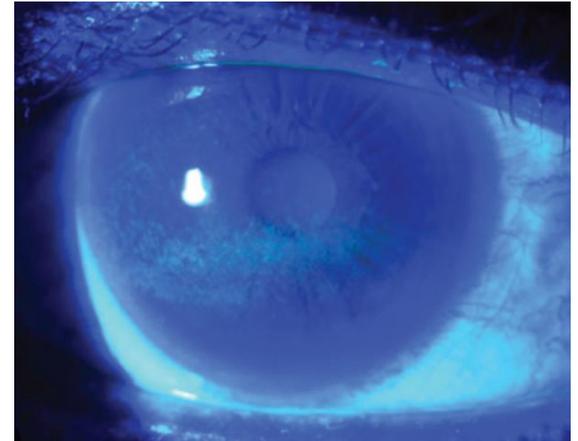


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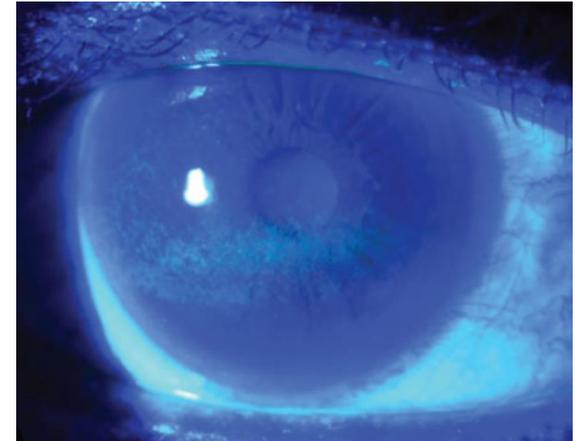
Epiphora – watering eye

- NLDO
- DED
 - FBS
 - PEE



Epiphora – watering eye

- *Constant vs Intermittent*
- NLDO = Nasolacrimal duct obstruction
 - Constant, Unilateral, No pain
 - Disappearing dye test > 5 min
- DED = Dry eye disease
 - Intermittent, Bilateral, Pain
 - FBS = Foreign Body Sensation
 - PEE = Punctate Epithelial Erosions
- Mx: Trial lubricants, Non-urgent



Common Diagnoses & their Acronyms

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Anterior Segment

MK

– CL



Anterior Segment

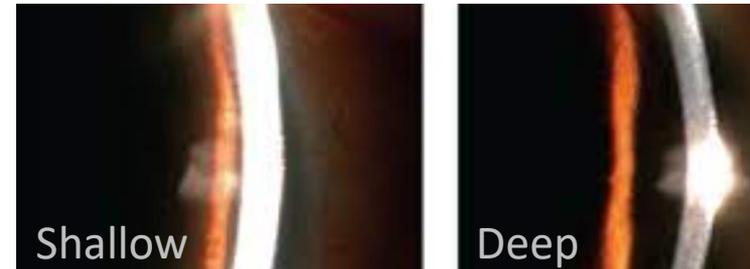
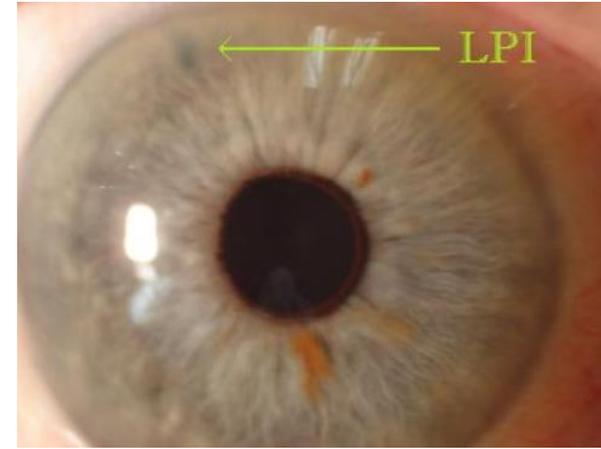
MK = Microbial keratitis

- Risk factors
 - CL = Contact lens overuse
 - Trauma / FB
 - Severe dry eyes
 - Reduced corneal sensation
- White spot on cornea with staining epithelial defect
- Mx: Refer today for sampling + Antibiotics



