

# Identifying and Managing **Eye** Emergencies

Signs, symptoms, management and  
avoiding major disasters

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University of Auckland

# OUTLINE

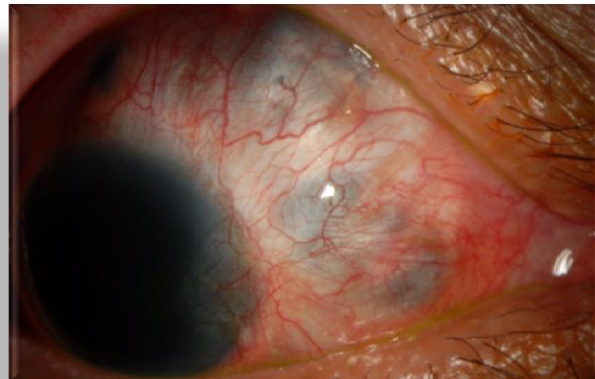
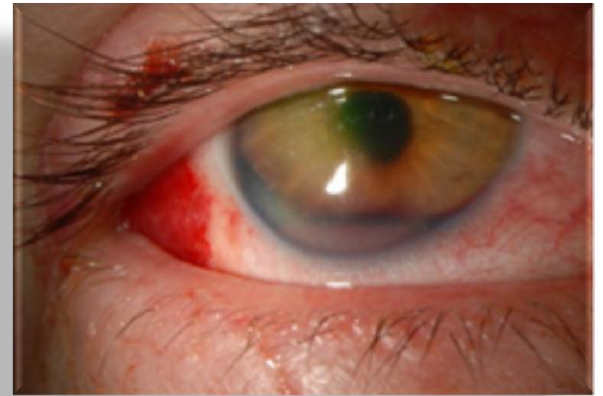
## Assessment

- History
- Examination

## Common Acute Presentations

Sight threatening conditions

Life threatening conditions



# Presenting Complaint

Mostly a combination of a small number of the following symptoms:

- Loss of vision
- Photopsia
- Diplopia

- Redness
- Pain
- Photophobia
- Grittiness
- Itchiness

- Discharge
- Watering

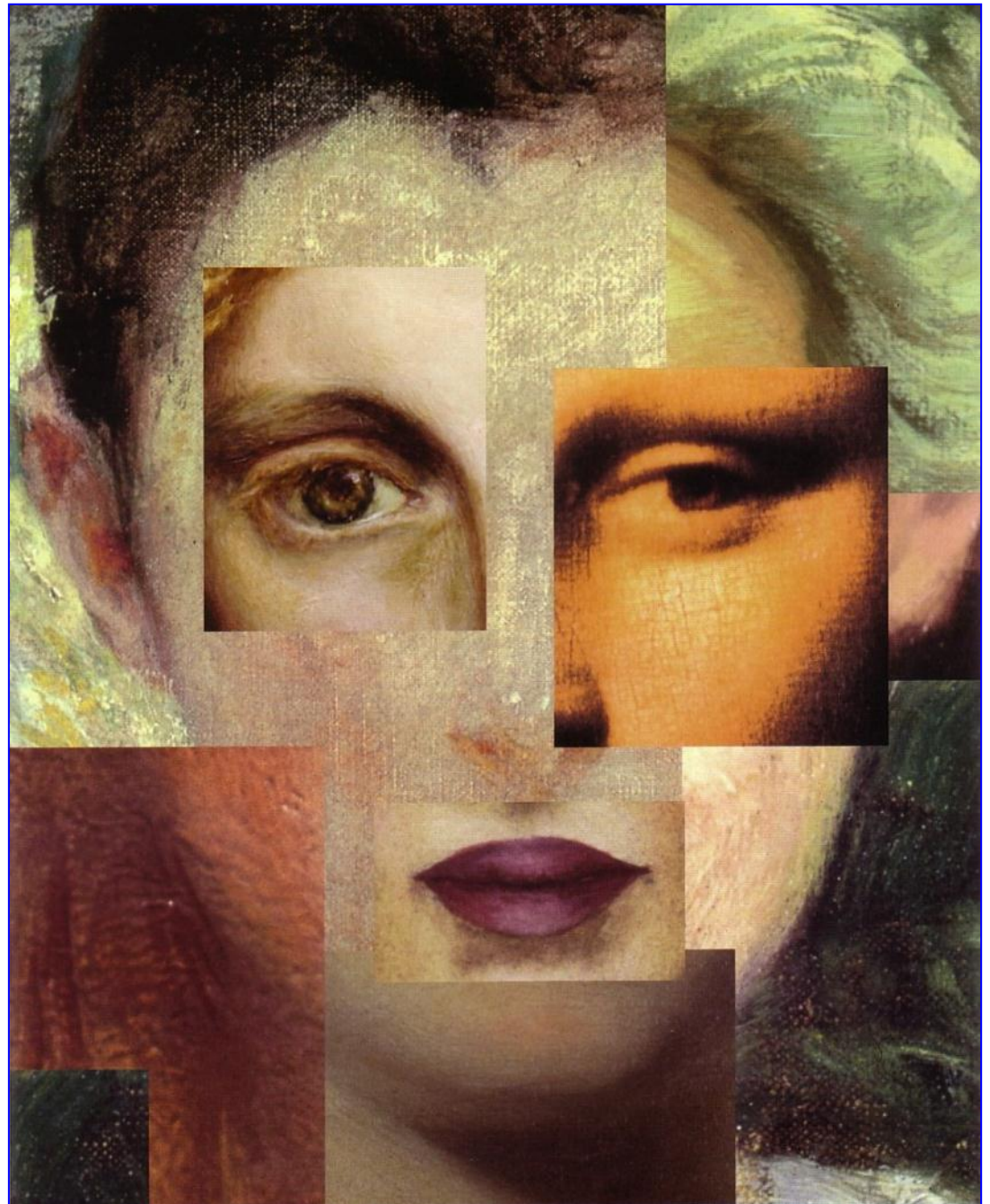
# HISTORY

TRAUMA

DISCHARGE

PAIN

- Nature
- Onset
- Photophobia



# HISTORY: EYE AND THE SOMA

## PAST MEDICAL HISTORY

- Ocular history
- Medical and drug history
- Family history



# EXAMINATION



*Fido gets his nose checked*



# SNELLEN VISUAL ACUITY



Distance patient  
read chart

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Line read

6/60

6/18

6/6

6/4

# RECORDING POOR VISUAL ACUITY



CF



HM



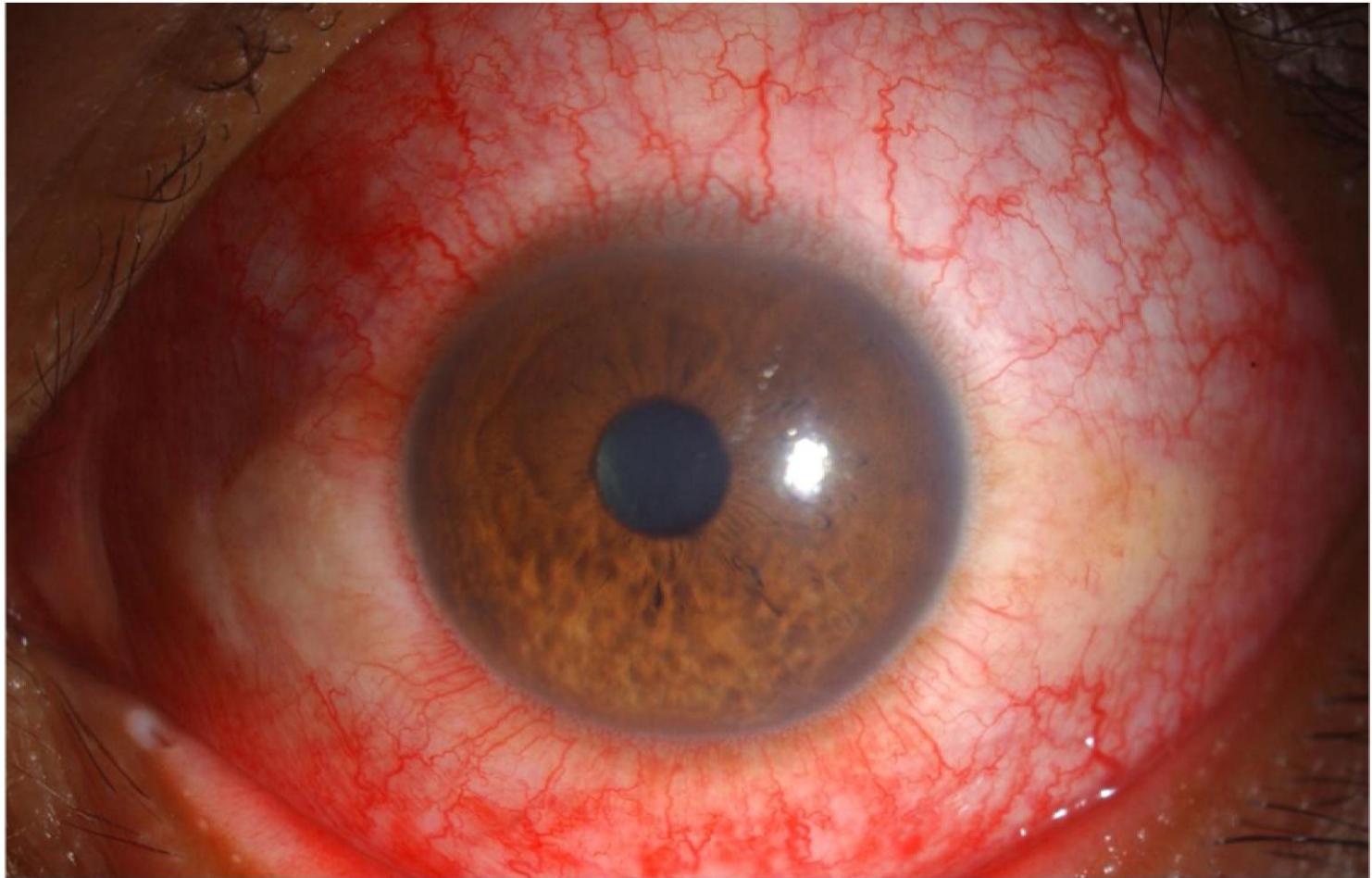
PofL



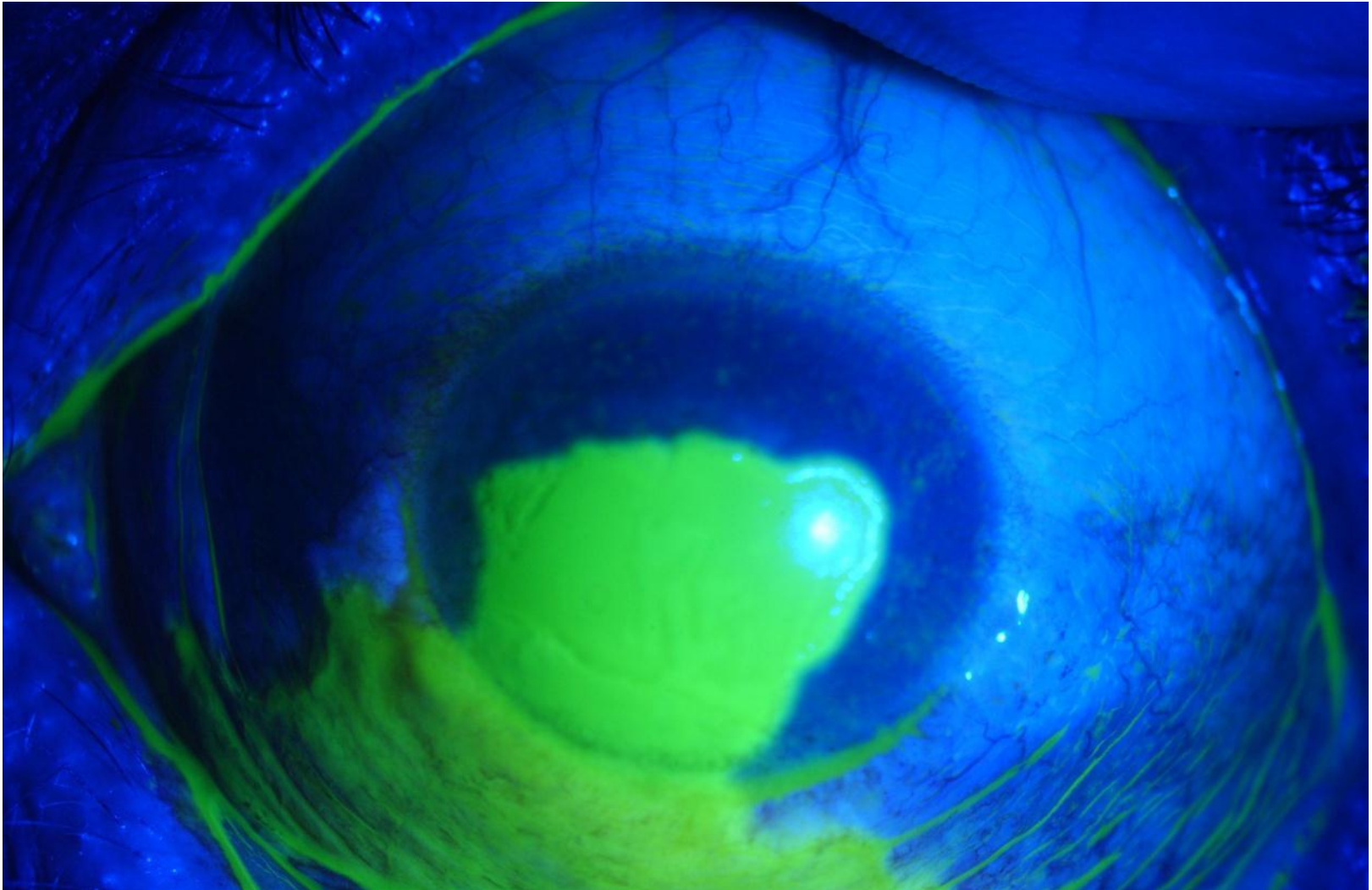
NPL



# OCULAR APPEARANCE



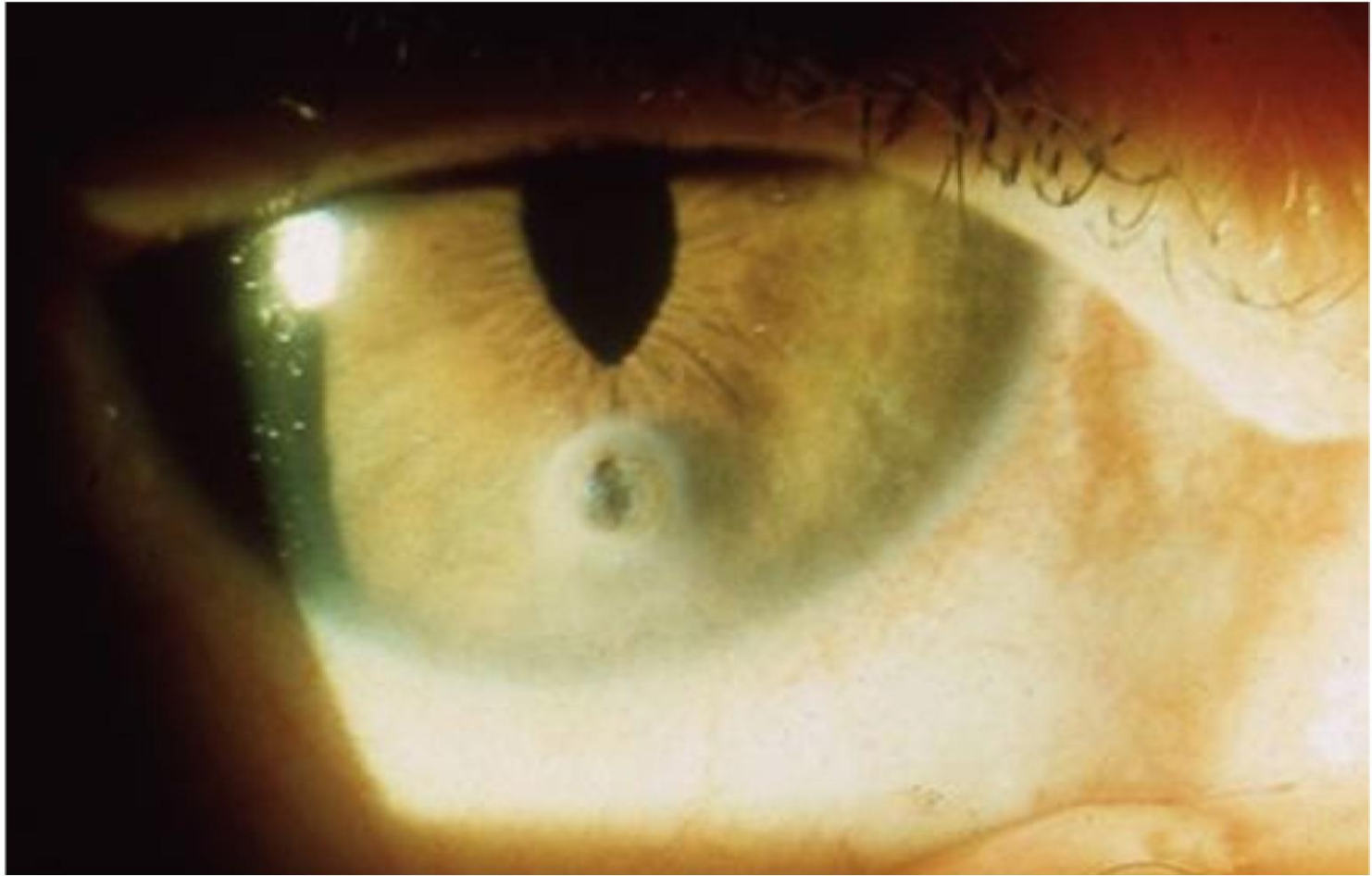
# APPEARANCE : CONSIDER DYE



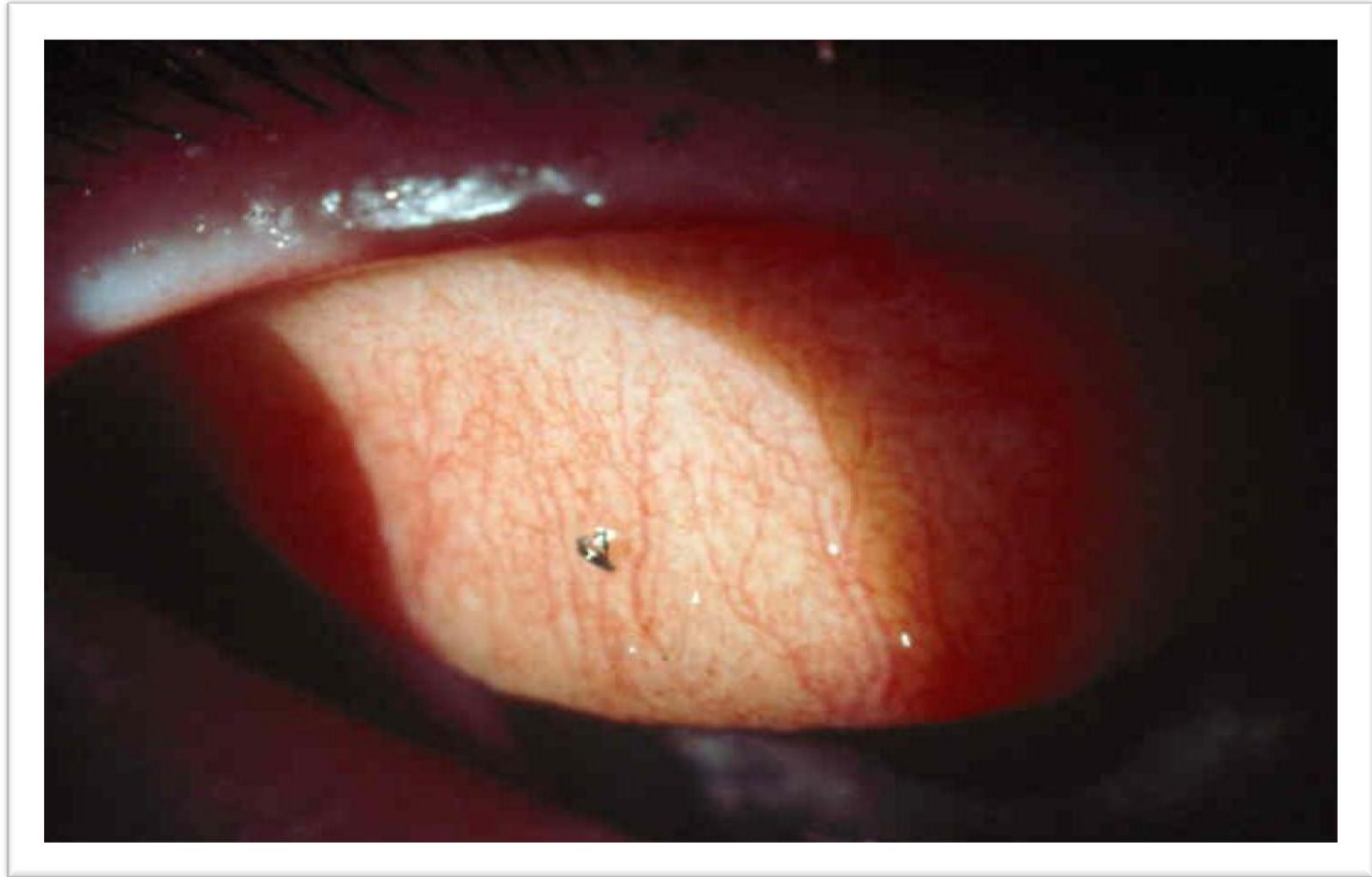
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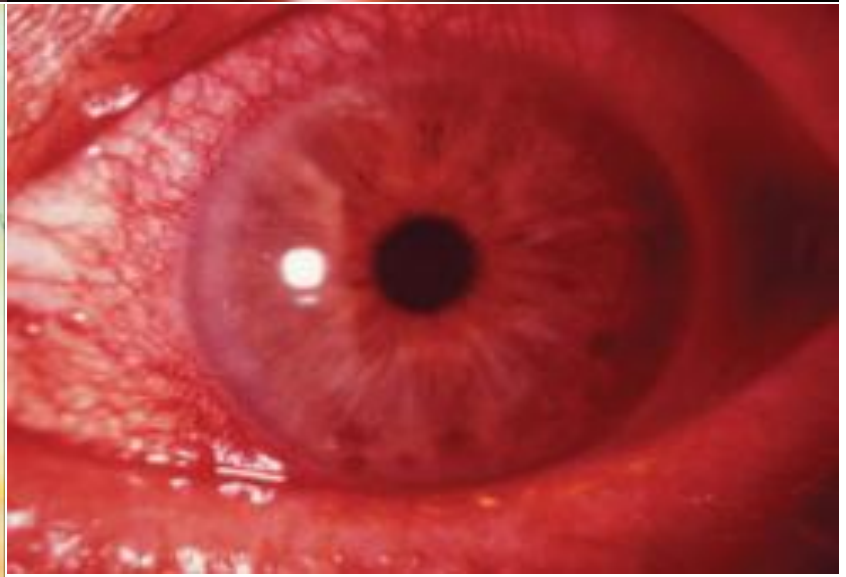
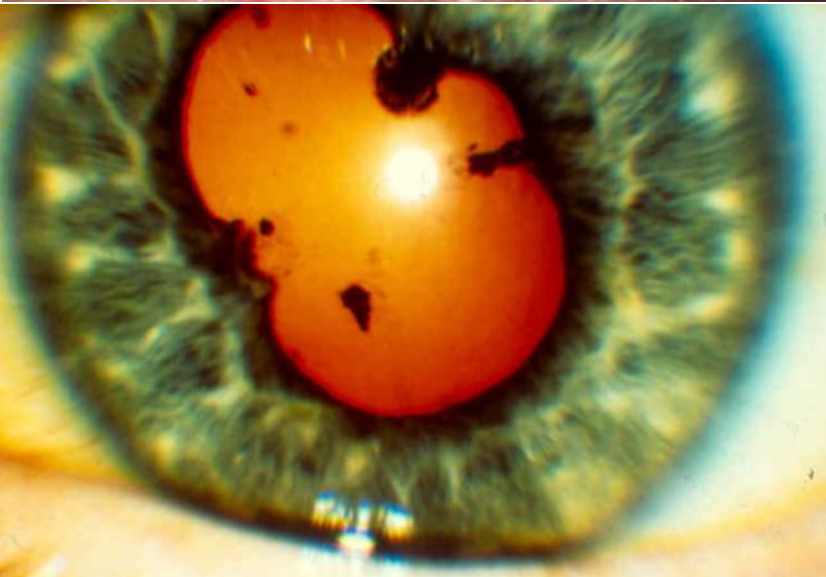
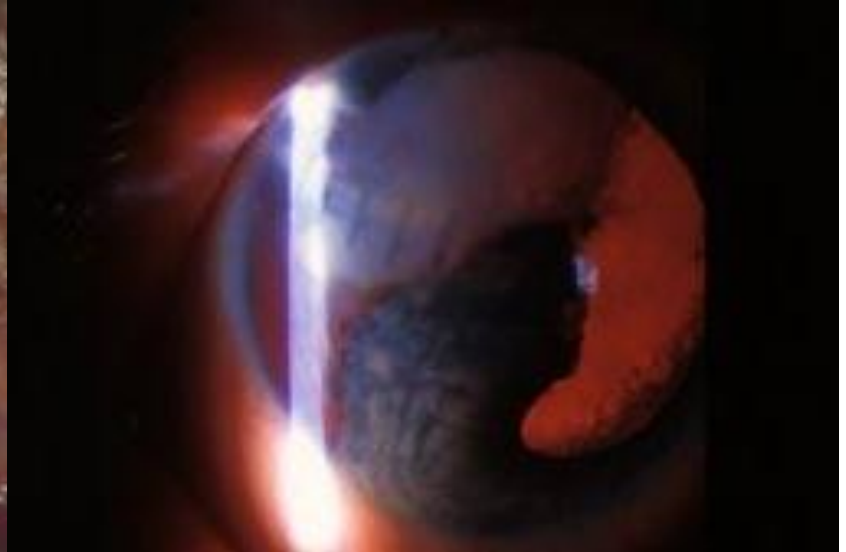
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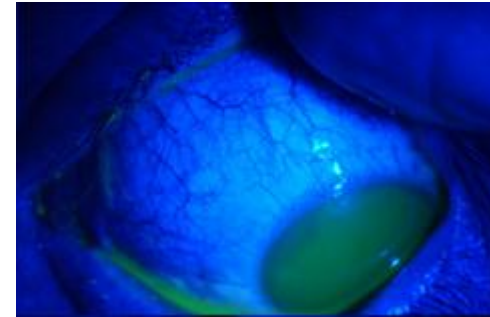
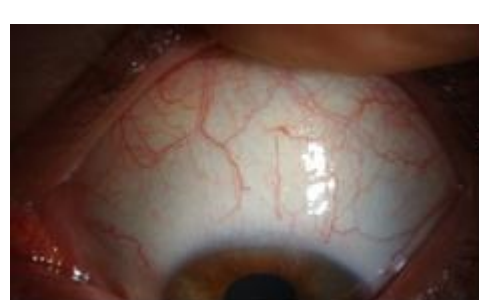
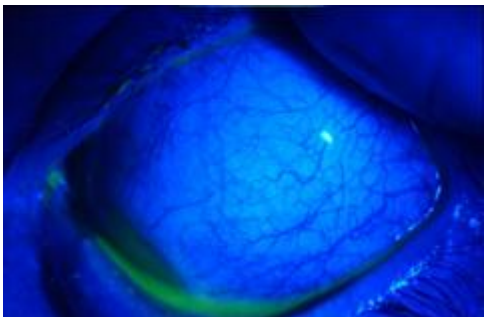
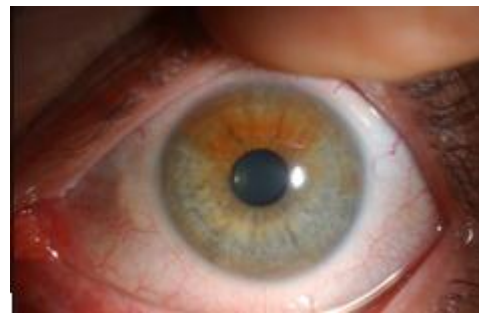
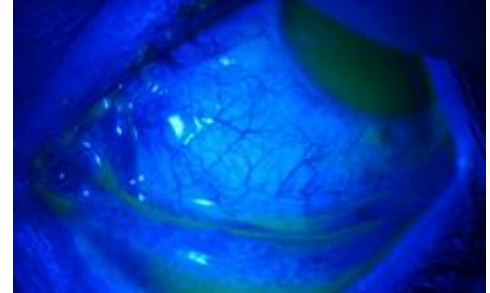
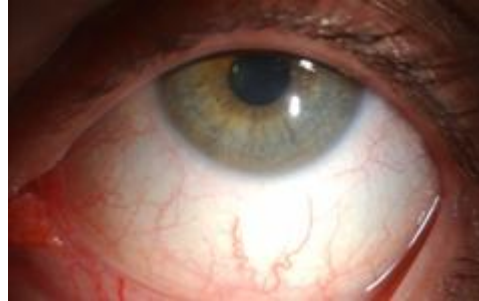
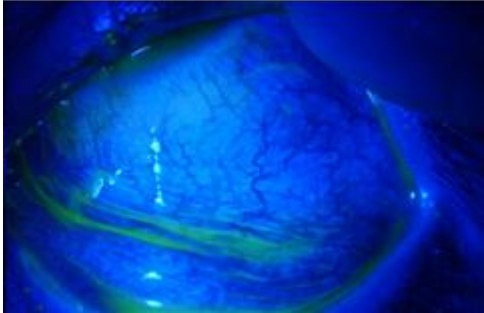
# APPEARANCE



# PUP LS



# EYE MOVEMENTS



# Eye Emergencies

## Common Conditions

Subconjunctival haemorrhage

Conjunctivitis

Keratitis

Episcleritis/Scleritis

Uveitis

BRVO/CRVO

BRAO/CRAO

Retinal Detachment

## Sight Threatening

Endophthalmitis

Acute Angle Closure

Giant Cell Arteritis

Trauma

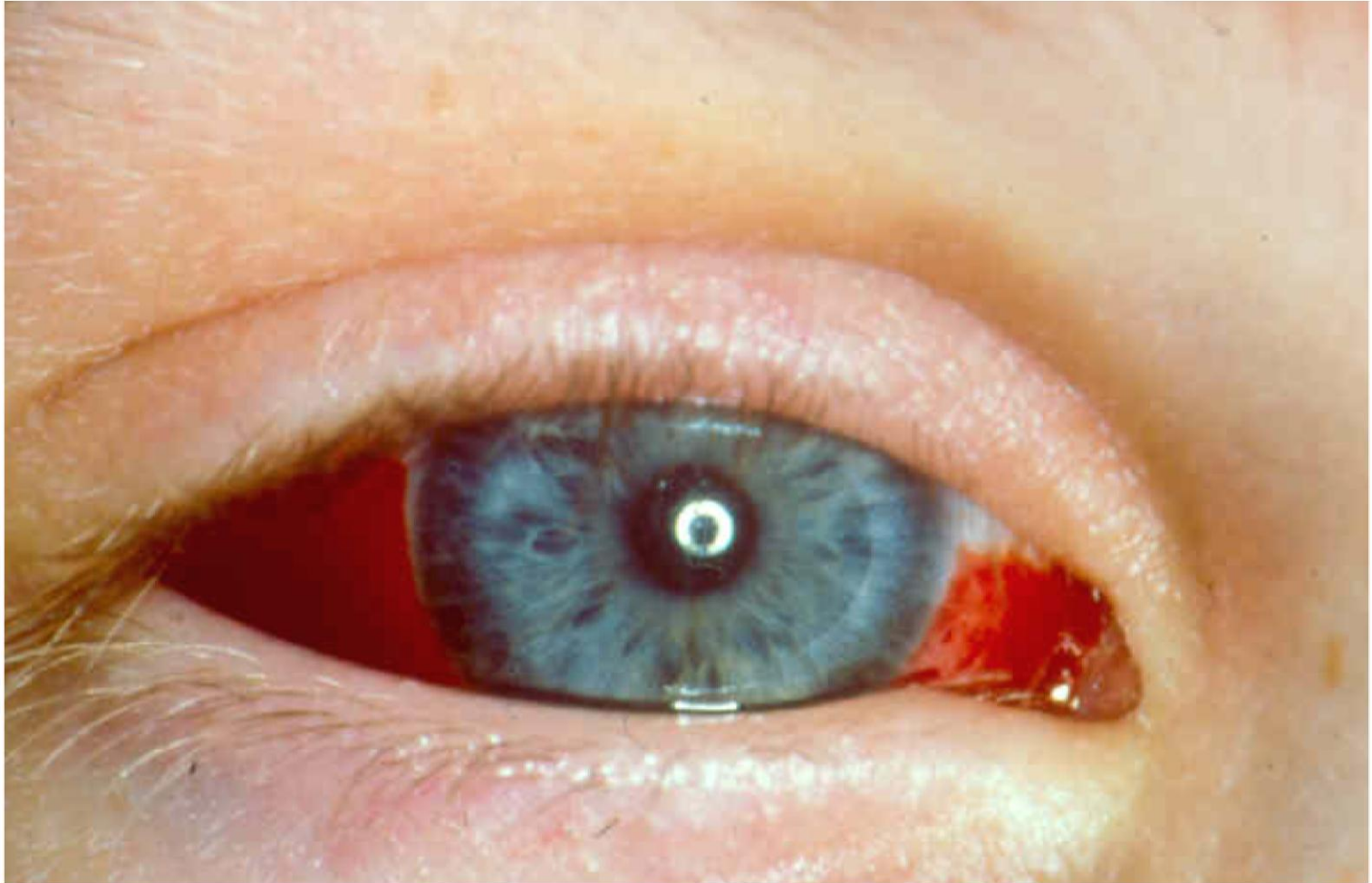
## Life Threatening

Orbital Cellulitis

Third Nerve Palsy



# SUBCONJUNCTIVAL HAEMORRHAGE

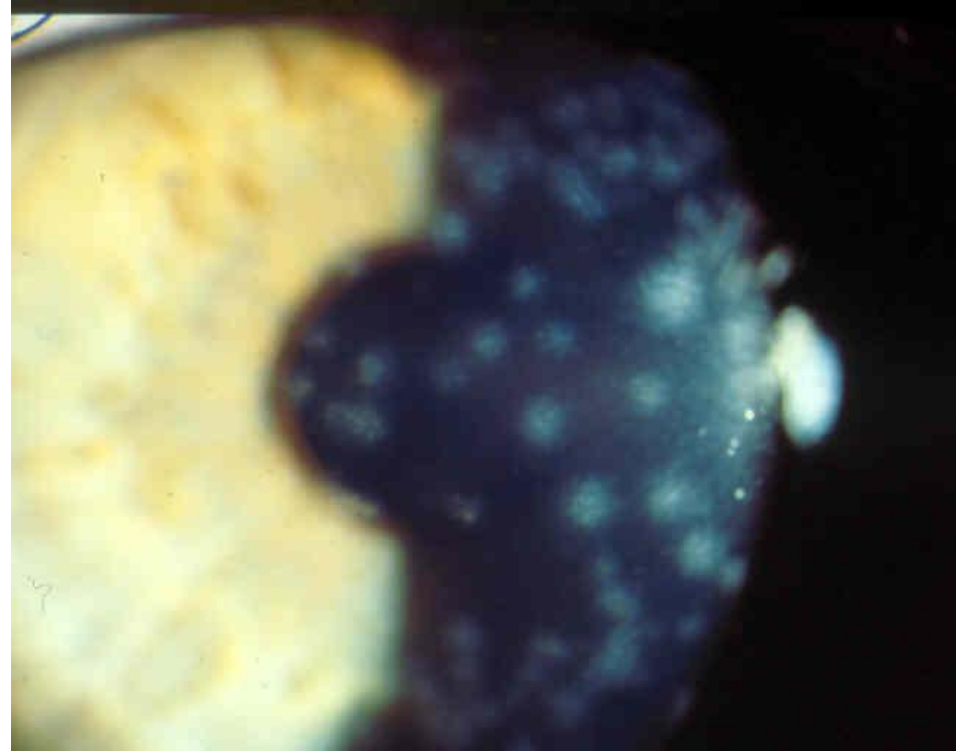




**CONJUNCTIVITIS**

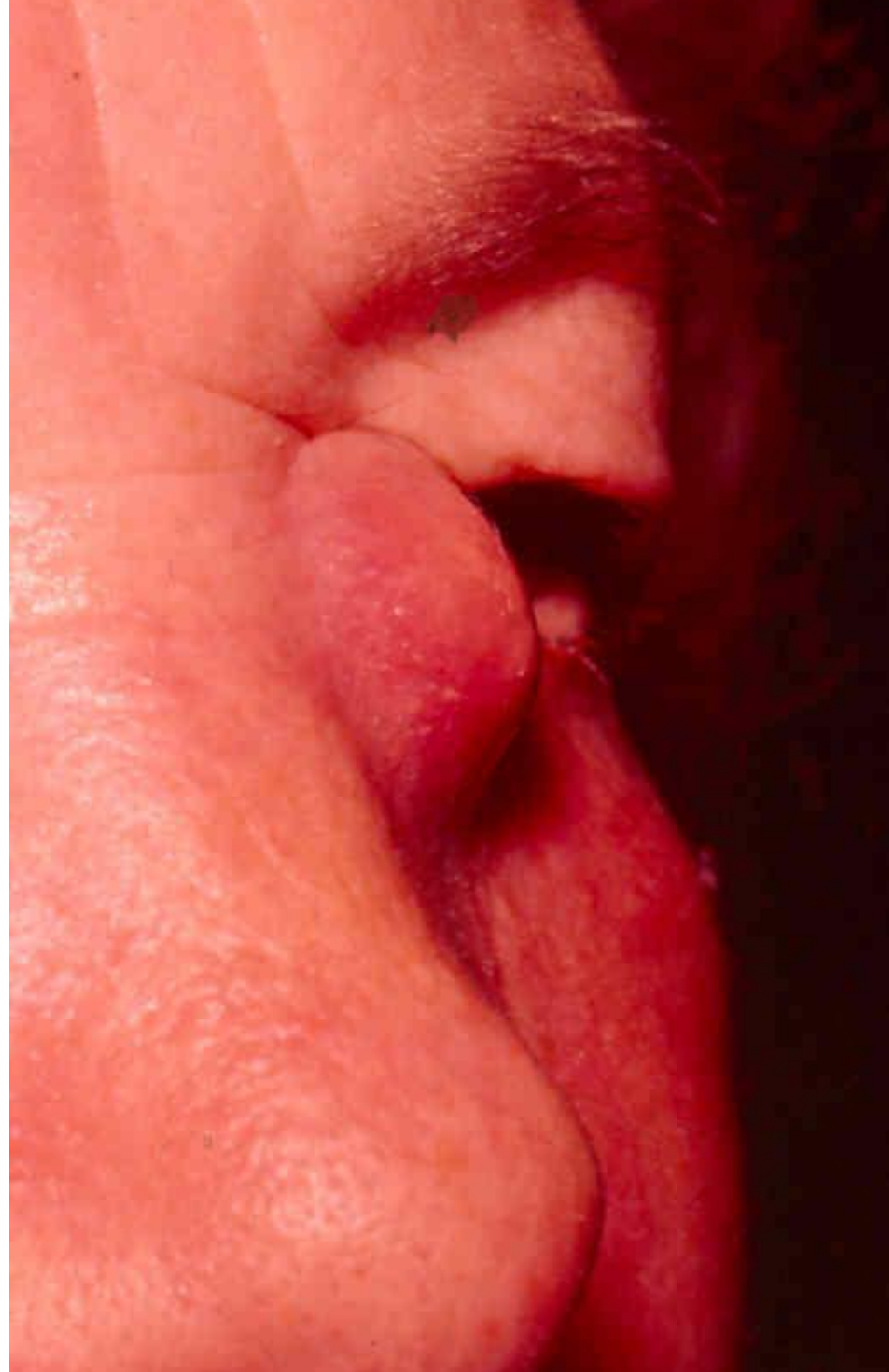
# VIRAL CONJUNCTIVITIS

- Usually caused by adenovirus
- Clear watery discharge
- *Highly Contagious*
- Associated features
  - Viral
    - URTI
    - Pre auricular nodes
- Treatment
  - Hygiene
  - Supportive measures



## BACTERIAL CONJUNCTIVITIS

- Purulent discharge
- Staphylooccus, streptococcus, haemophilus, neisseria etc
  - Secondary to nasolacrimal duct obstruct
- Treatment
  - Chloramphenicol



# BACTERIAL CONJUNCTIVITIS



# CHLAMYDIA

- Mucopurulent discharge
- Associated features – Reiters Syndrome
- Treatment
  - Doxycycline 100mg po bd one week
  - Azithromycin 1g stat dose



# OPHTHALMIA NEONATORUM

- Conjunctivitis in the first three weeks of life
- Infection transmitted during delivery
  - Chlamydia
  - Gonorrhoea
  - Staph aureus
  - Herpes Simples

# ALLERGIC CONJUNCTIVITIS

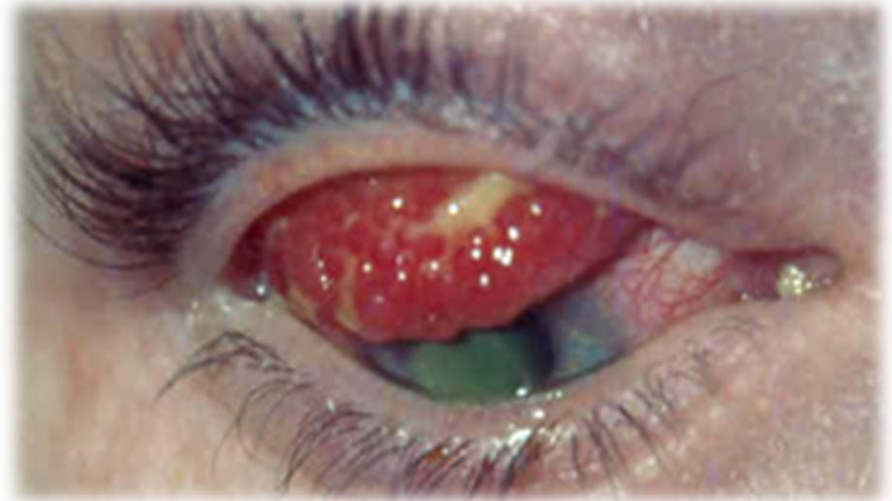
Watery itchy eyes

Types

- Seasonal (hayfever) / Perennial (dust mites)
- Vernal
- Atopic

Treatment

- Mast cell stabilisers
- Antihistamine





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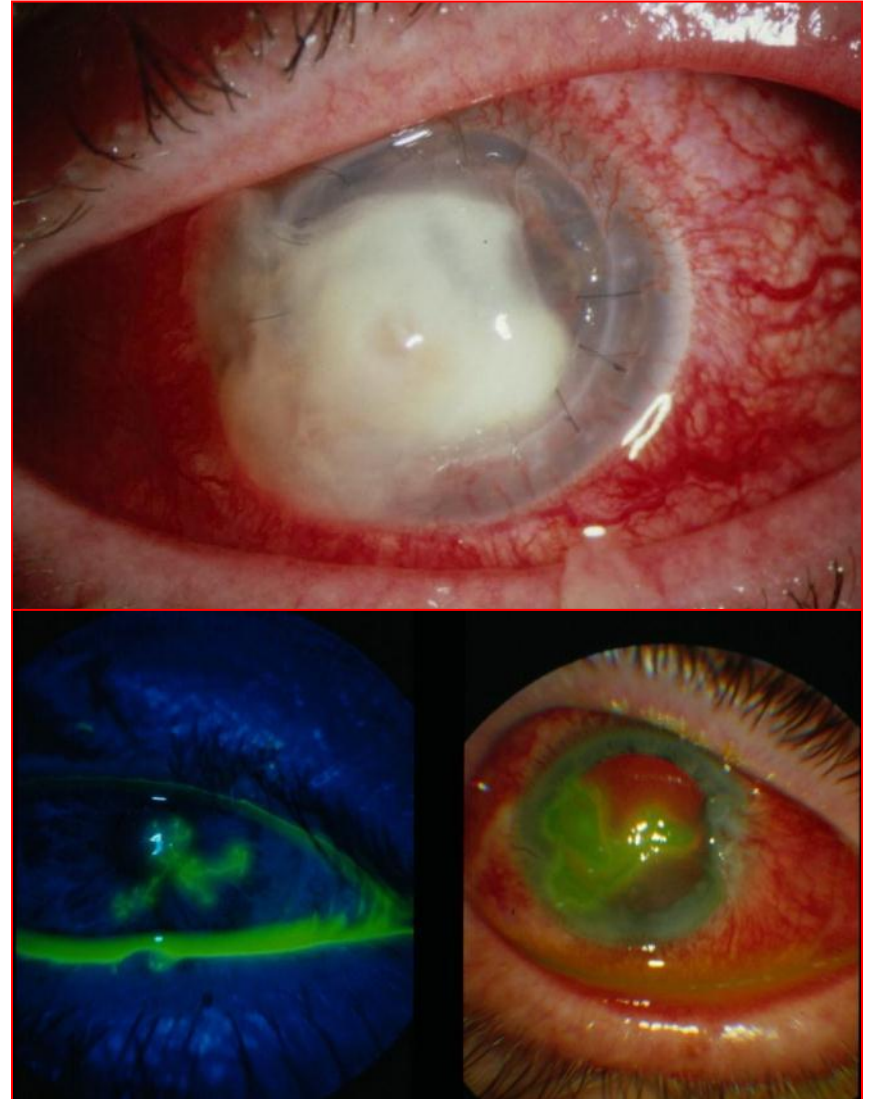
# Keratitis : history