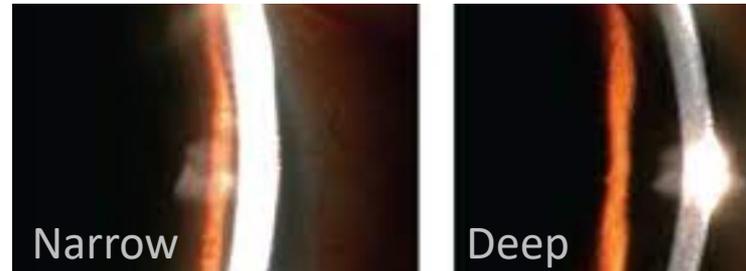
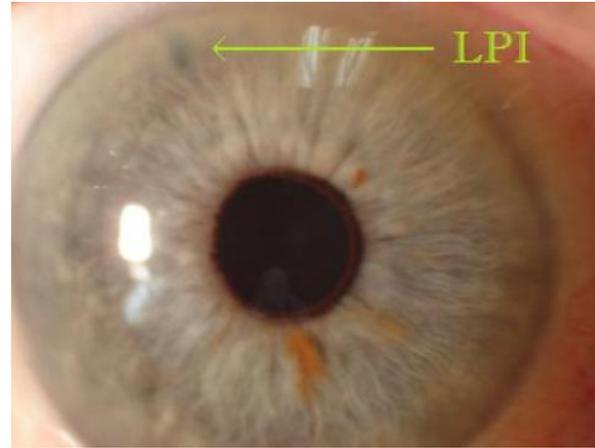
Anterior Segment

- POAG
- Laser PI



Anterior Segment

- POAG
 - = Primary Open Angle Glaucoma
 - Non-urgent, Outpatient follow up
- Laser PI
 - Peripheral Iridotomy
 - For 'Narrow angles'



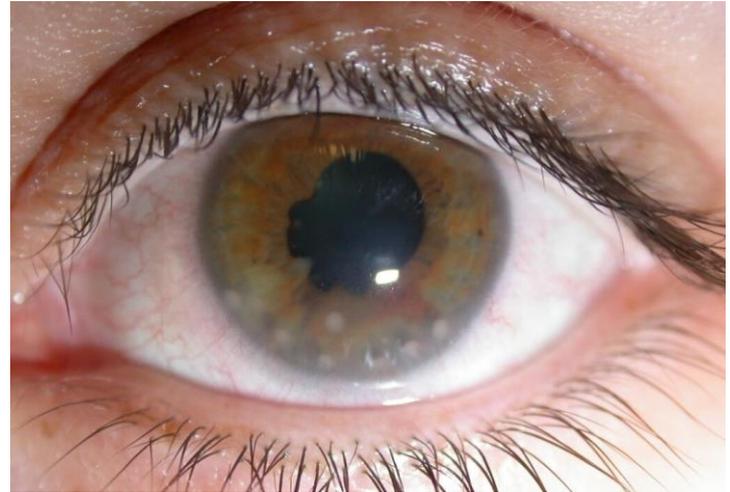
Anterior Segment

- AAU



Anterior Segment

- AAU = Acute Anterior Uveitis
 - = Iritis
 - Signs
 - Iris synechiae
 - Anterior chamber cells
 - Corneal precipitates
 - Mx: Refer for baseline Ex before topical steroids