Key points in history:

1.	Past ocular disease	+ or -
2.	Decreased vision	+ to ++
3.	Pain and severity	++
4.	Photophobia	++
5.	Ocular discharge	+
6.	Systemic symptoms	-

# Predisposition to infective Keratitis

- ▶ Dry eye
- ▶ Lid malposition
- ▶ Trauma
- ▶ Prior surgery
- ▶ Contact lenses
- ▶ **Topical Corticosteroids**



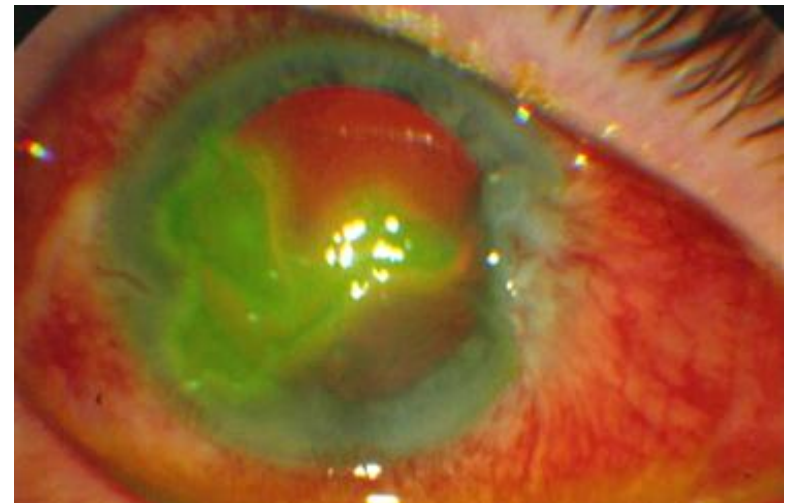
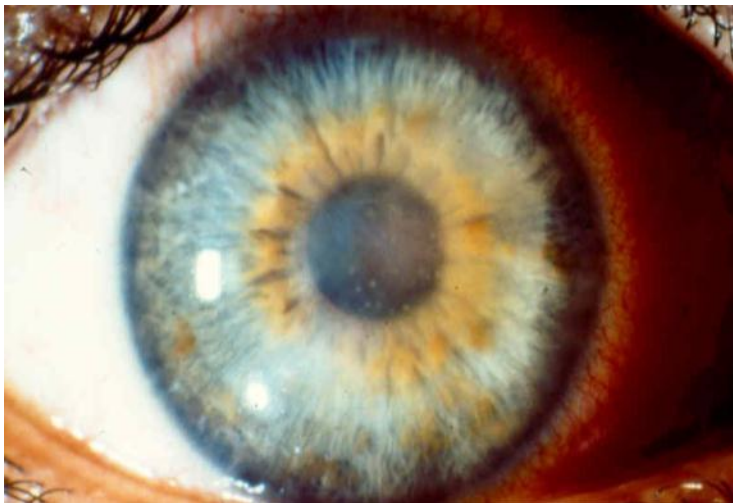
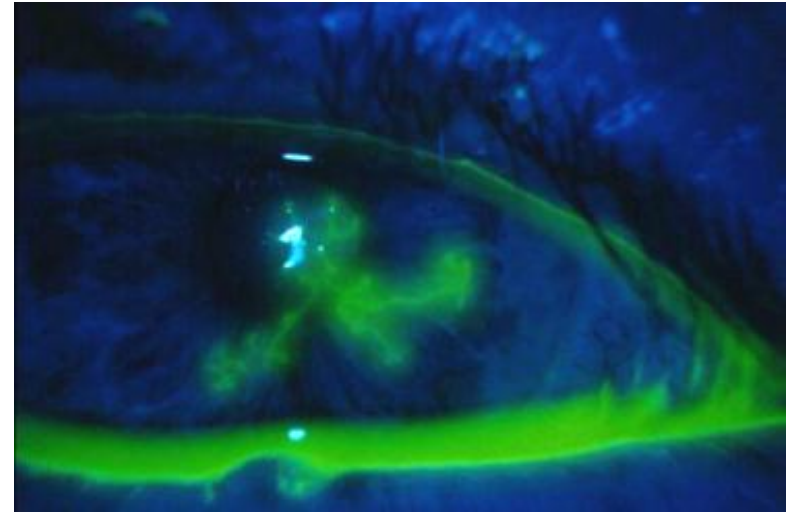
# VIRAL KERATITIS

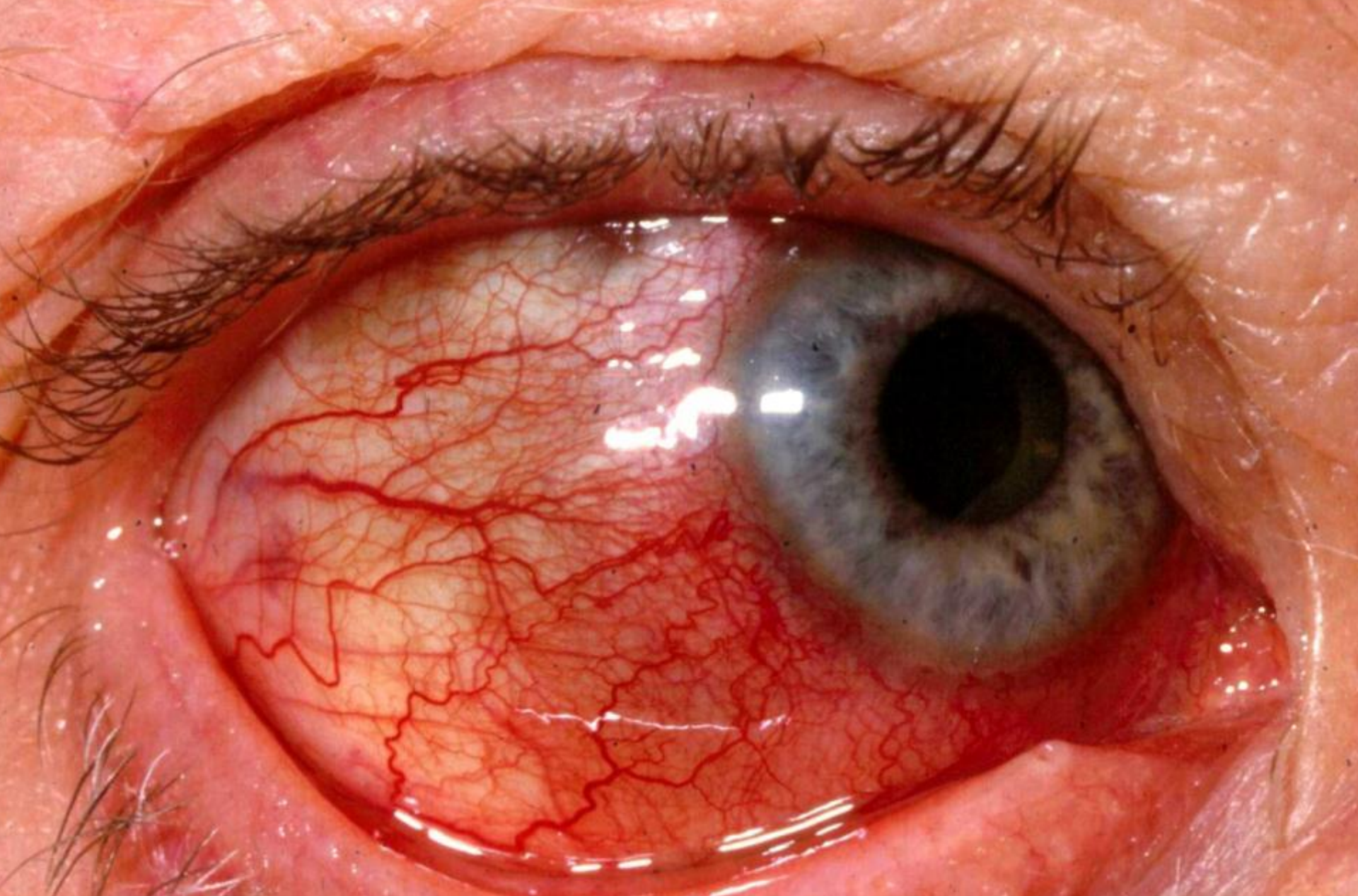
Herpes Simplex virus

Dendritic lesion

Treatment

- Acyclovir ointment  
5x day



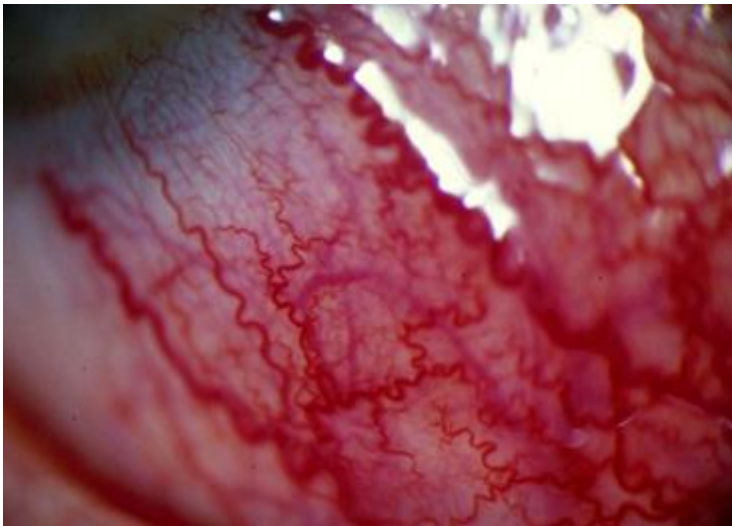


**EPISCLERITIS AND SCLERITIS**

# EPISCLERITIS AND SCLERITIS

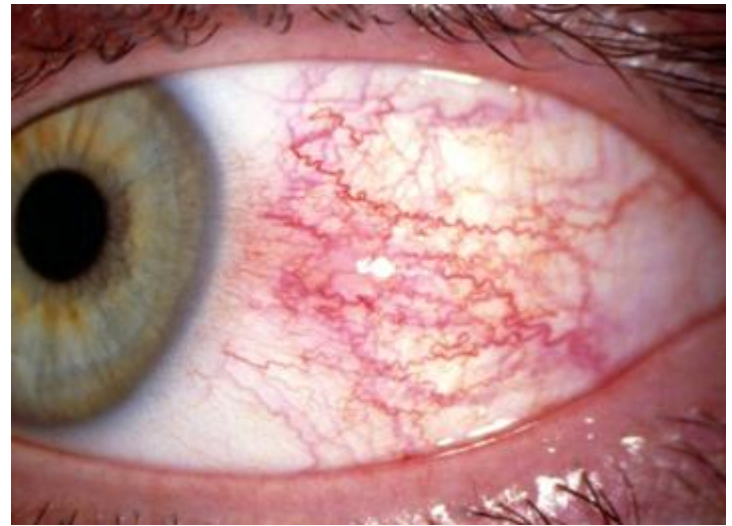
## SCLERITIS

- Relatively uncommon
- Severe boring pain
- Injection of deep scleral vessels



## EPISCLERITIS

- Relatively common
- Mild ocular discomfort
- Injection of episcleral vessels



# SCLERITIS AND EPISCLERITIS

## SCLERITIS

- Can be associated with systemic conditions
  - Rheumatoid arthritis
  - HZO
- Can lead to blindness if untreated

## EPISCLERITIS

- Generally no systemic associations
- Symptomatic relief



# SCLERITIS AND EPISCLERITIS

## **SCLERITIS (systemic Rx)**

- Usually associated with rheumatoid in general practice
- Requires systemic Rx
  - NSAIDS
  - Prednisone
  - Immunosuppressants

## **EPISCLERITIS (Topical Rx)**

- Trivial
- Topical lubricants
- Topical NSAIDS
- RARELY topical steroids

### **Practice Points**

Episcleritis does not progress to Scleritis.

Episcleritis can generally be managed in practice scleritis should be referred



# ANTERIOR UVEITIS

A close-up photograph of a human eye. The iris is a deep red color, indicating inflammation. The pupil is visible in the center, and the surrounding sclera is also red and swollen. The background is a blurred, colorful pattern of green and blue.

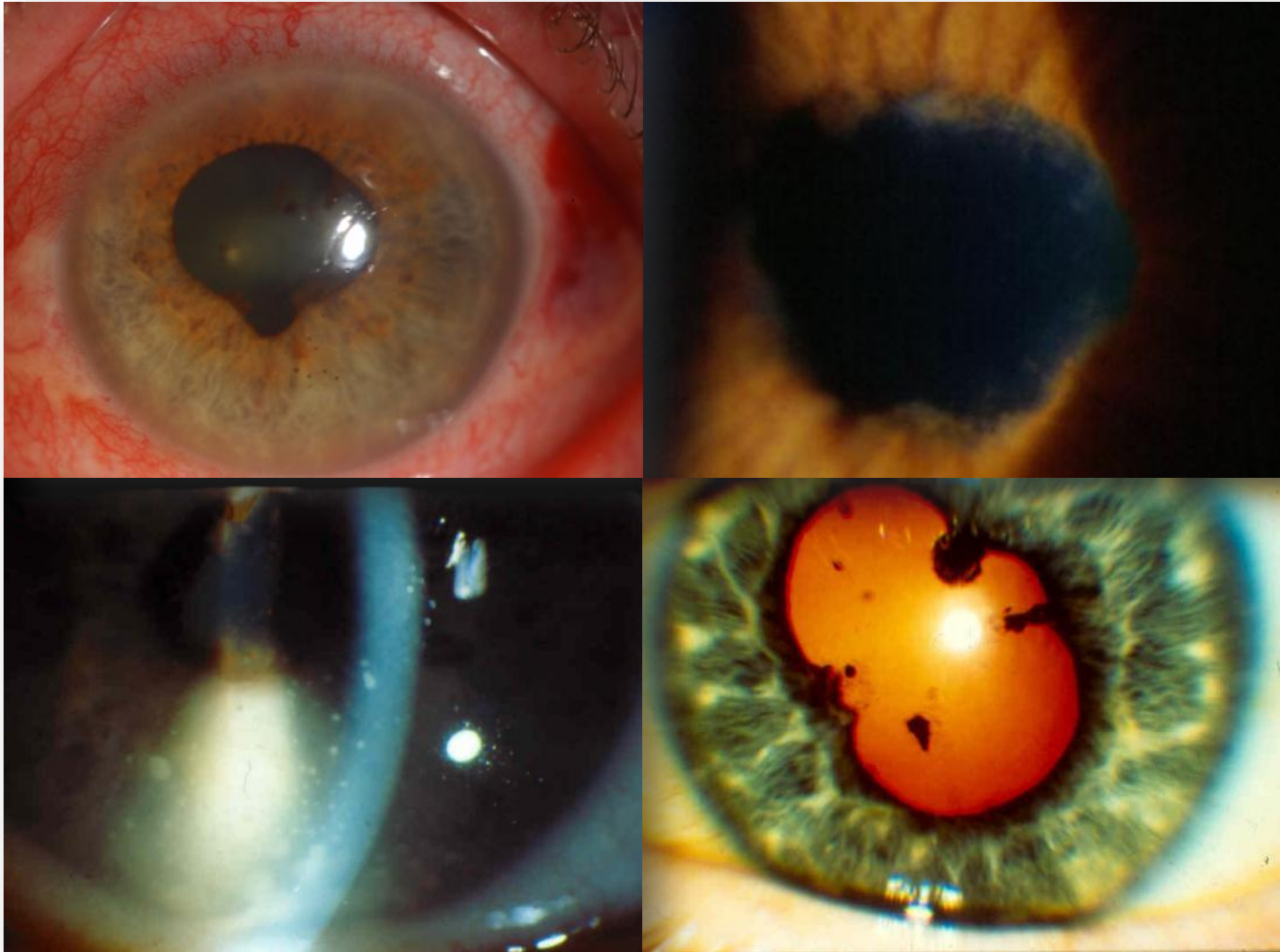
- Moderate aching pain
- Photophobia
- Past History
- Screen for systemic symptoms



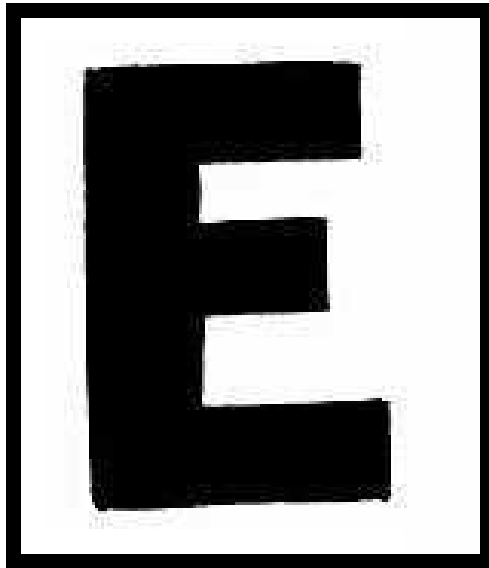
# ASSOCIATIONS

- Seronegative arthropathies
- Inflammatory bowel disease
- Sarcoid
- Behçets
- Infections  
e.g TB, Syphilis

# IRIS APPEARANCE: Synechiaiae



# SUDDEN PAINLESS LOSS OF VISION

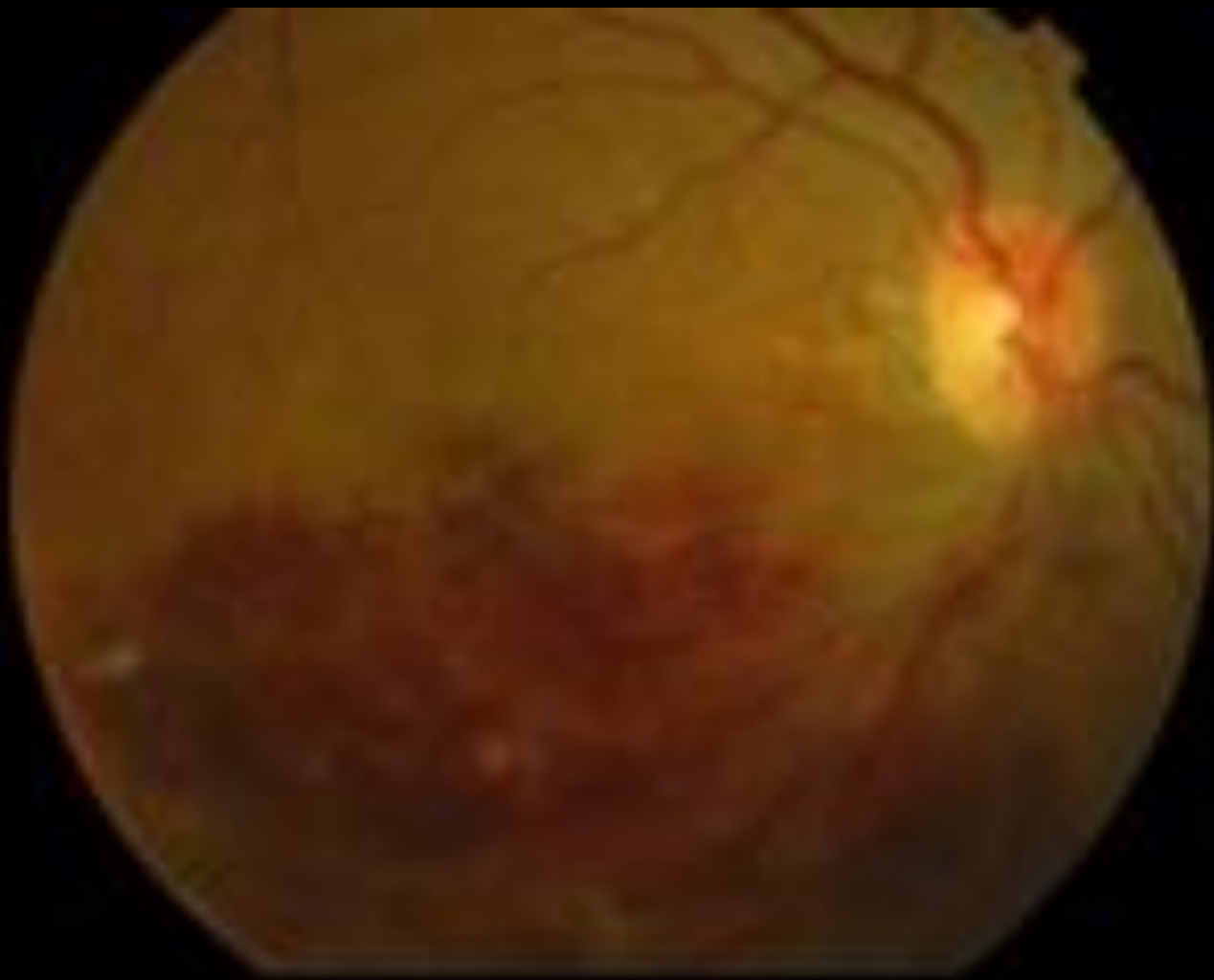


*"And you say you drove here Mr Smith?"*

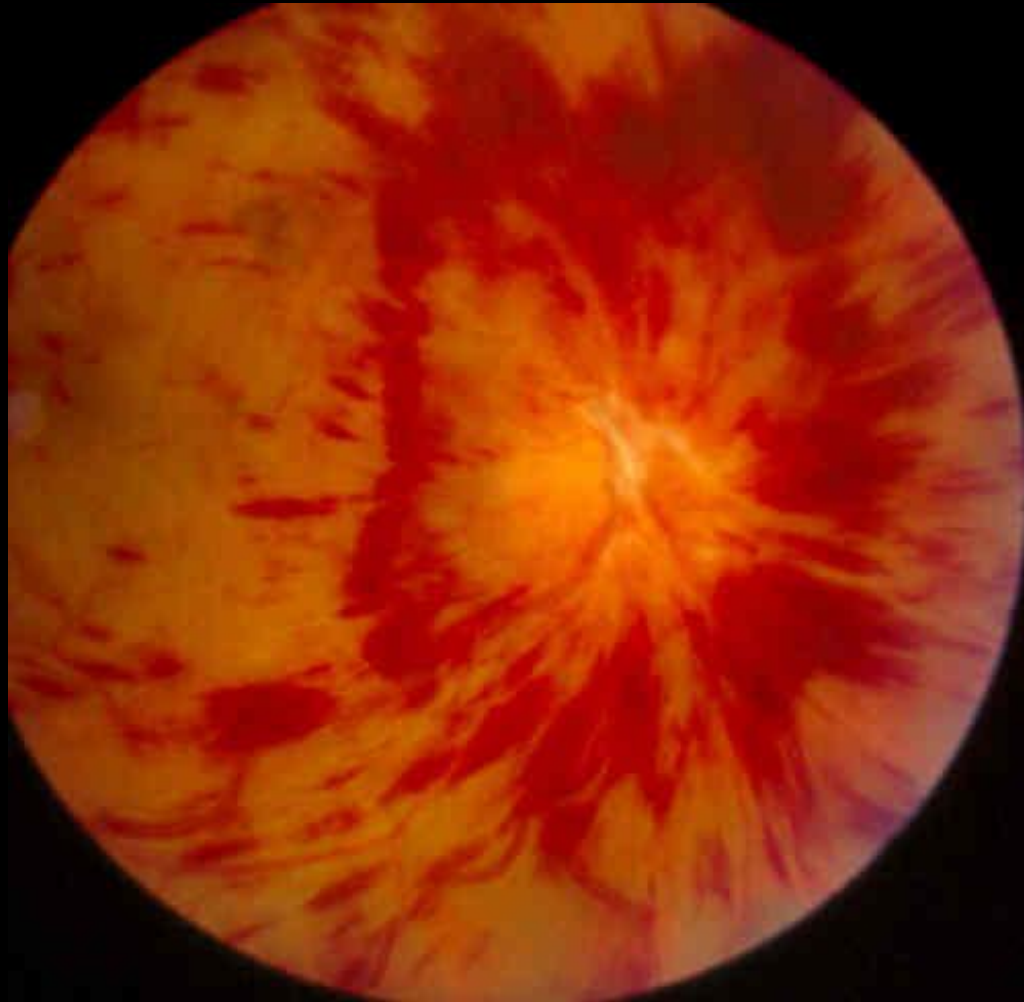
# RETINAL DETACHMENT



# BRANCH RETINAL VEIN OCCLUSION



# CENTRAL RETINAL VEIN OCCLUSION

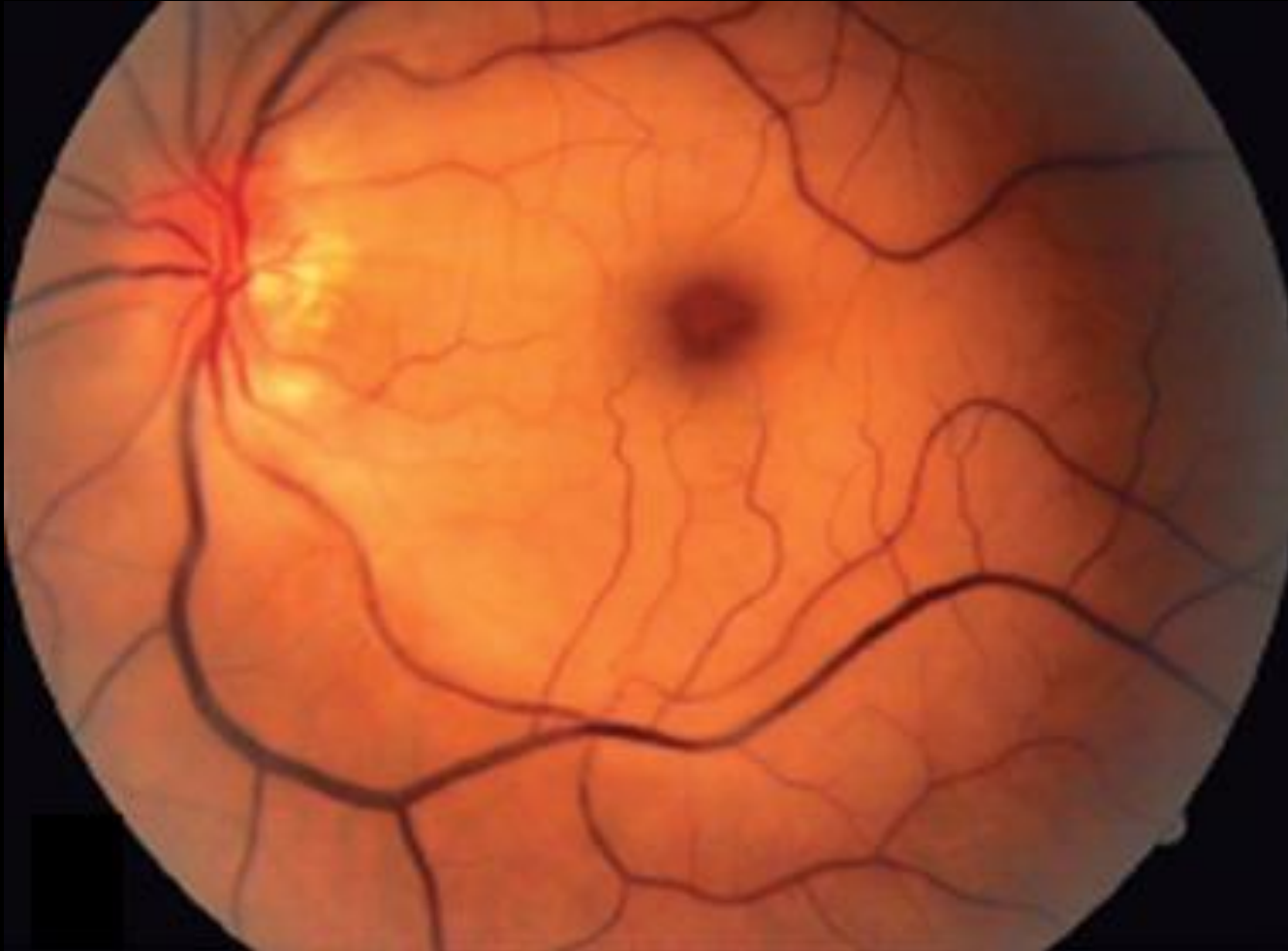


# BRANCH RETINAL ARTERY OCCLUSION





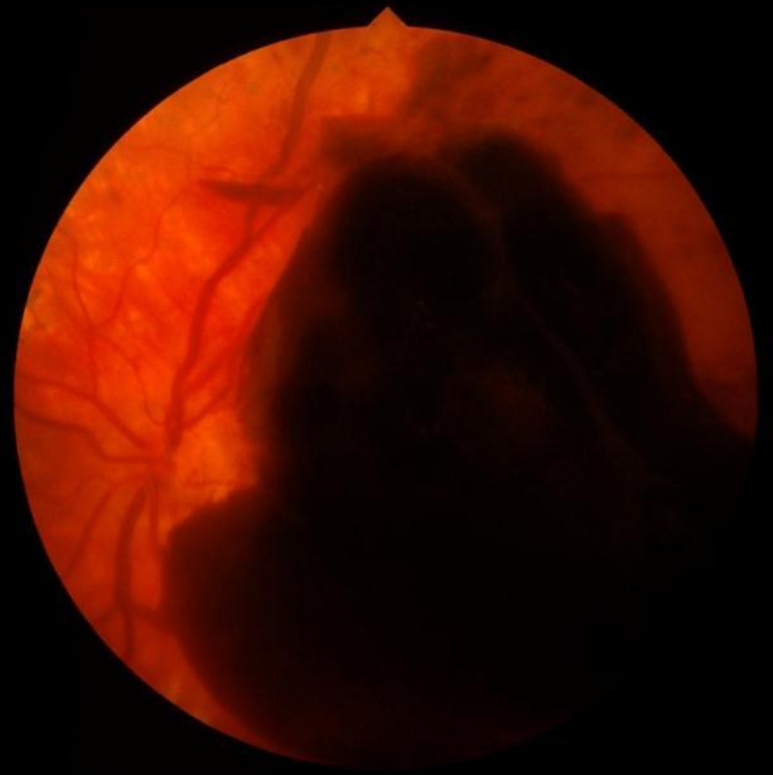
# CENTRAL RETINAL ARTERY OCCLUSION

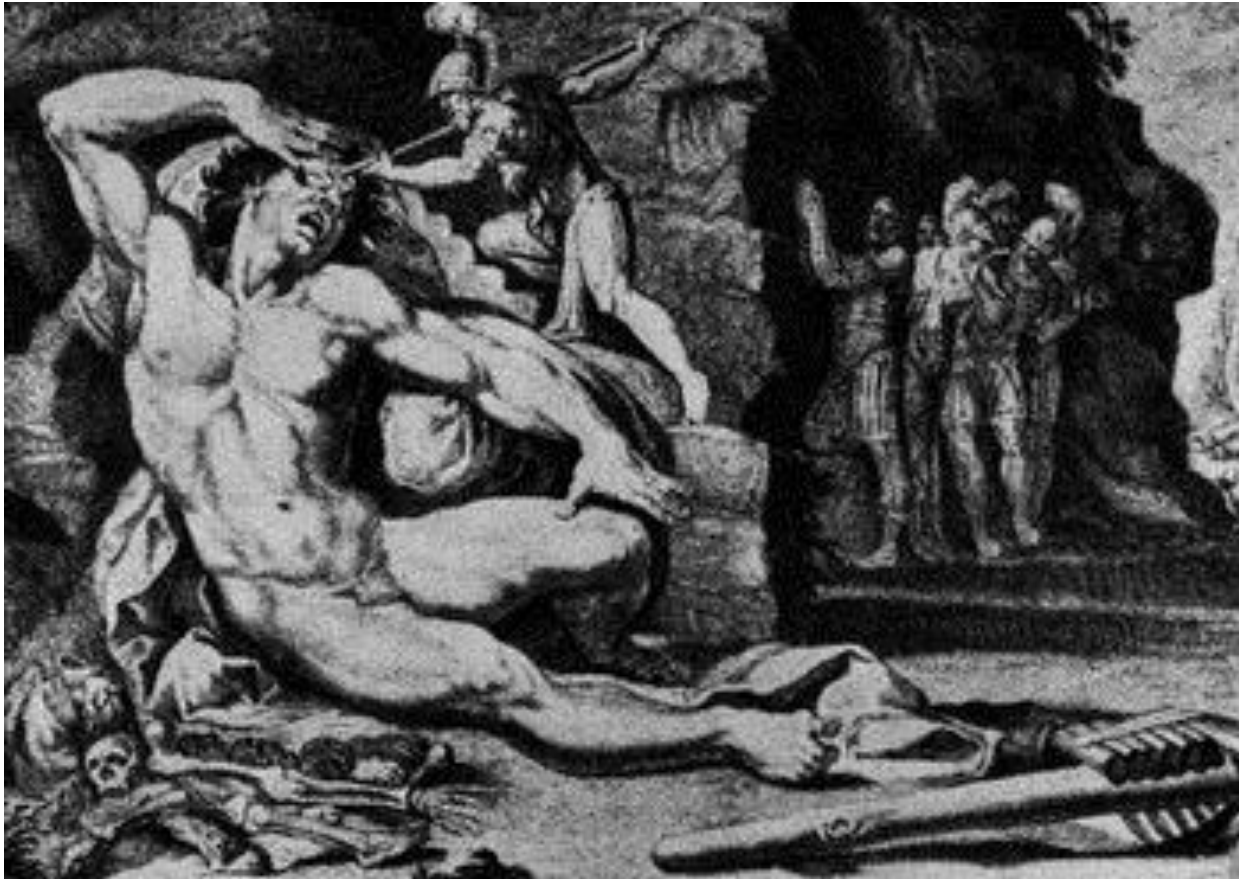


# ARTERY OCCLUSION



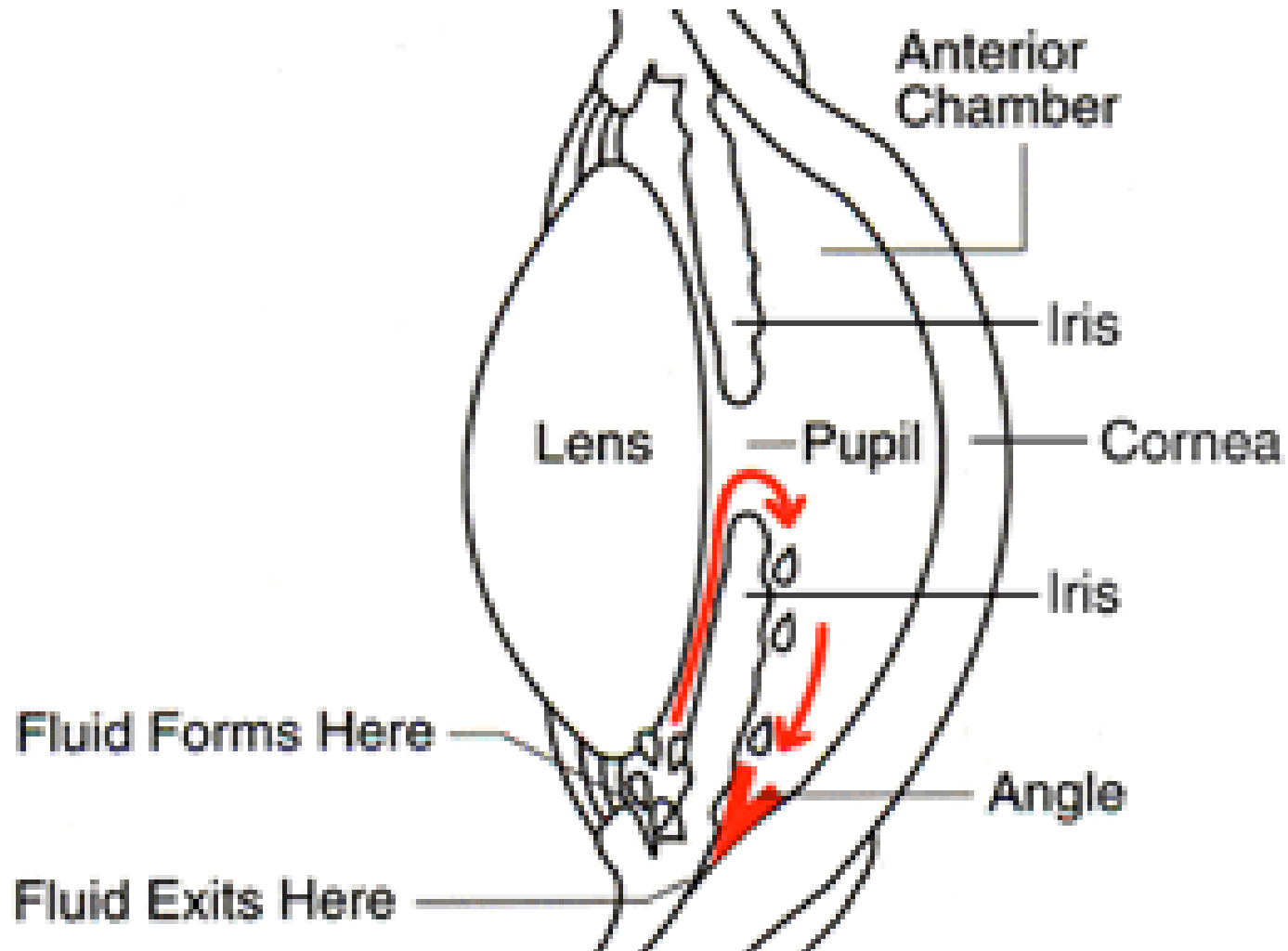
# VITREOUS HAEMORRHAGE





# **SIGHT THREATENING CONDITIONS**

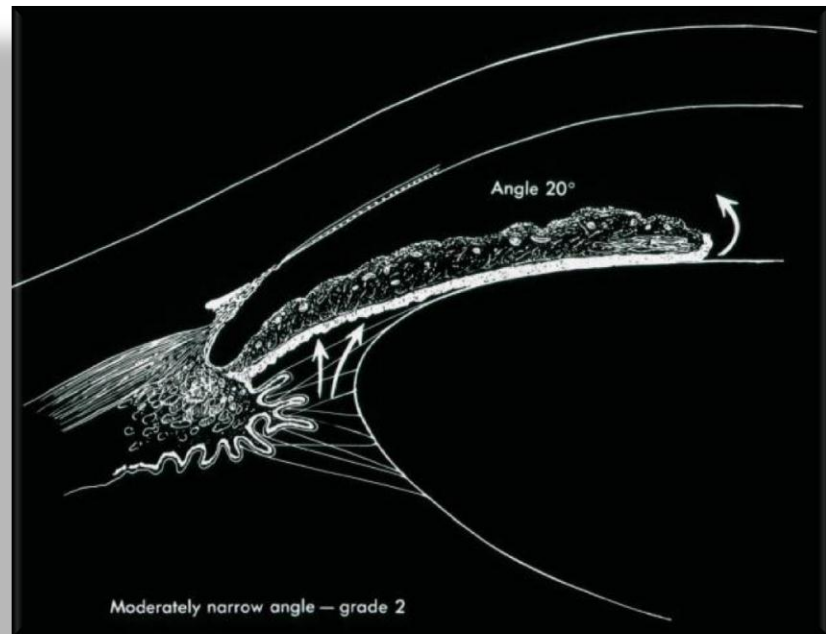
# ACUTE ANGLE CLOSURE



# PREDISPOSITION

- Incidence 1/1,000 pop'n > 40 yrs  
4:1 female to male

- Predisposition
  - Short Eye
  - Narrow Angle
  - Large Lens



- Therefore older hypermetrope at risk

# ACUTE ANGLE CLOSURE GLAUCOMA

Intense ocular pain

Decreased vision

Headache

Photophobia

Haloed around lights

Nausea and vomiting

Premonitory symptoms

Hypermetrope



# BEWARE OF THE MASQUERADE

## *Lesson of the Week*

BMJ VOLUME 299 22 JULY 1989

### Acute glaucoma presenting with abdominal symptoms

N J Watson, G R Kirkby

The patient with abdominal pain and a red eye may have glaucoma

Acute angle closure glaucoma is a rare condition that affects 0.1% of the population aged over 50 years.<sup>1,2</sup> Patients usually present with sudden onset of severe pain in or over the affected eye and reduced vision. They may have had prodromal attacks of aching, blurred vision, and haloes round lights, particularly at night. The eye is red, with oedema of the cornea and a fixed semidilated pupil, and is hard when palpated.

Rarely patients present not with severe eye pain but with abdominal symptoms predominating that result from effects of an appreciable rise in intraocular pressure. The symptoms are prostration, nausea, vomiting, and pain.<sup>3</sup> Patients and their doctors may therefore ignore serious eye disease.

We describe two patients who illustrate this unusual presentation of the disease.

#### Case 1

An 86 year old woman with senile dementia was admitted to hospital with increasing confusion, nausea, vomiting, and colicky lower abdominal pain. Urinary tract infection was diagnosed. She was prescribed systemic antibiotics and chloramphenicol eye drops for her left eye, which was red.

Four days later the abdominal pain had not settled, no abdominal abnormality was found, and a mid-stream urine sample (taken before she started taking

frequency of micturition. Urinary tract infection was diagnosed at her day hospital and by her general practitioner. Her right eye was uncomfortable and conjunctivitis suspected. She was prescribed systemic antibiotics and chloramphenicol eye drops. Two days later the left eye became red, and it was assumed that the conjunctivitis had spread. Chloramphenicol was then prescribed for both eyes. A midstream urine specimen contained no cells and grew no organisms.

Two days later she fell and broke her arm, and it was established that this was the result of poor eyesight. An opinion was sought from an ophthalmologist. Her visual acuities were hand movements right and count fingers left. She had oedema of the cornea with fixed semidilated pupils in both eyes. The intraocular pressures were 9.6 kPa right and 7.9 kPa left. The fundus was not visible. Bilateral acute angle closure glaucoma was diagnosed.

The intraocular pressures returned to normal with medical treatment, and the abdominal symptoms resolved. Later she had drainage surgery to both eyes. Her vision did not improve, and she remained blind.