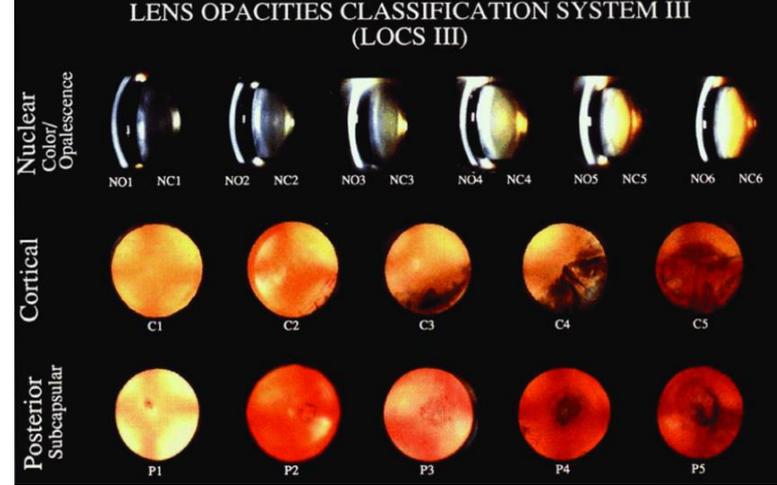


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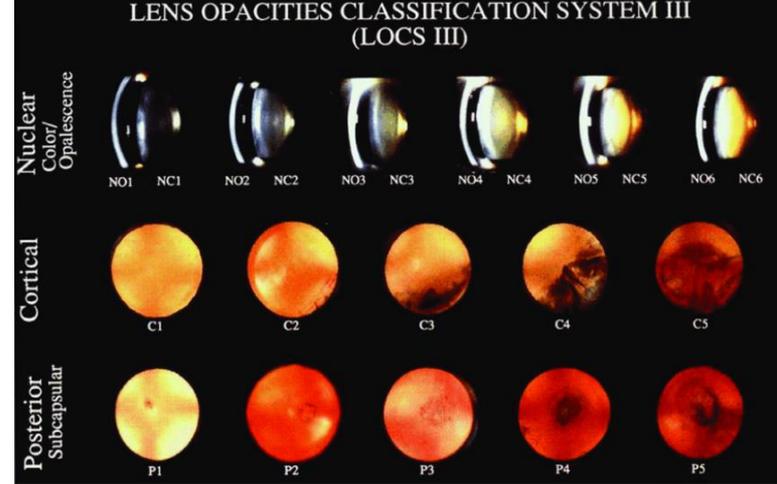
Lens

- Cataract subtypes
 - NS
 - CLO
 - PSCC
- IOL
 - “Cat/IOL surgery”



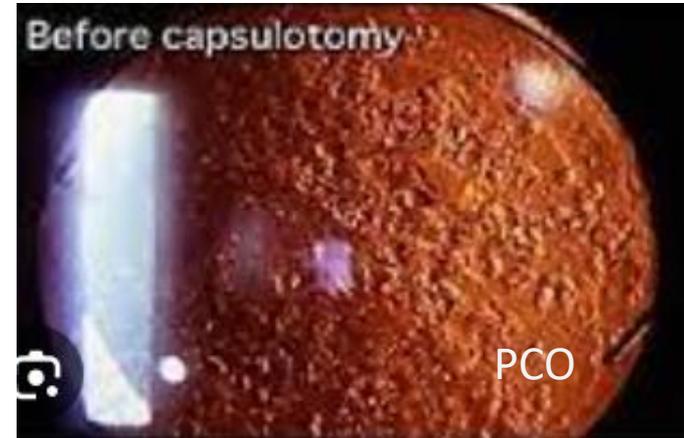
Lens

- Cataract subtypes
 - NS Nuclear Sclerosis
 - CLO Cortical lens opacification
 - PSCC Posterior Subcapsular
- IOL = Intraocular lens
 - Implant at the time of cataract surgery
 - “Cat/IOL surgery”



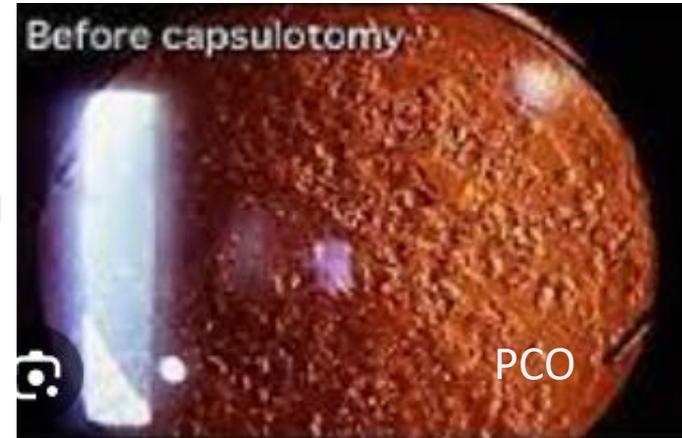
Lens

- PCO
- YAG Capsulotomy



Lens

- PCO
 - = posterior capsule opacification
 - = “After Cataract”
 - Fibrosis behind IOL implant
 - 50% of patients any time after cataract surgery
- YAG Capsulotomy
 - Clinic laser to remove fibrosis