#### Discussion

An early diagnosis of acute glaucoma is essential because a prolonged rise in intraocular pressure can result in permanent loss of vision due to ischaemia of



# ACUTE ANGLE CLOSURE Rx

- REDUCE IOP
  - Medical
    - Topical:
      - Alpha-agonist, Beta-blockers, Mitotics (Pilocarpine)
    - Systemic
      - Carbonic anhydrase inhibitors (Diamox), Osmotics (Mannitol)
  - Surgical
    - Peripheral iridotomy
    - Clear lens extraction/trabeculectomy



# TEMPORAL ARTERITIS

- SIGHT THREATENING
- Systemic inflammatory vasculitis of unknown Aetiology
- Time is vision



# TEMPORAL ARTERITIS

- **General History**

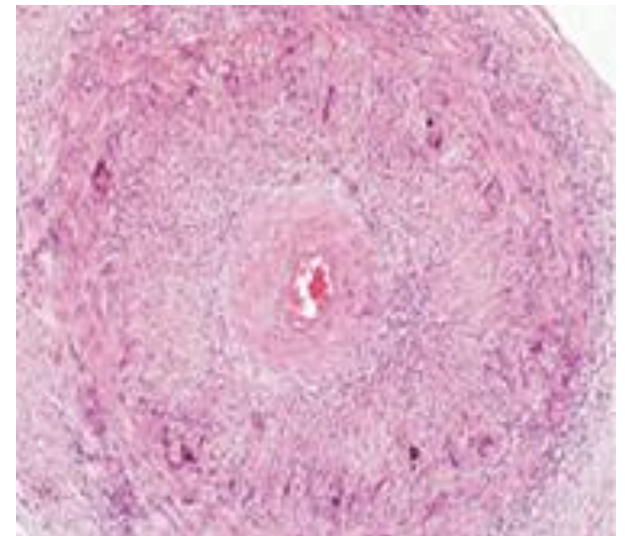
- Jaw claudication,
- scalp tenderness,
- weight loss, sweats, shoulder girdle pain

- **Ophthalmic presentation**

- Sudden vision loss,
- amaurosis fugax,
- visual obscurations,
- diplopia

# TEMPORAL ARTERITIS

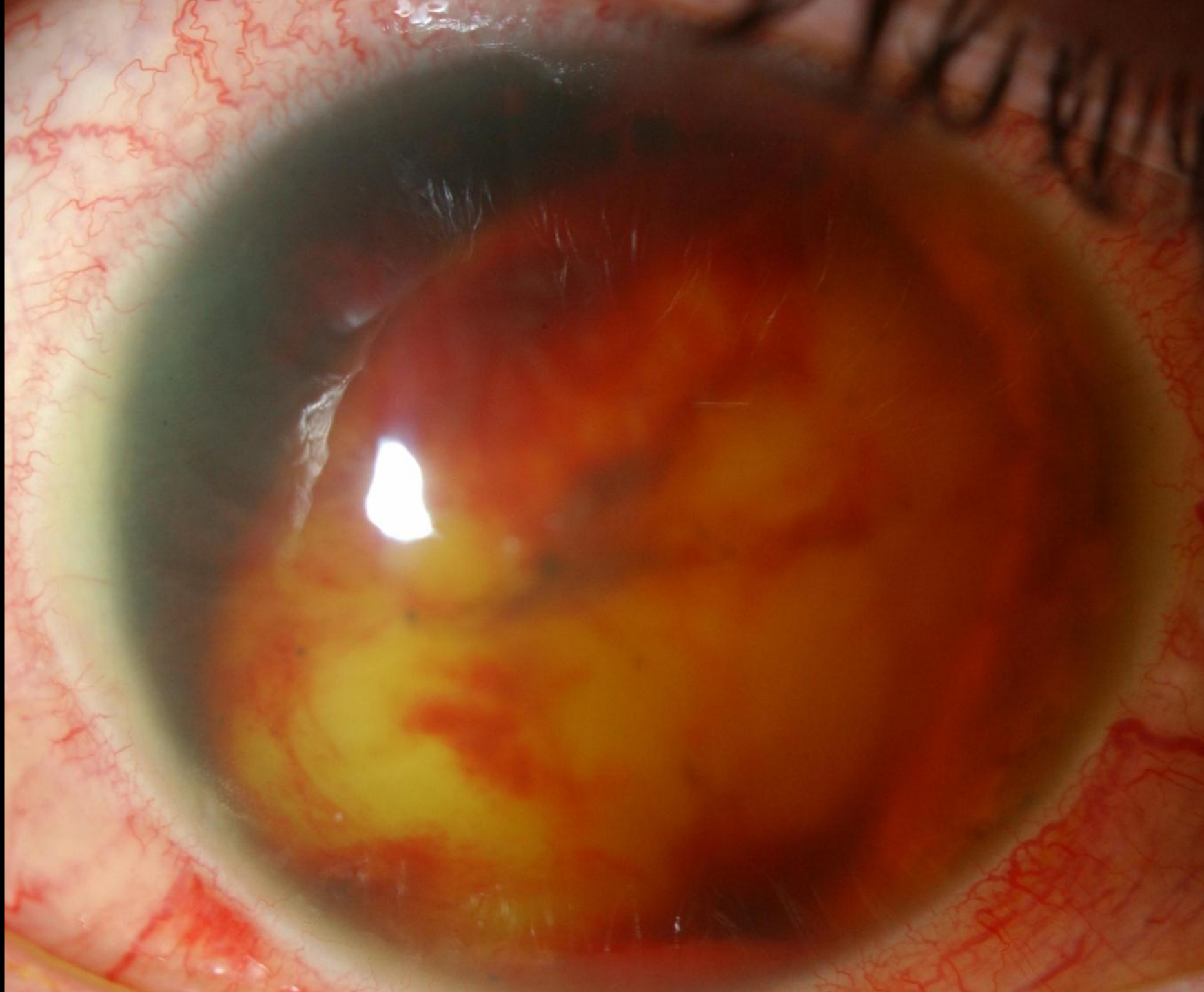
- Investigations
  - ESR, CRP, FBC, temporal artery biopsy
- Treatment
  - IV methylpred 1g for three days
  - High dose oral prednisone



# ENDOPHTHALMITIS

- Inflammatory condition of the intraocular cavities.
- Typically caused by infection
- May be endogenous or exogenous
- “Tap and inject”
- **SIGHT THREATENING**

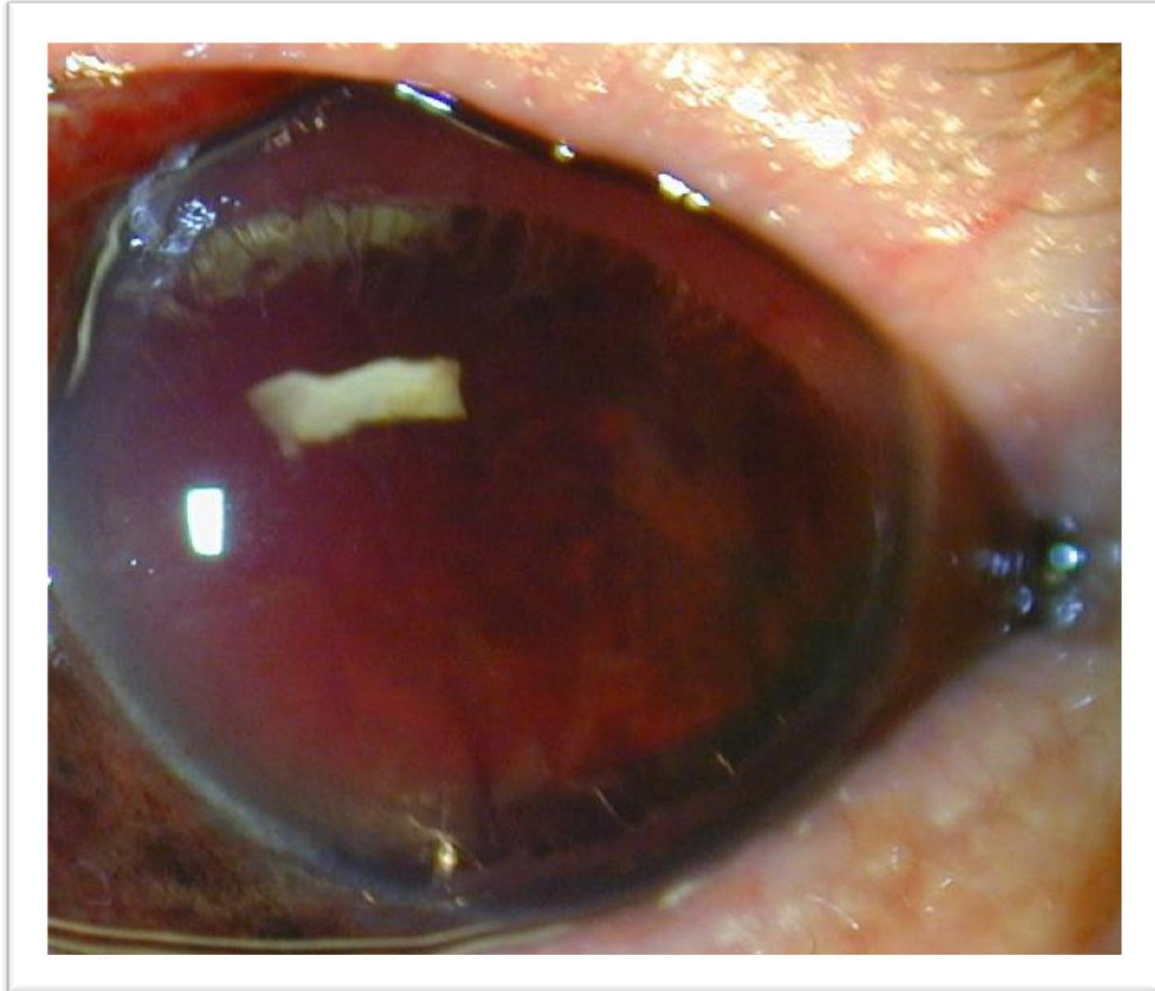
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# BLUNT TRAUMA

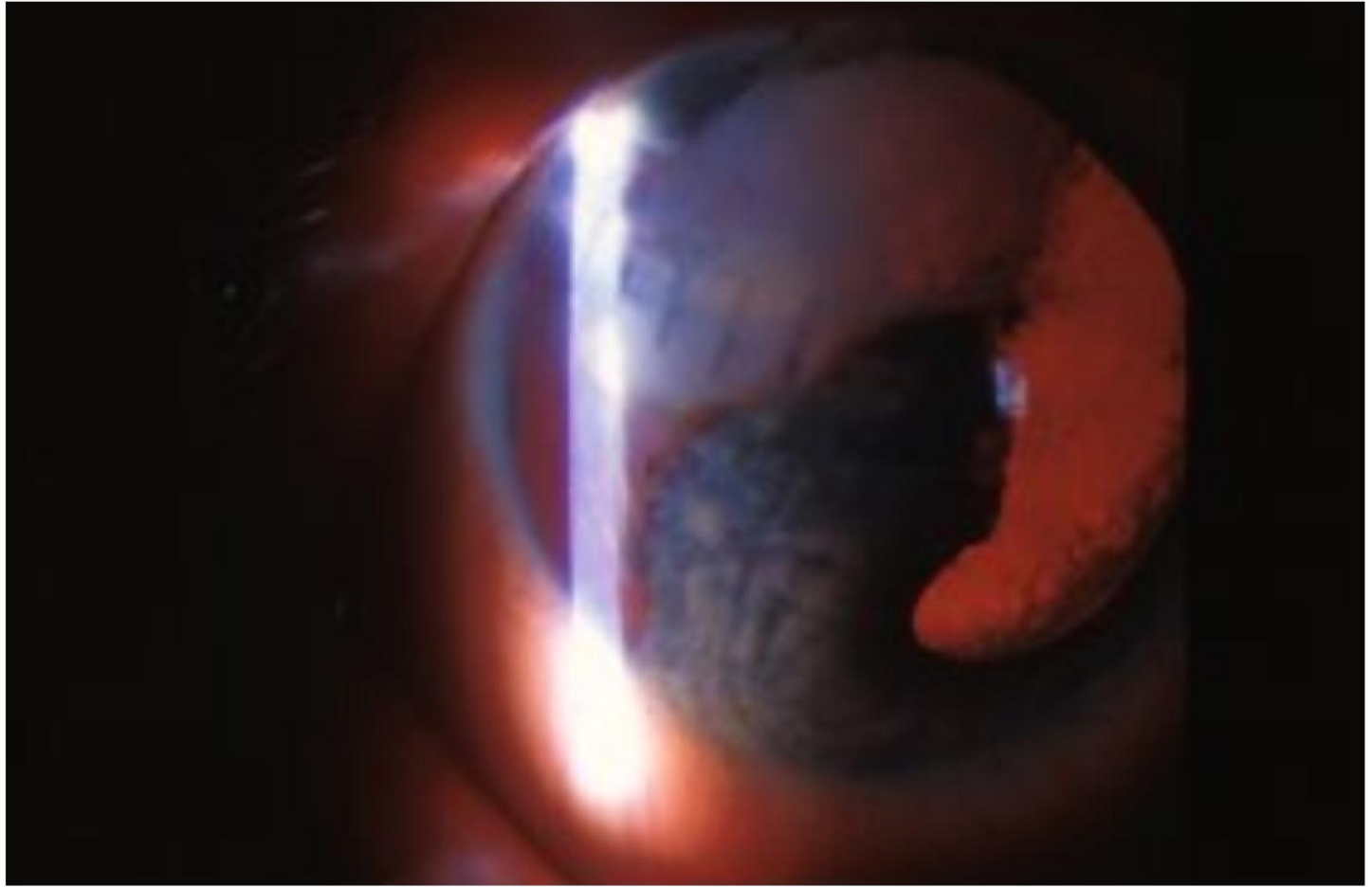
- Mild – moderate
  - “bruise” ocular tissues
  - Eye wall intact
- Moderate – severe
  - Rupture eye wall
  - Very severe consequences

# BLUNT TRAUMA





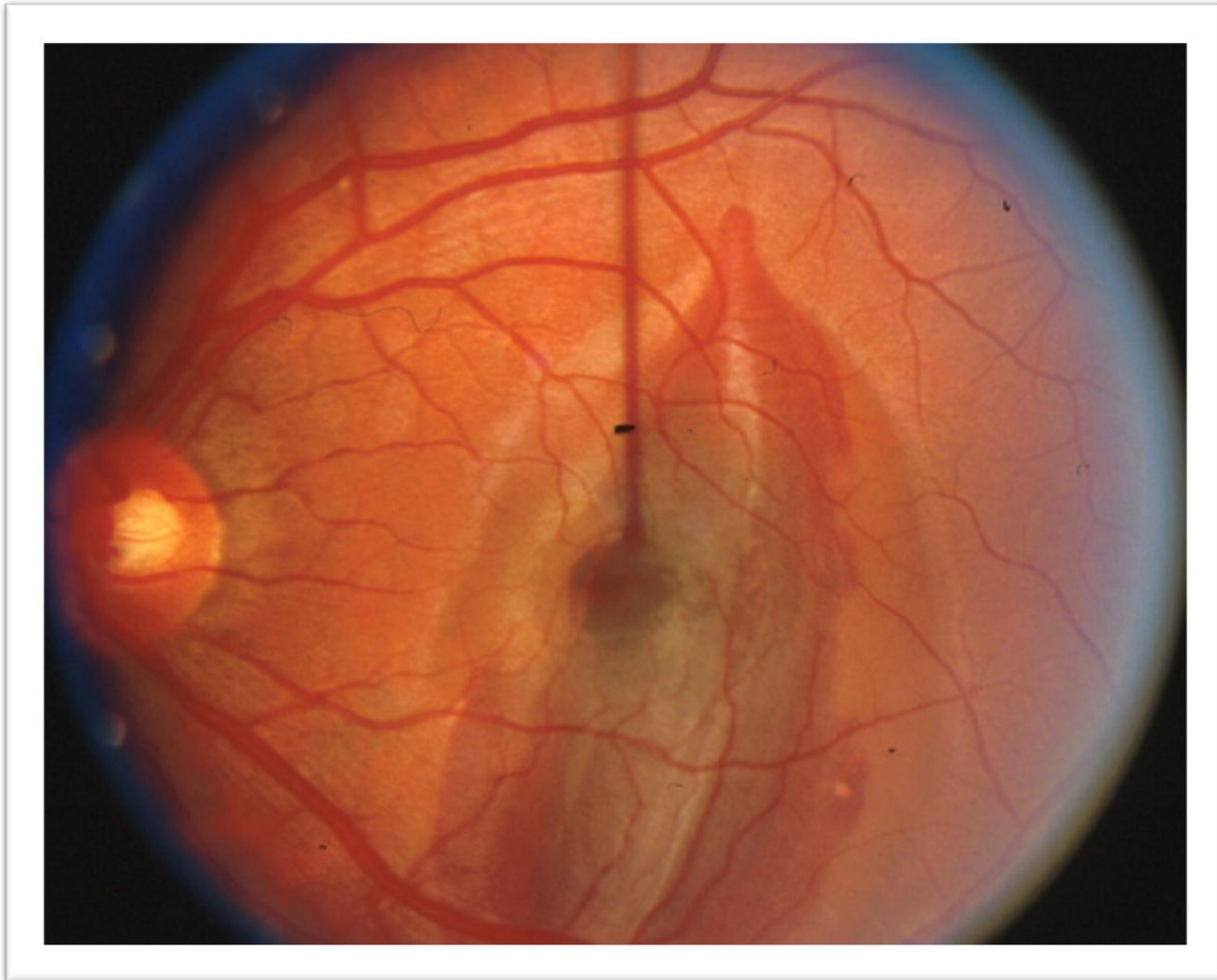
# BLUNT TRAUMA



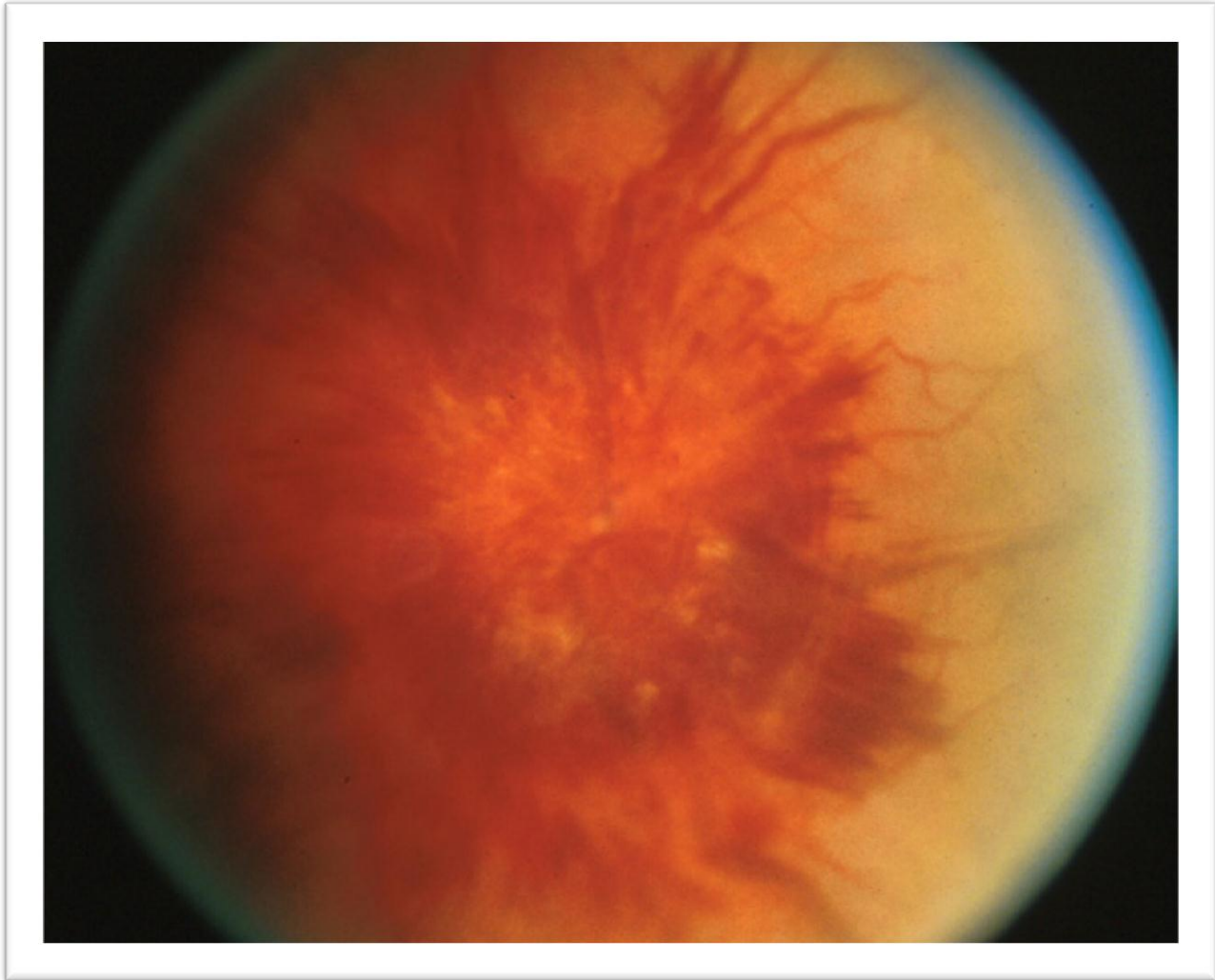
# BLUNT TRAUMA



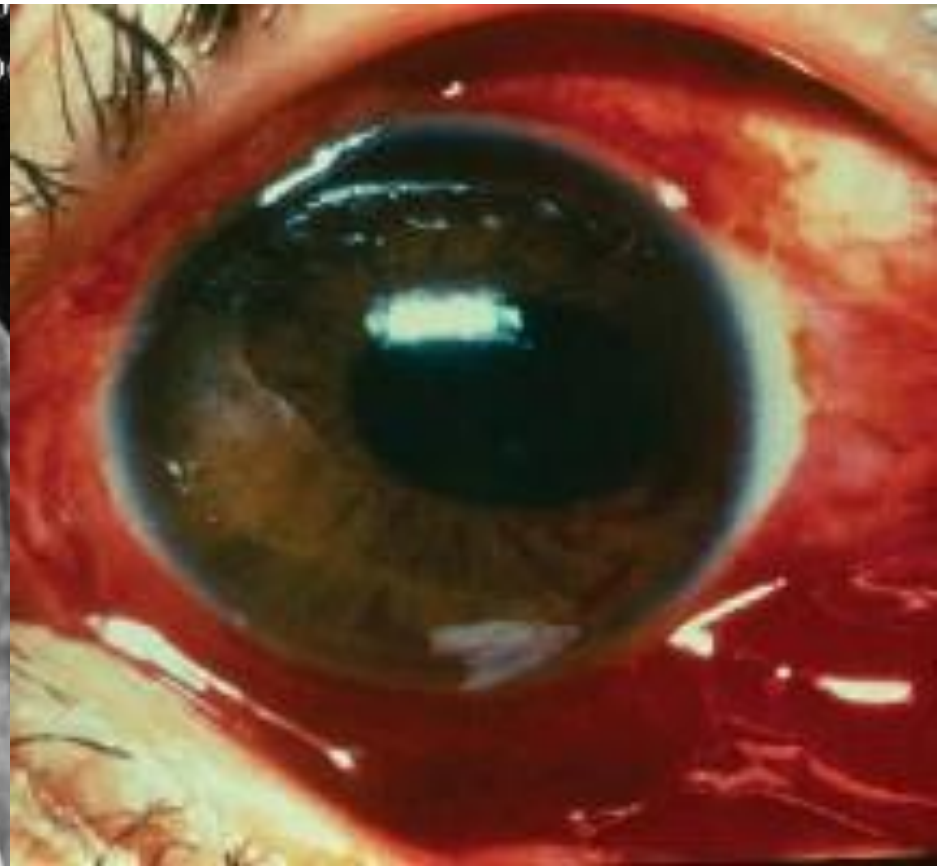
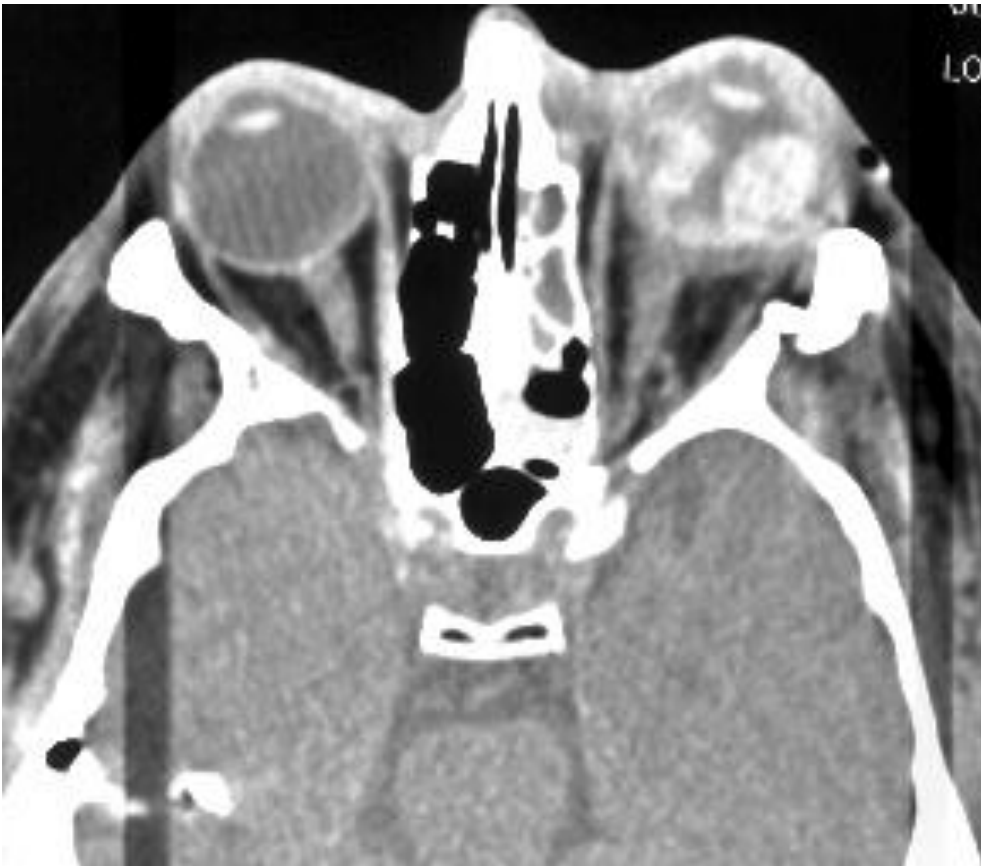
# BLUNT TRAUMA