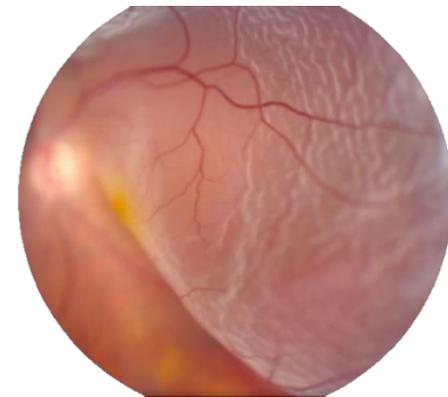
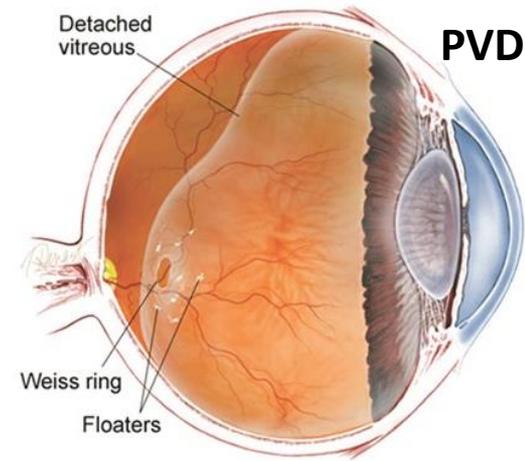
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Vitreous

PVD

RRD



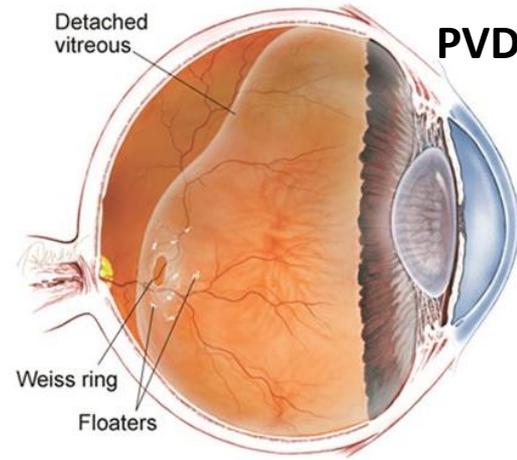
Retinal detachment

Vitreous

PVD

= Posterior Vitreous Detachment

- Intermittent brief flash +/- single floater
- Universal process around age 60
- 10% associated retinal tear
 - Risk for retinal detachment
- Mx:
 - Refer within 1-3 days
 - Monitoring only, once retinal tear excluded

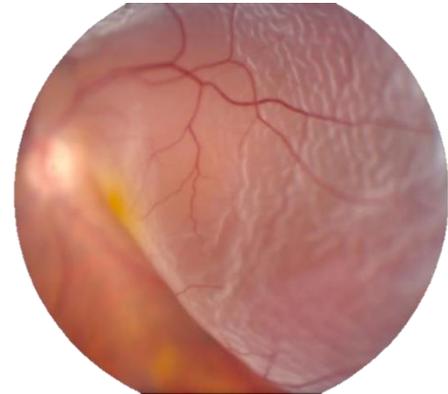


Vitreous

RRD

= Rhegmatogenous Retinal Detachment

- Persistent flashes and many floaters
- Risk factors:
 - Short-sightedness
 - Deceleration trauma (car accident)
 - PVD
- Mx: Urgent surgery <1-3 days
 - Vitrectomy surgery



Retinal detachment

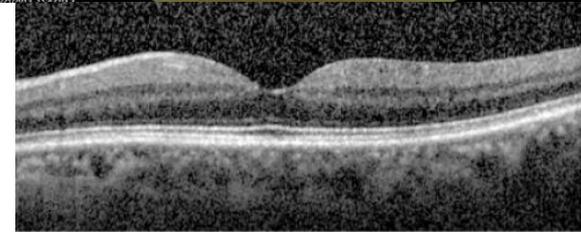
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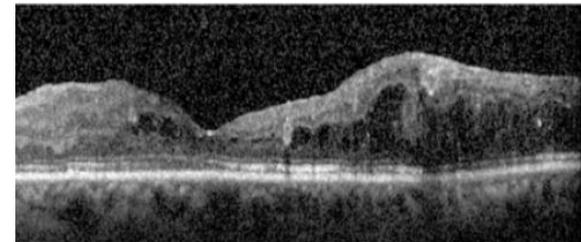
Retina - Diabetes

NPDR

- DMO
 - Anti-VEGF injections



Normal macula



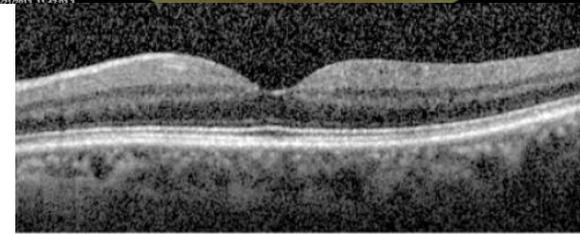
Diabetic macular edema macula

Retina - Diabetes

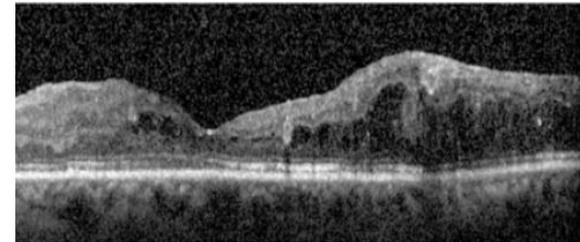
NPDR

= Non-proliferative Diabetic Retinopathy

- Mx: Monitor only
 - Minimum 2 yearly interval
 - Reversible changes
- DMO = Diabetic macular oedema
 - Causes reduced vision
 - Mx: Anti-VEGF injections
 - Vascular Endothelial Growth Factor
 - eg Ranibizumab



Normal macula

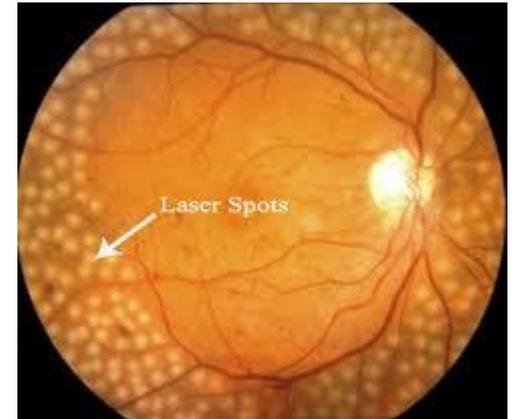
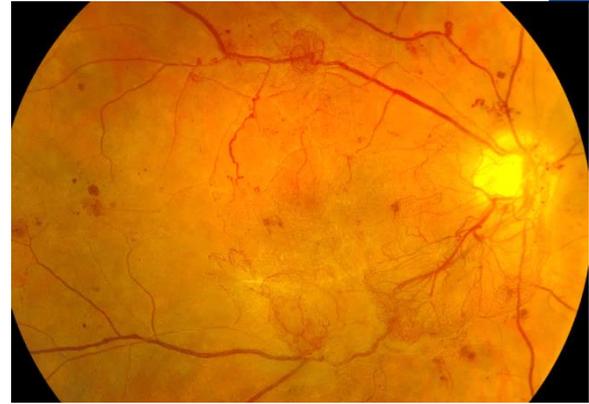