# BLUNT TRAUMA



# BLUNT GLOBE RUPTURE



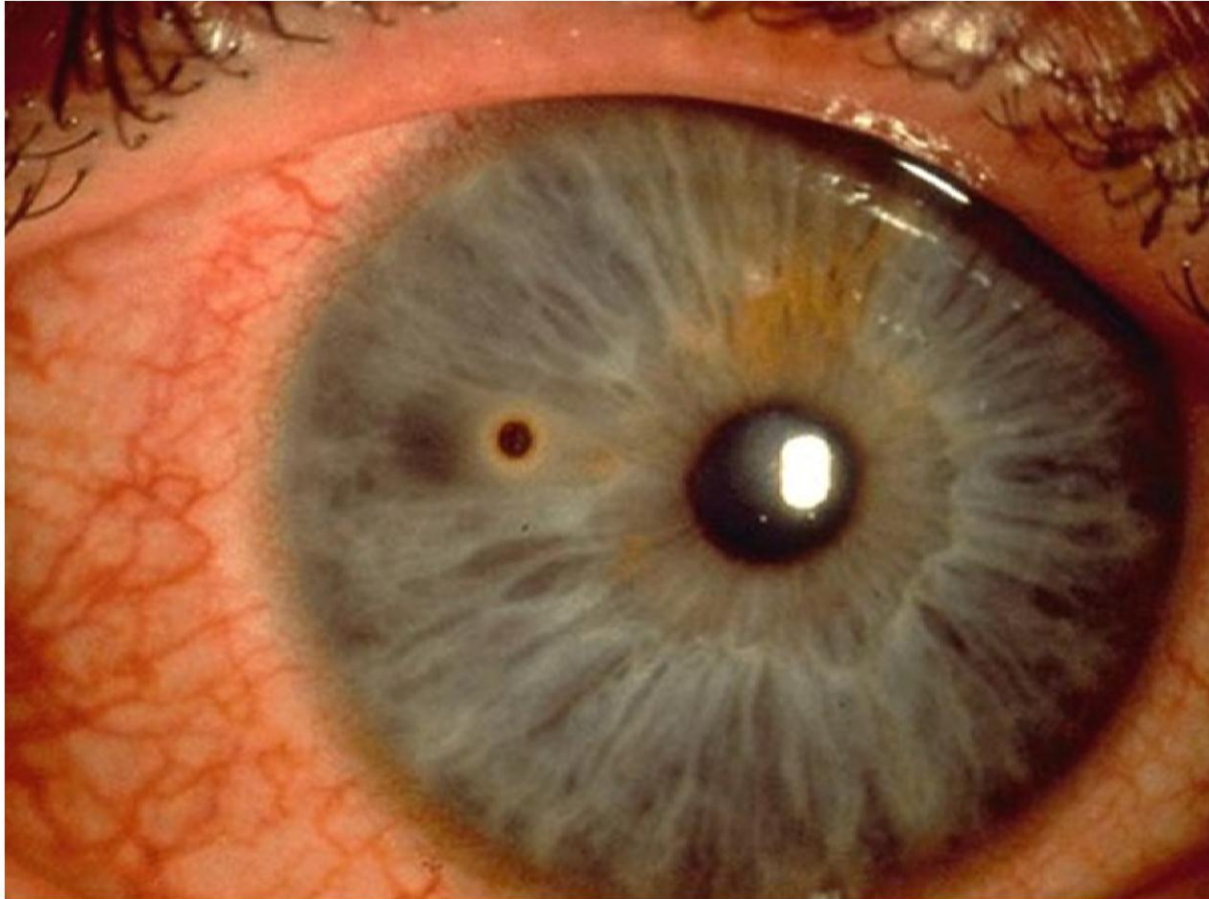
# ORBITAL FRACTURES



# ORBITAL FRACTURES

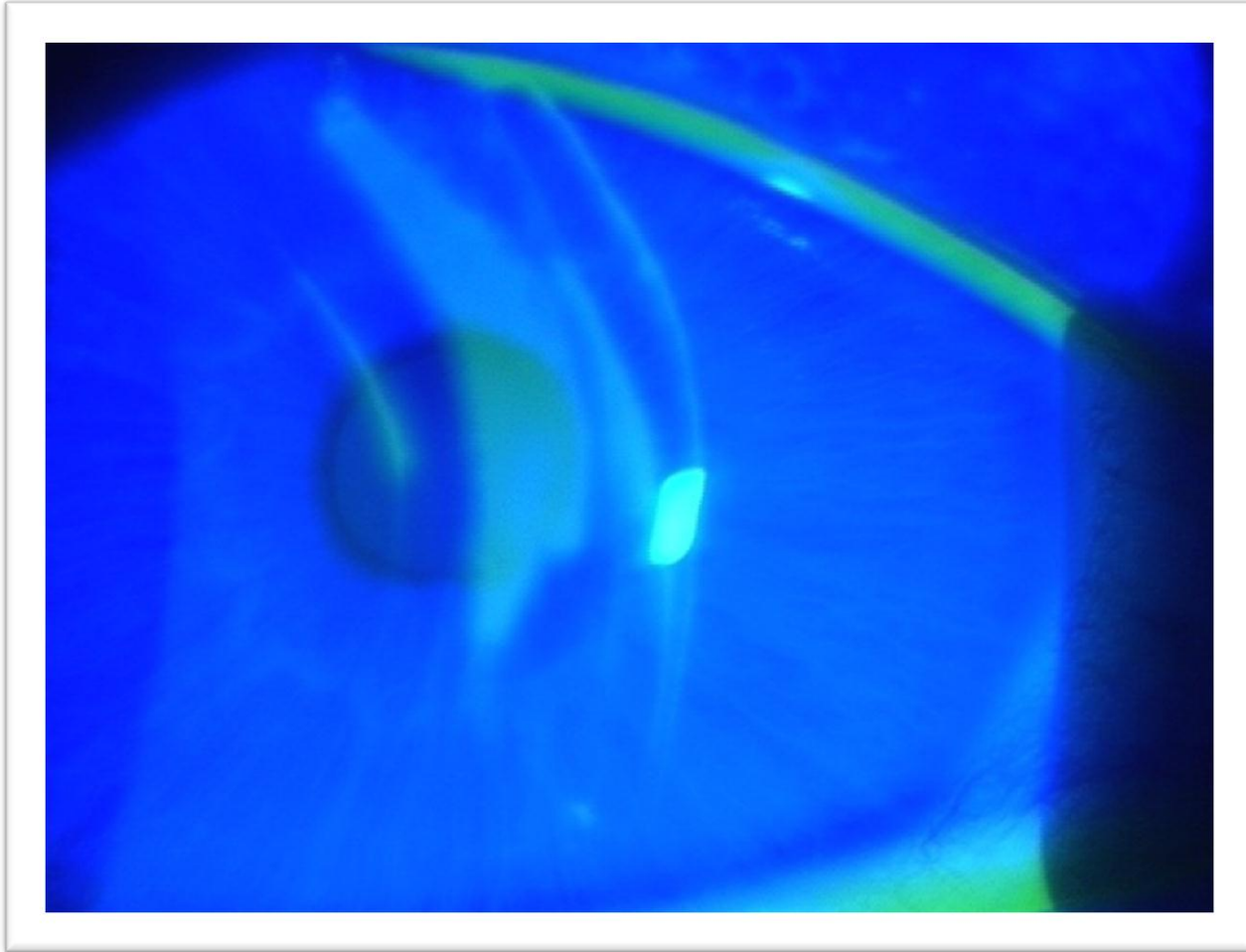


# CORNEAL FOREIGN BODY

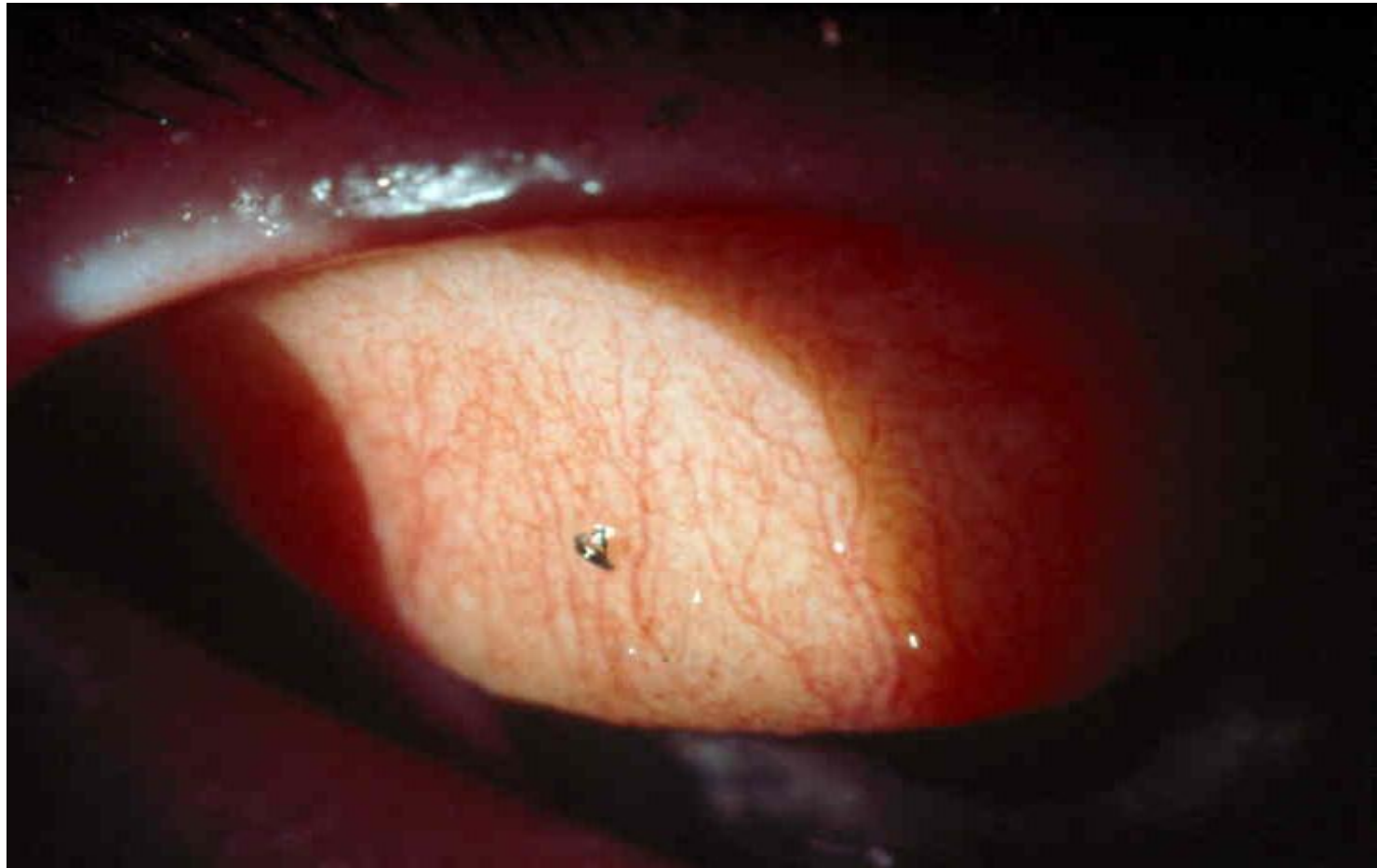




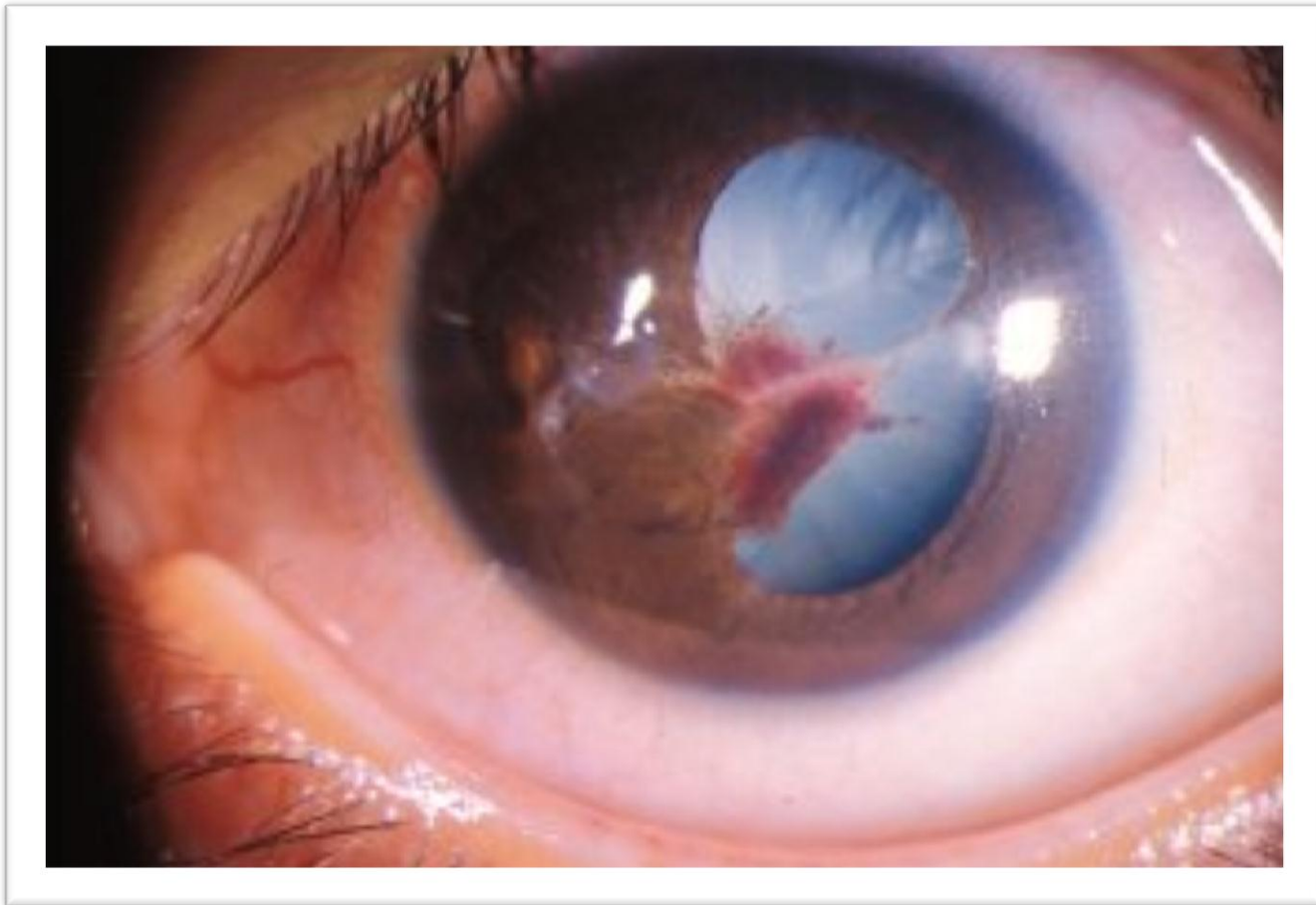
# FOREIGN BODY



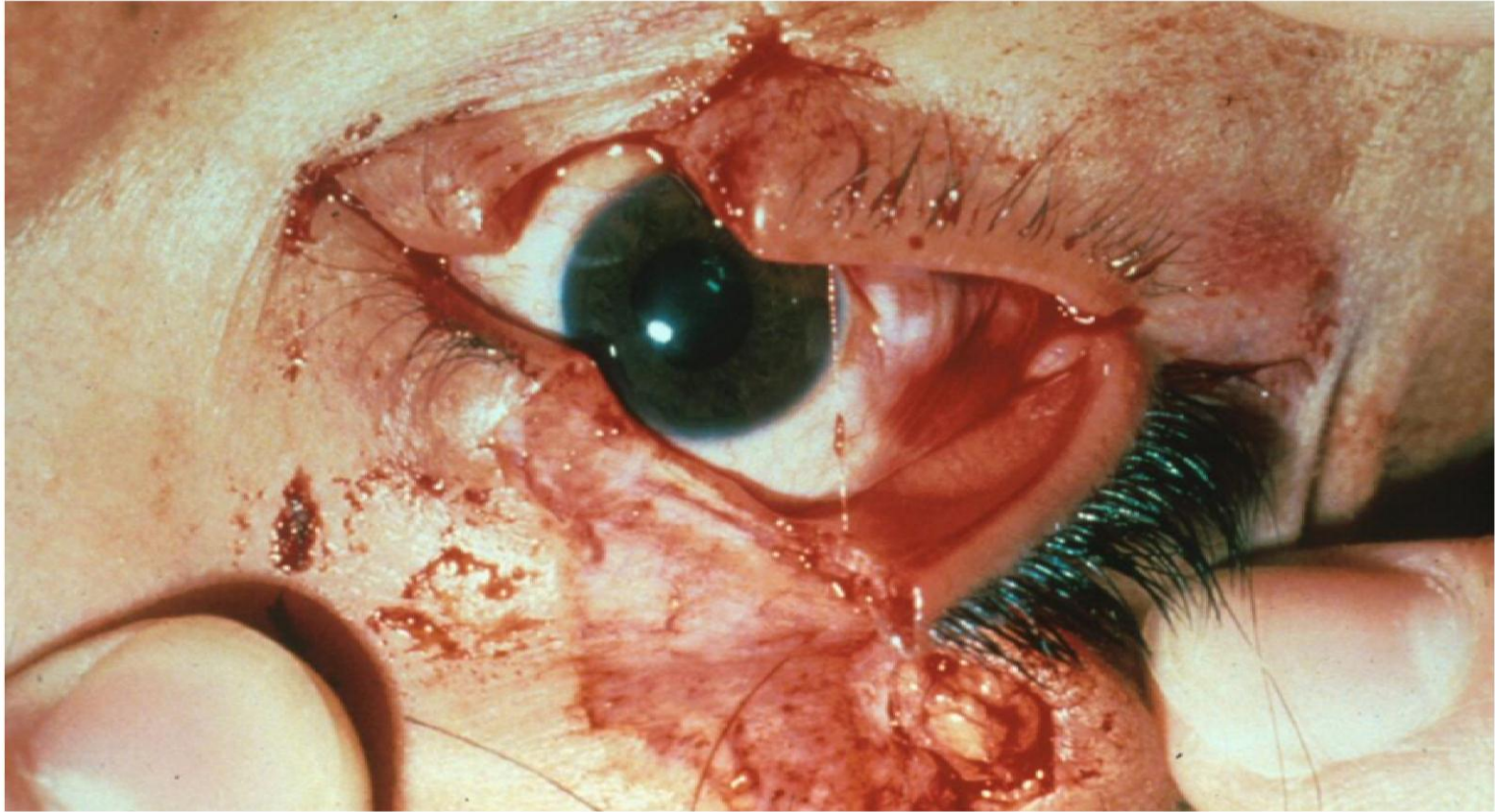
# SUB TARSAL FOREIGN BODY



# LACERATING TRAUMA

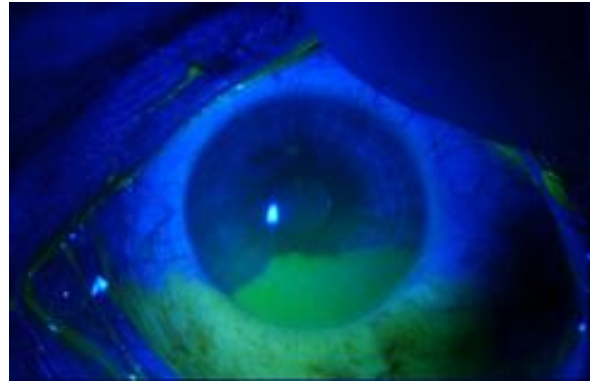
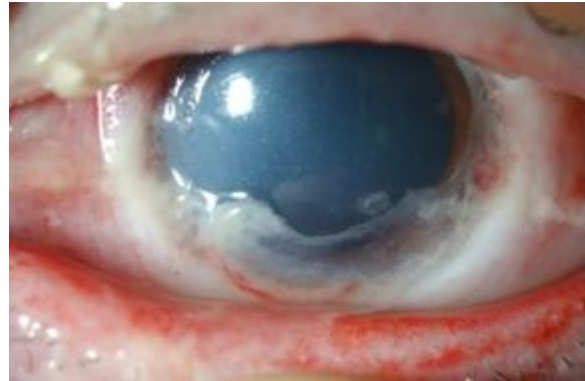
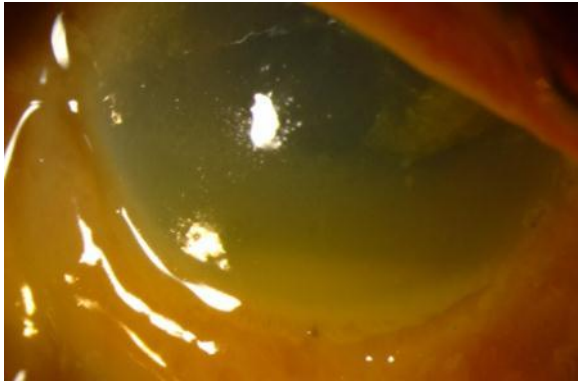
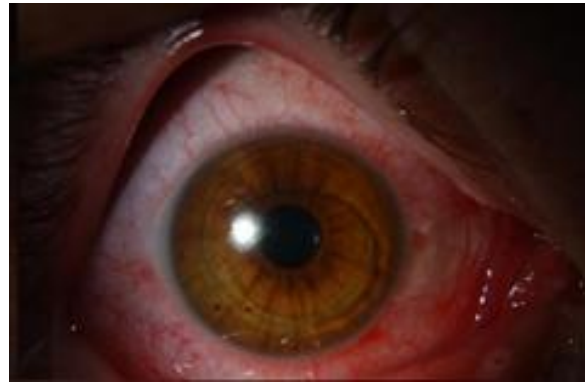
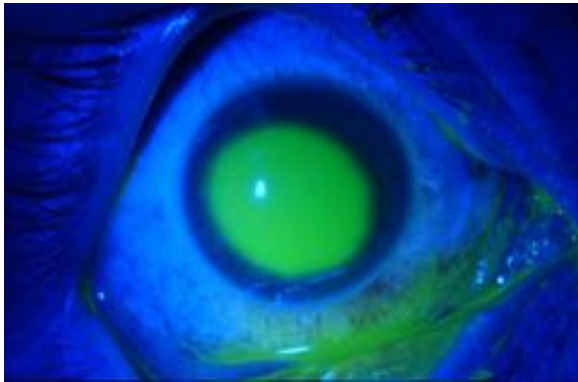


# LACERATING TRAUMA



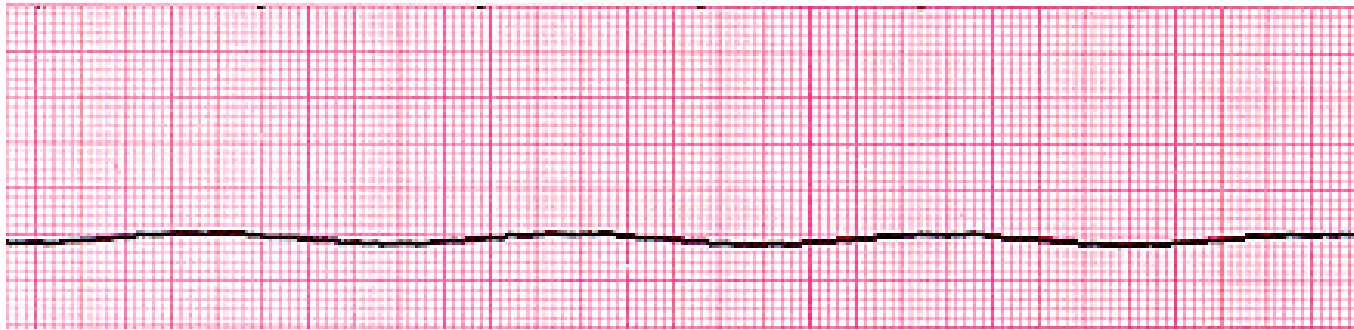
# CHEMICAL BURNS

- SIGHT THREATENING
- Acid vs Alkali



# IMMEDIATE AND COPIOUS IRRIGATION



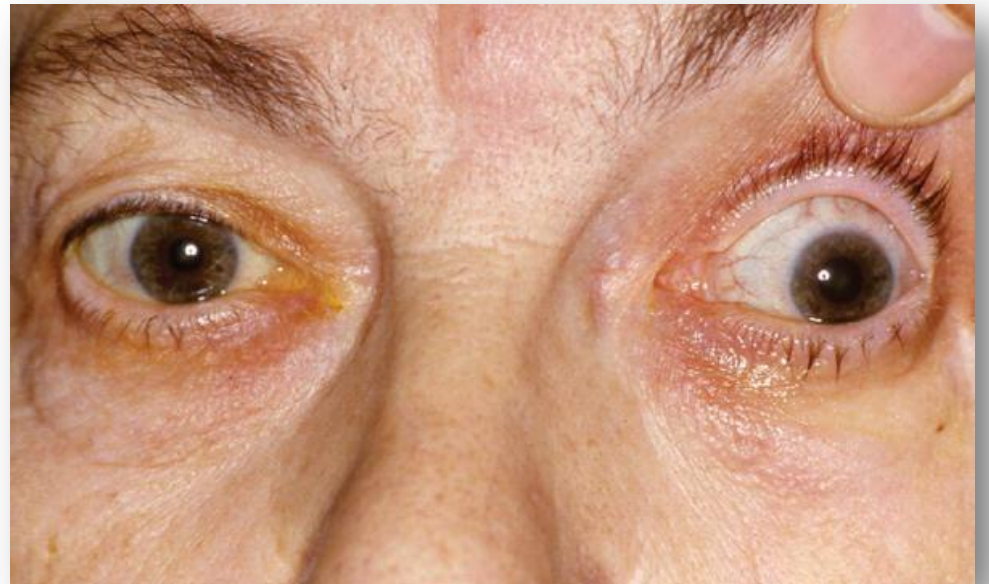


**LIFE THREATENING CONDITIONS**



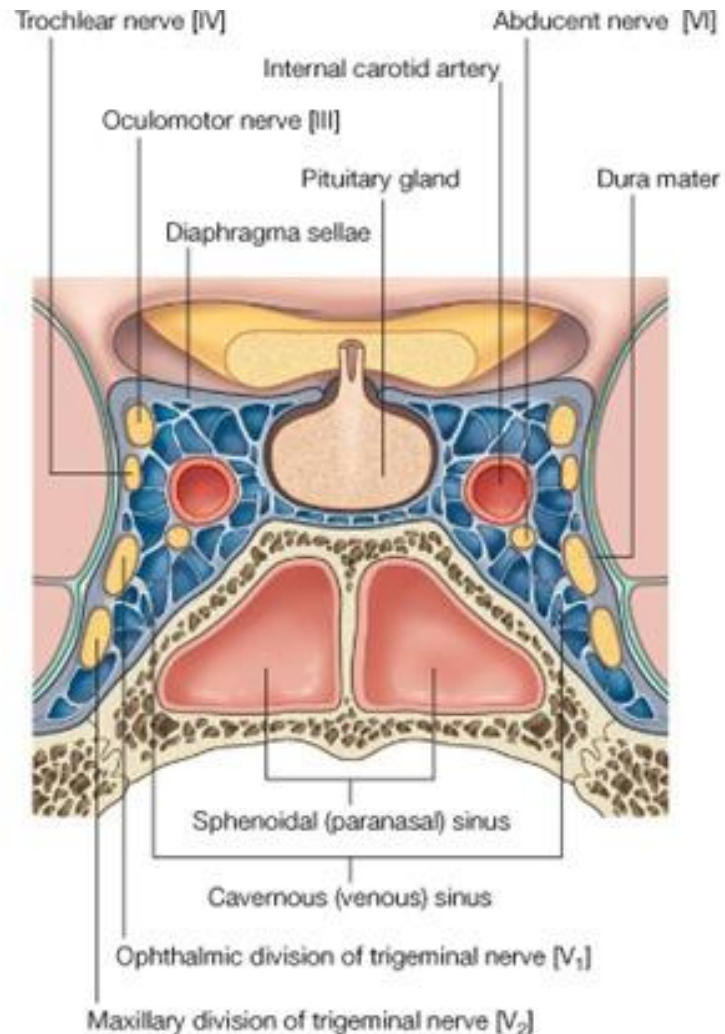
**THIRD NERVE PALSY**

**LIFE THREATENING**

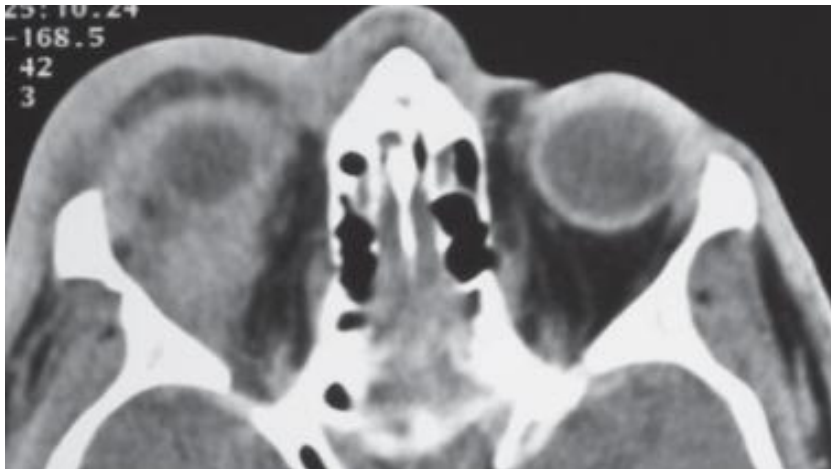




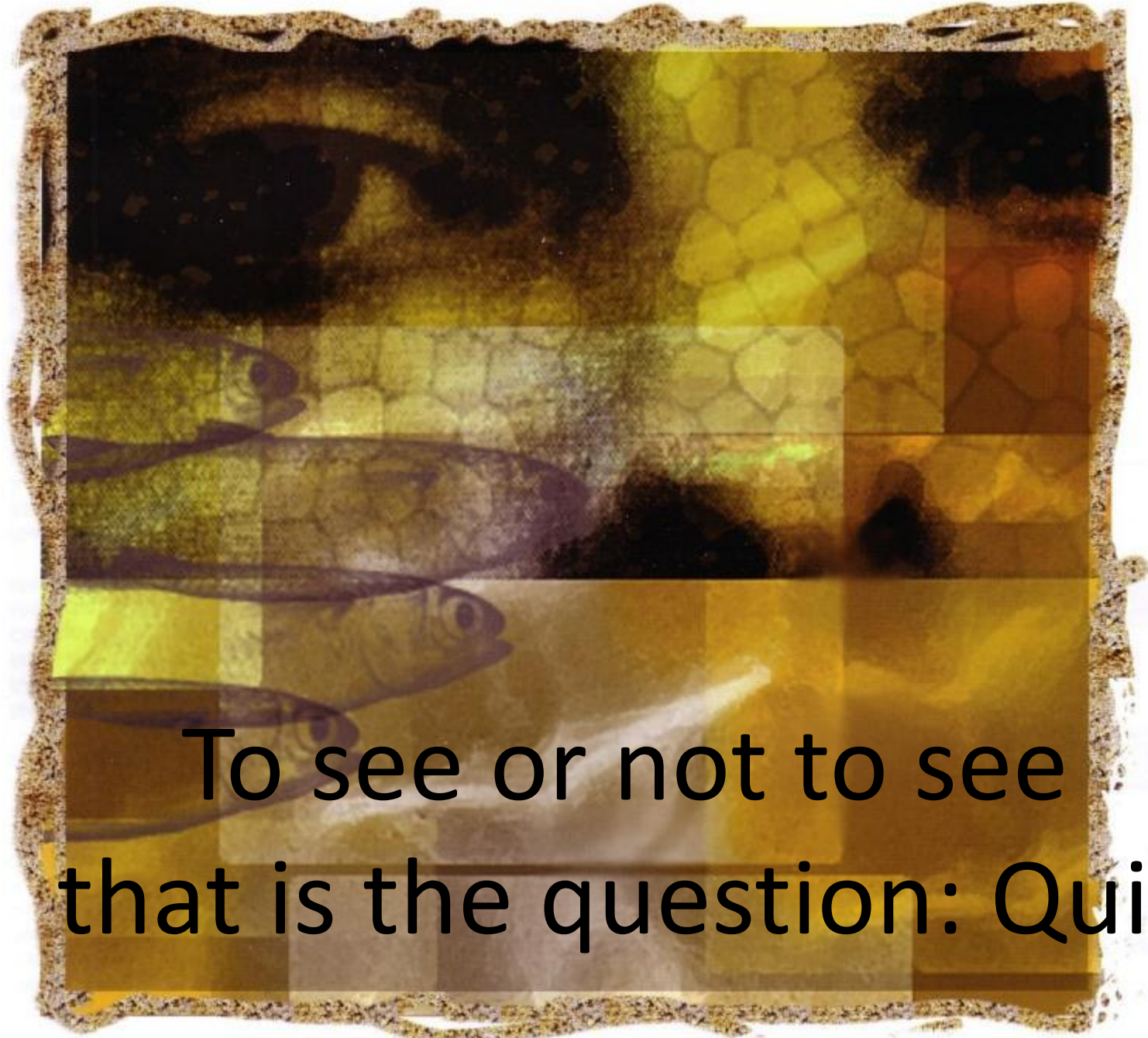
# THIRD NERVE PALSY



# ORBITAL CELLULITIS



- LIFE THREATENING
- Proptosis
- Reduced ocular motility
- Chemosis
- Other symptoms
  - Fever
  - Malaise
  - Lid swelling
  - Redness



To see or not to see  
that is the question: Quiz

# Question 1: Happy labourer

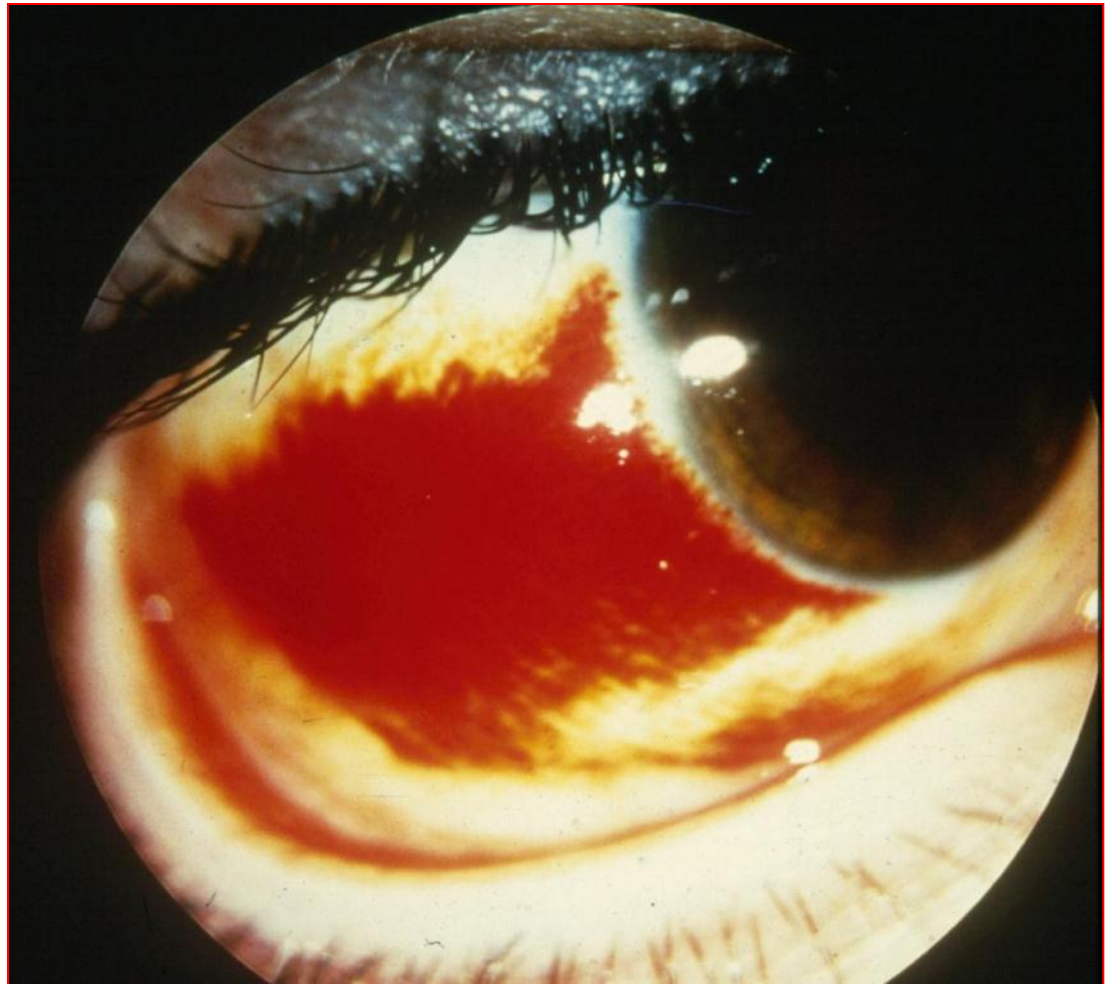
- **History**
- 26 year old carpenter
- Hammering masonry nail
- Felt something bounce of eye (2pm)
- Foreign body sensation and red eye
- Black “spot” in temporal field
- Attends at 8pm for review

# Question 1: Signs

OD: UAVA 6/6

OS: UAVA 6/5

Right eye red



# Differential Diagnosis

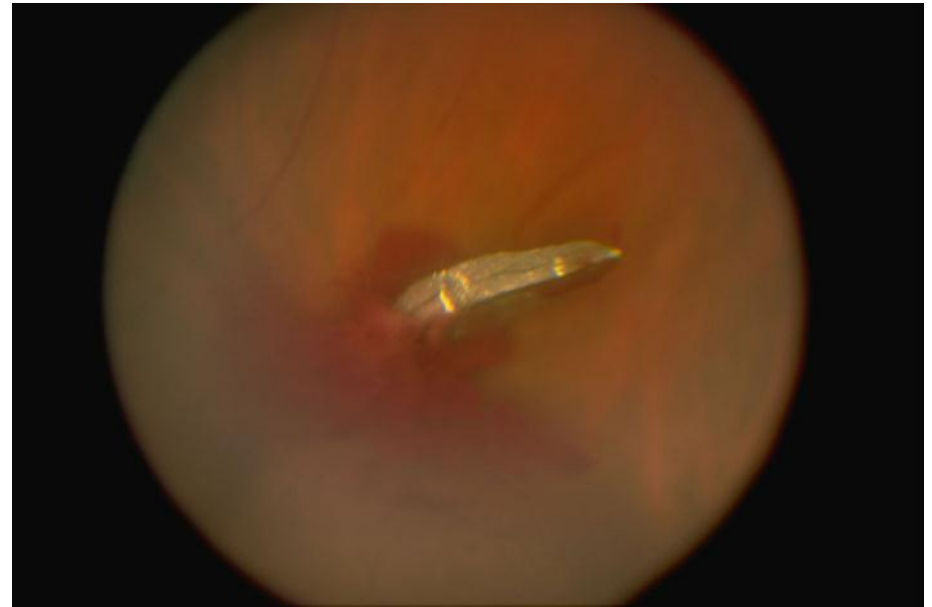
1. Corneal foreign body
2. Penetrating eye injury
3. Subconjunctival haemorrhage
4. Traumatic macular haemorrhage

# Differential Diagnosis

1. Corneal foreign body
2. **Penetrating eye injury**
3. Subconjunctival haemorrhage
4. Traumatic macular haemorrhage

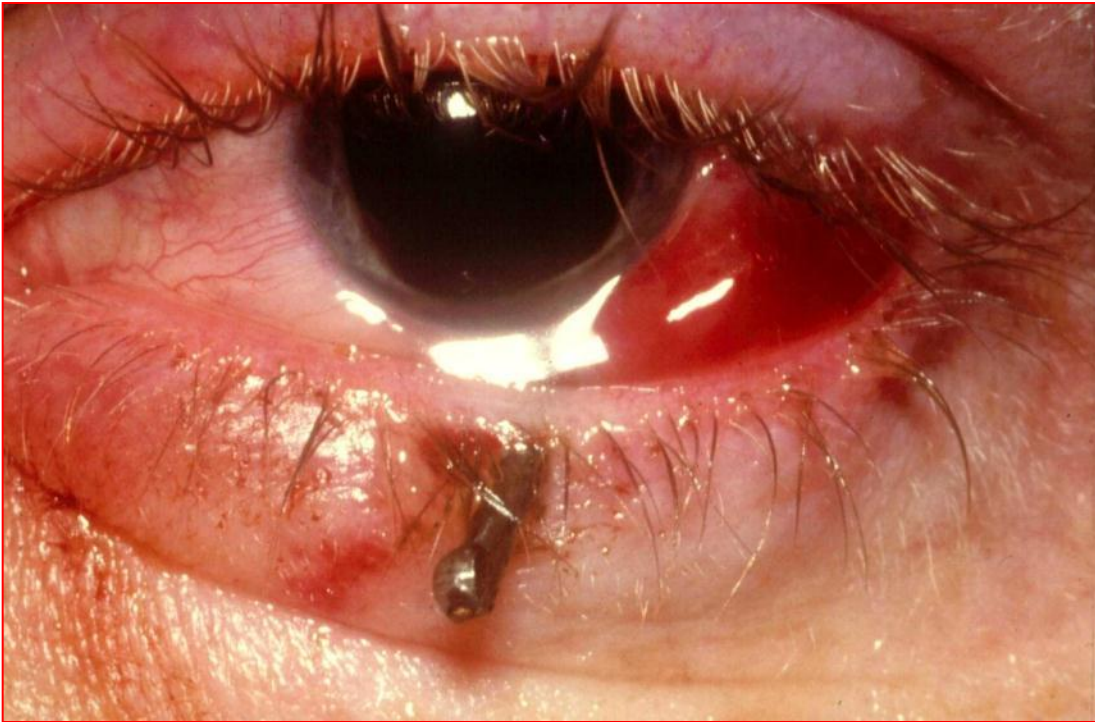
# Always suspect penetrating injury

- Hammer & nail
- Hammer and chisel
- Power tools
  
- **Management**
  - Urgent referral





# Obvious foreign bodies



Question 2:  
which is the most potent anti-inflammatory  
corticosteroid?

1. Betnesol 0.5% (betamethasone phosphate)
2. Predforte 1.0% (prednisone acetate)
3. Maxidex 0.1% (dexamethasone alcohol)
4. Predsol 0.5% (prednisone phosphate)

Question 2:  
which is the most potent anti-inflammatory  
corticosteroid?