Diabetic macular edema macula

Retina - Diabetes

PDR

- VH
 - PRP

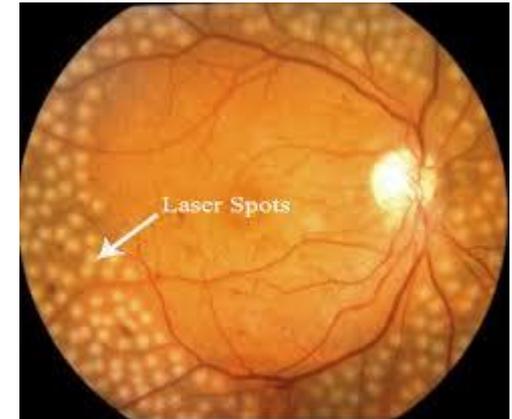
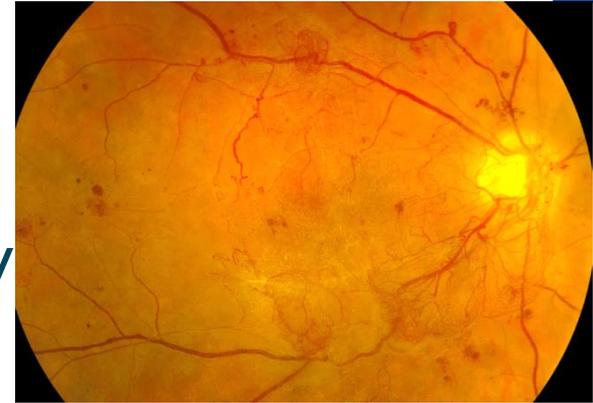


Retina - Diabetes

PDR

= Proliferative Diabetic Retinopathy

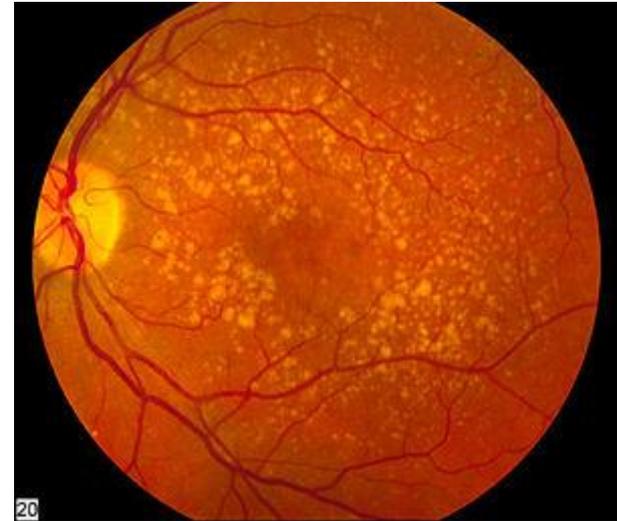
- Sight threatening due to Vitreous Haemorrhage (VH)
- Mx:
 - Retinal laser PRP (Panretinal Photocoagulation)



Retina – AMD

AMD

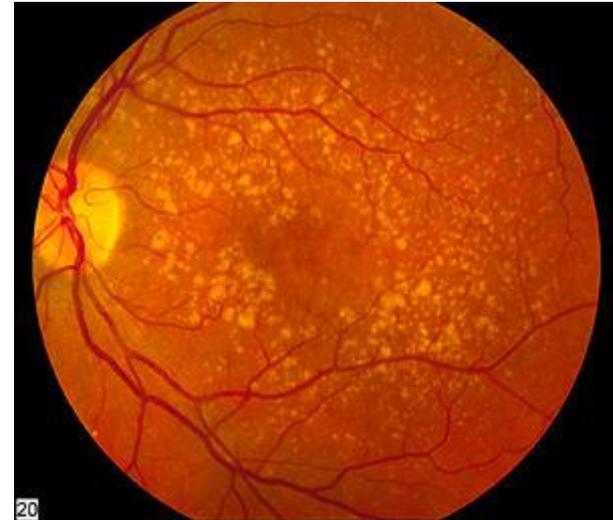
– CNV



Retina – AMD

AMD – Age-related macular degeneration

- Mx:
 - Antioxidant diet
 - Cease smoking
 - Dry AMD
 - Monitor only
 - Wet neovascular AMD with CNV (Choroidal Neovascularisation)
 - Anti-VEGF Injections



Retina

BRVO



Retina

BRVO

= Branch retinal vein occlusion

- 75% superotemporal
- RF:
 - Age
 - HTN
- Mx:
 - Anti-VEGF injections if vision reduces from macula oedema



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Neurological - GCA

GCA



Neurological - GCA

GCA

= Giant Cell Arteritis / Temporal Arteritis

- Caucasian, >55 years
- Headache, Jaw claudication, Polymyalgia, Tender Scalp or Temporal artery
- Amaurosis, CN palsy, Swollen disc
- Mx:
 - Temporal Artery Biopsy (TAB) within 1 week of steroids
 - IV methylprednisolone if vision loss
 - Oral PNL with Rheumatologist or Neuro-ophthalmologist, typically 12 months



Neurological - CRAO

CRAO

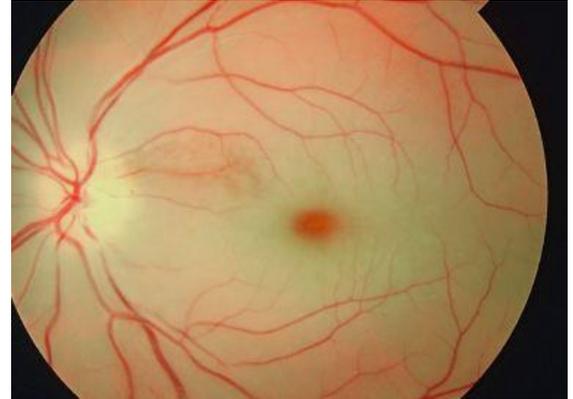


Neurological - CRAO

CRAO

= Central retinal artery occlusion

- Sudden loss of vision to <CF
 - or central island only
 - 'Cherry red spot'
- Mx:
 - Usually irreversible
 - Urgent IOP lowering if <6 hours only
 - Urgent stroke risk profile management
 - ECG, USS carotid, Stroke CTB, DAPT 3/52
 - No driving 3 months (even if other eye normal)



Case 1

Blurry vision



Blurry vision 1

- 52 year old man presents to GP with 3 months of blurry vision



Blurry vision 1 - Constant

- 52 year old man presents to GP with 3 months of blurry vision
 - Not sure which eye
 - Constant
 - Worse in glare of sunlight and night driving
 - No pain / headache / redness / Black outs of vision
- PMHx: Nil



Blurry vision 1 - Constant

	RE	LE
VA s	6/12	6/15
VA c	6/9	6/12
VA ph	6/6	6/12
Pupils	PEARL, No RAPD	
Conjunctiva	White	White
Cornea	Clear	Clear
Fundoscopy	Clear view to disc	Slightly hazy disc view

Blurry vision 1 - Constant

- GP assessment
 - Left eye blur
 - Constant
 - Chronic
- Right improves to 6/6 at best
 - Needs updated glasses
 - Patient reports 5 year old glasses
- Left eye 6/12 at best
 - GP refers to optometrist, non-urgent

Blurry vision 1 - Constant

- Referred to optometrist
 - RE: NS +
 - LE: PSCC ++
 - Identifies cataracts



Blurry vision 1 - Constant

- Referred to optometrist
 - RE: NS ++
 - LE: PSCC ++
 - Identifies cataracts
- Optometrist asks GP to:
 - Refer to ophthalmologist for cataract surgery
 - Screen for associations of PSCC cataract in young pt
 - Diabetes
 - Systemic Hypertension
 - Corticosteroid use



Blurry vision 1 - Constant

- Referred to optometrist
 - RE: NS ++
 - LE: PSCC ++
 - Identifies cataracts
- Optometrist asks GP to:
 - Refer to ophthalmologist for cataract surgery
 - Screen for associations of PSCC cataract in young pt
 - Diabetes
 - HTN
 - Corticosteroid use
- GP finds BSL 11.3
 - HbA1c 6.7%



Case 2

Blurry vision

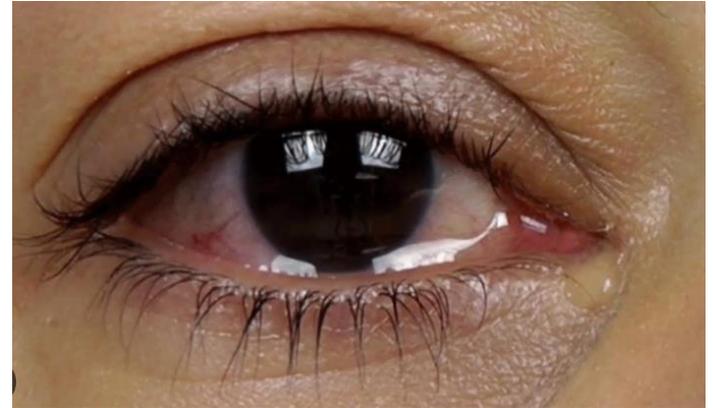
Blurry vision 2

- 55 year old woman presents to GP for 3 months of blurry vision



Blurry vision 2 - Intermittent

- 55 year old woman presents to GP for 3 months of blurry vision
- Not sure which eye
- Intermittently normal
- Associated intermittent red, watery, sandy sensation
- No trauma, headache, blackouts of vision

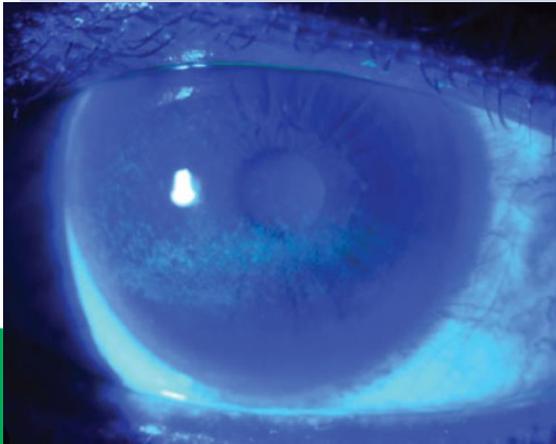


Blurry vision 2 - Intermittent

	RE	LE
VA s	6/9	6/9
VA c	6/6	6/6
Pupils	PEARL, No RAPD	
Conjunctiva	Mild injection	Mild injection
Cornea	PEE ++, Watery	PEE ++, Watery
Eyelids	No lashes turned in. No ST FB.	
Fundoscopy	Clear view to disc	Clear view to disc

Blurry vision 2 - Intermittent

	RE	LE
VA s	6/9	6/9
VA c	6/6	6/6
Pupils	PEARL, No RAPD	
Conjunctiva	Mild injection	Mild injection
	PEE ++, Watery	PEE ++, Watery
	No lashes turned in. No ST FB.	
	Clear view to disc	Clear view to disc



Blurry vision 2 - Intermittent

- GP assessment
 - Complaint of blur
 - Intermittent
 - Associated reflexive redness & watering
 - Vision is normal 6/6 at best in each eye
 - Punctate erosions found with fluorescein

Blurry vision 2 - Intermittent

- GP assessment
 - Complaint of blur
 - Intermittent
 - Associated reflexive redness & watering
 - Vision is normal 6/6 at best in each eye
 - Punctate erosions found with fluorescein
- GP suspects dry eye as complaint
 - Trial of dry eye treatments
 - Refer at any time as desired

Blurry vision 2 - Intermittent

- Trial lubricant drops
 - QID lubricants
 - Eg:
 - HyloForte
 - Systane
 - Refresh



Blurry vision 2 - Intermittent

- Trial lubricant drops
 - QID lubricants
 - Eg:
 - HyloForte
 - Systane
 - Refresh
- Patient notices improvement after couple weeks only when drops are used
- If inadequate or concerned refer on to Optometrist or Ophthalmologist at any point



Learning objectives

- Demystifying the communication from eye care providers
- Review eye assessment for GPs
 - History, Vision, Fluorescein, Ophthalmoscopy
- Use these commonly abbreviated conditions to revisit their assessment and management
 - FB, AAU, PVD, AMD, GCA...
- Cases
 - Blurry vision



Questions?

Dr Lukas Sahhar

FRANZCO MPH BMedSc(Hons) MBBS(Hons)

Services offered:

- Cataract surgery
- Refractive surgery
- Eye injections for AMD and Diabetes
- Glaucoma
- Blepharoplasty, Ectropion, Entropion

Practice Locations:

- East Melbourne
 - Melbourne Eye Centre
- Cheltenham
 - Cheltenham Eye Centre
- Warragul
 - Retina Specialists Victoria
- Public Consultant:
 - RVEEH, Austin, Northern