1. Betnesol 0.5% (betamethasone phosphate)
2. **Predforte 1.0% (prednisone acetate)**
3. Maxidex 0.1% (dexamethasone alcohol)
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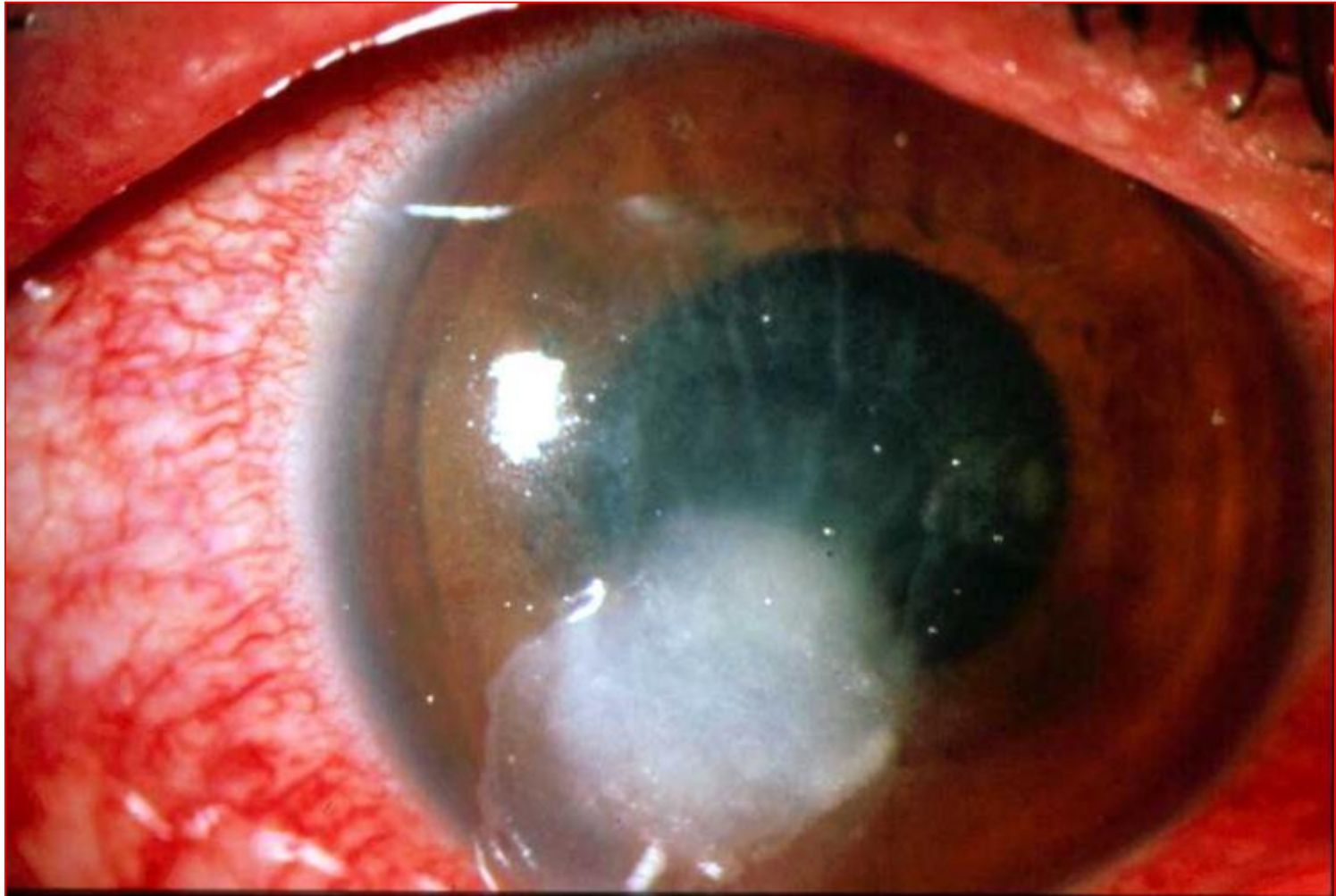
# Question 3: male nurse redevye

- **History**
- 24 year old charge nurse in urology
- Overnight shift - struck in left eye by catheter wielding patient at 2am
- Attends same day at 6pm with red eye
- Watery discharge
- Vision slightly “fuzzy”

# Case 3: signs

- VAR – 6/6      VAL – 6/12
- Right eye white – left moderately red
- Minor discharge

# Case 3



# Acute Red Eye – differential

1. Conjunctivitis
2. Corneal abrasion
3. Keratitis
4. Uveitis
5. Acute angle closure crisis
6. Scleritis / episcleritis
7. Subconjunctival haemorrhage
8. Ocular Trauma
9. Herpes zoster ophthalmicus

# Acute Red Eye – differential

1. Conjunctivitis
2. Corneal abrasion
3. **Keratitis**
4. Uveitis
5. Acute angle closure crisis
6. Scleritis / episcleritis
7. Subconjunctival haemorrhage
8. Ocular Trauma
9. Herpes zoster ophthalmicus





Look again: Michael Segal, photographer

# Question 4: Saturday afternoon graft

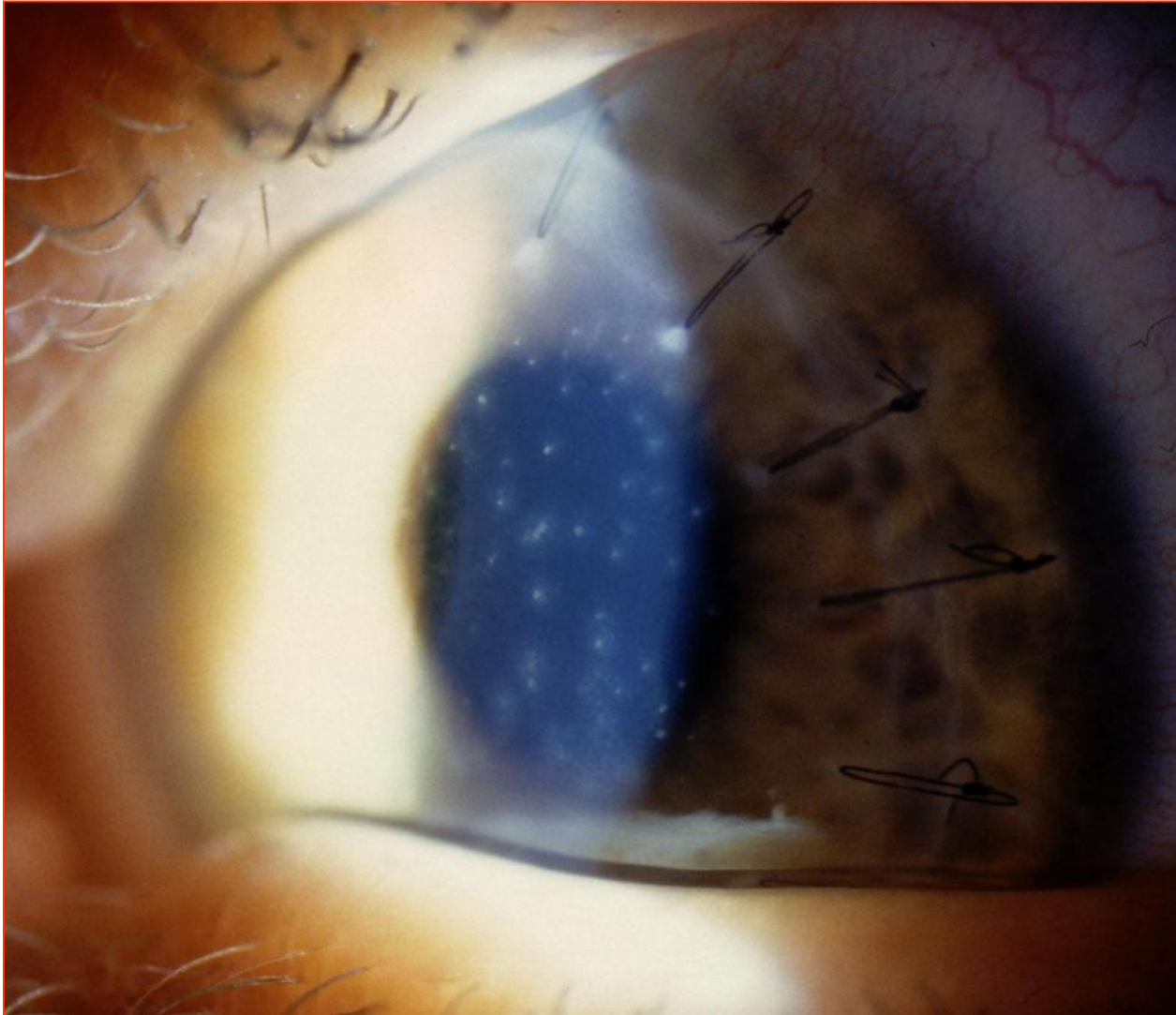
## History

- Attends optometrist 4pm on Saturday afternoon
- Corneal transplant six months earlier
- Advised 4 weeks ago graft healthy and should attend own optometrist for temporary spectacle correction
- Feels vision generally good,
- Eye has been a little gritty and minimally photophobic since graft, perhaps minimally more in last two weeks.
- Would like photosensitive lenses in new spectacles
- Still unhappy comes in for further opinion

# Question 4: Signs

- Bilateral penetrating keratoplasties
  - OD 5 year ago, OS 6 months ago
- OD – 6/6 BSCVA ( $-2.00/-3.50 \times 78$ )
- OS – 6/9 BSCVA ( $-1.25/-5.00 \times 140$ )
- Both eyes minimally pink

# Question 4: slit lamp signs



# Question 4: Differential diagnosis

1. Bilateral dry eye with PEE
2. Adenovirus keratoconjunctivitis
3. Corneal allograft rejection
4. Topical drop toxicity

# Question 4: Differential diagnosis

1. Bilateral dry eye with PEE
2. Adenovirus keratoconjunctivitis
3. **Corneal allograft rejection**
4. Topical drop toxicity

## QUESTION 5:

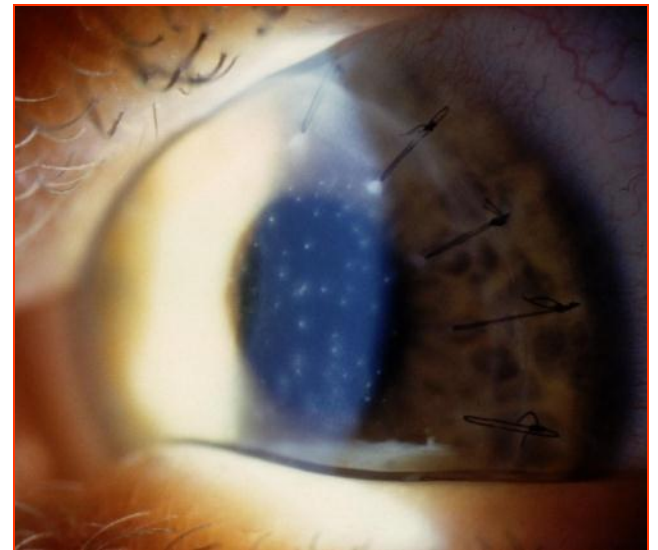
bonus points - name those lesions

1. Kaye dots
2. Krachmer's spots
3. Seilor's spots
4. Mittendorf's dots

## QUESTION 5:

bonus points - name those lesions

1. Kaye dots
2. **Krachmer's spots**
3. Seilor's spots
4. Mittendorf's dots



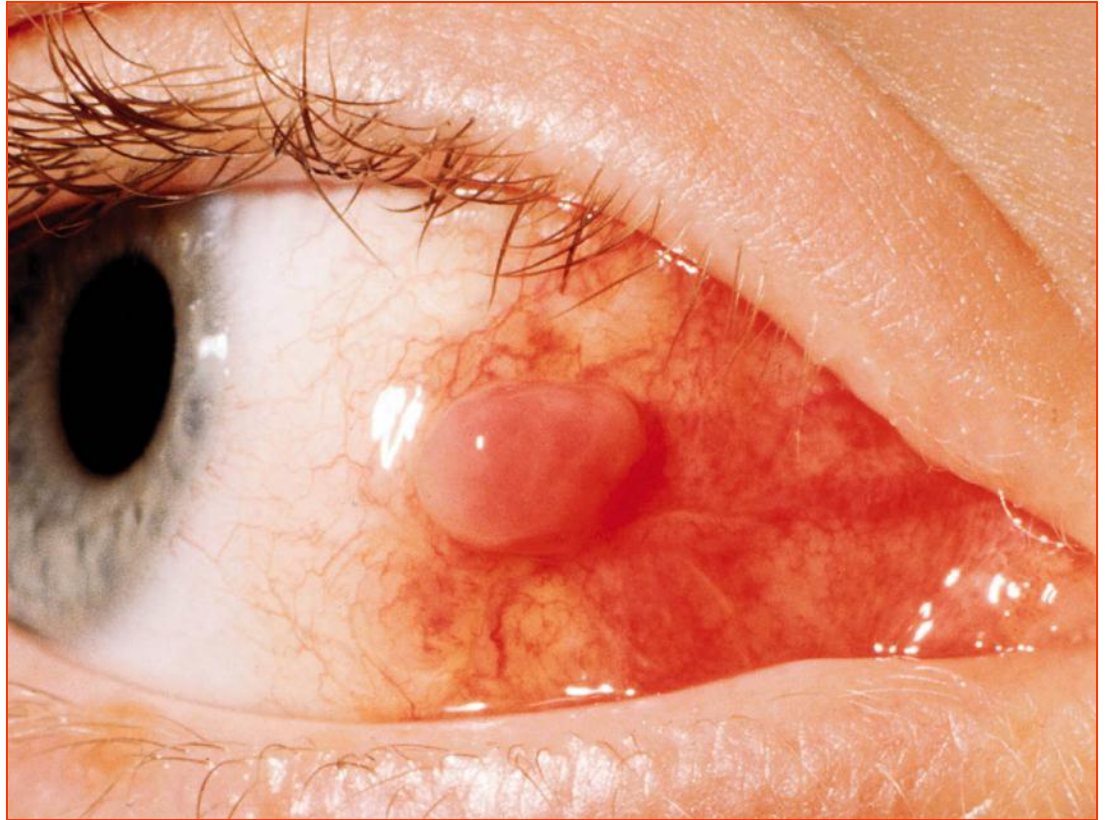


End of Section 1



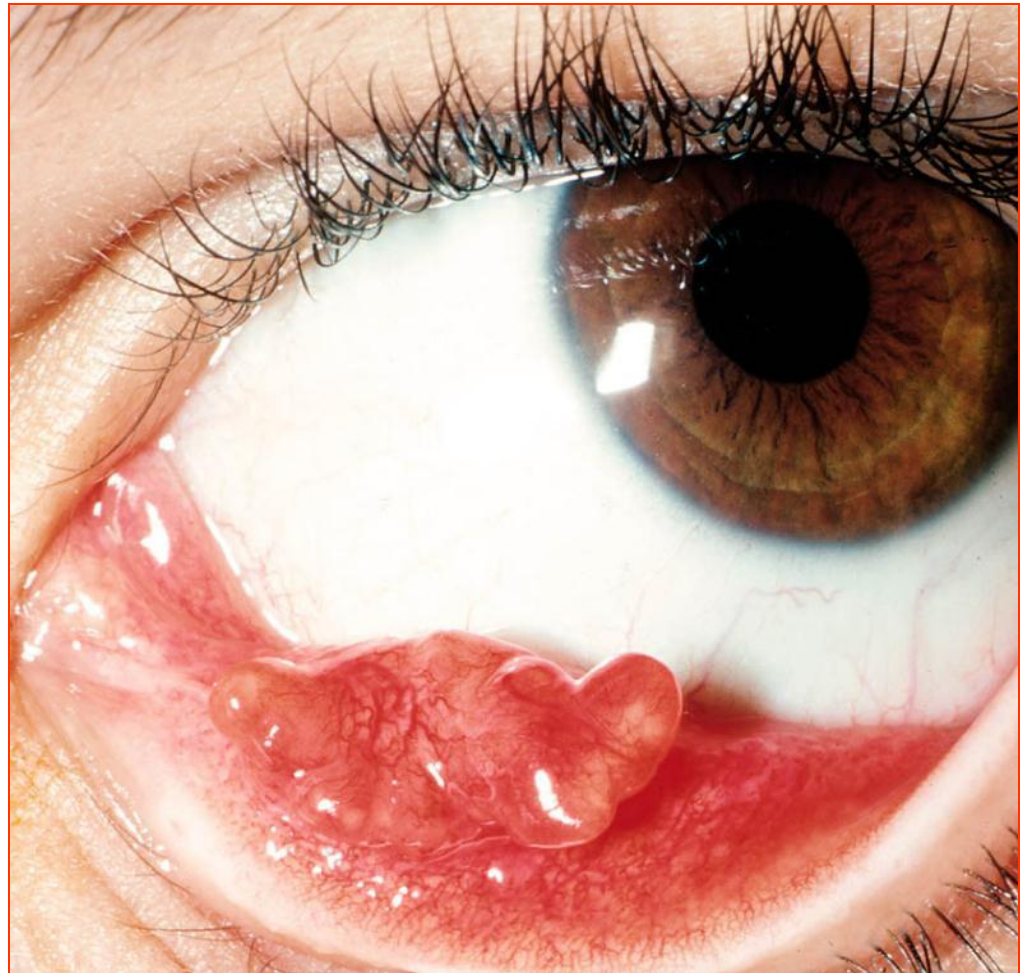
# Question 6: chronic red, raised lumps

- 32 year old male
- Medial aspect of eye - red, raised lump
- Chronic redness & grittiness
- BSCVA 6/18 & 6/6
- POH – childhood squint
- GP Rx
  - Chloramphenicol
  - Fucithalamic
  - Dexamethasone



# Question 6: chronic red, raised lumps

- 26 year old male
- Inner lower lid red, raised lump
- Chronic redness & grittiness
- BSCVA 6/6 & 6/6
- POH - nil
- GP Rx
  - Fucithalamic
  - Dexamethasone



## Question 6: chronic red, raised lumps common differential diagnosis

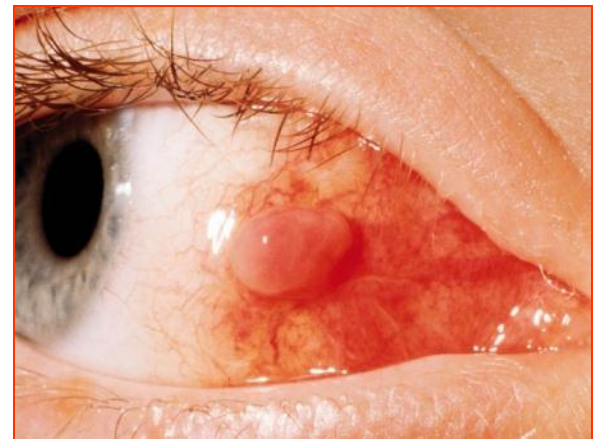
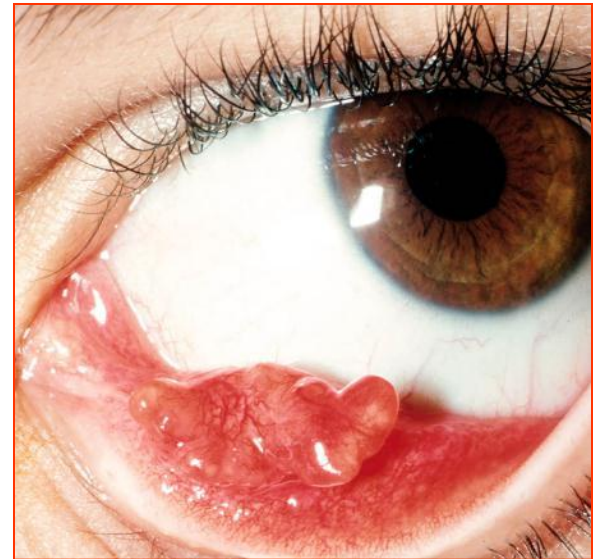
1. Severe nodular episcleritis
2. Conjunctival granuloma
3. Infective conjunctivitis
4. Ocular surface squamous neoplasia

## Question 6: chronic red, raised lumps common differential diagnosis

1. Severe nodular episcleritis
2. **Conjunctival granuloma**
3. Infective conjunctivitis
4. Ocular surface squamous neoplasia

## Question 6: Pyogenic & Suture Granuloma

- Lesions typically follow conjunctival inflammation
- Often post surgery
- Granulation tissue
  - fibroblasts, capillaries & inflammatory cells
- No Granulomas
- May be associated with sutures



# Question 7: Severe conjunctivitis

## “It came on with a rash”

- Three week history of “chest infection”
- Two week history of conjunctivitis
- Severe vesicular rash



# Question 7: Severe conjunctivitis

“It came on with a rash”

## **Diagnosis**

1. Measles conjunctivitis
2. Chickenpox conjunctivitis
3. Stevens-Johnson syndrome
4. Severe atopic conjunctivitis



# Question 7: Severe conjunctivitis

“It came on with a rash”

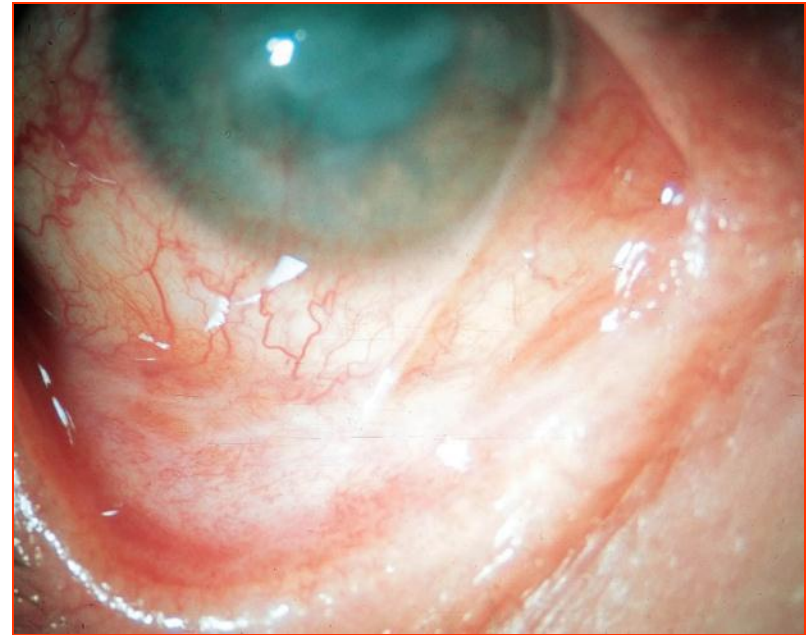
## Diagnosis

1. Measles conjunctivitis
2. Chickenpox conjunctivitis
3. **Stevens-Johnson syndrome**
4. Severe atopic conjunctivitis

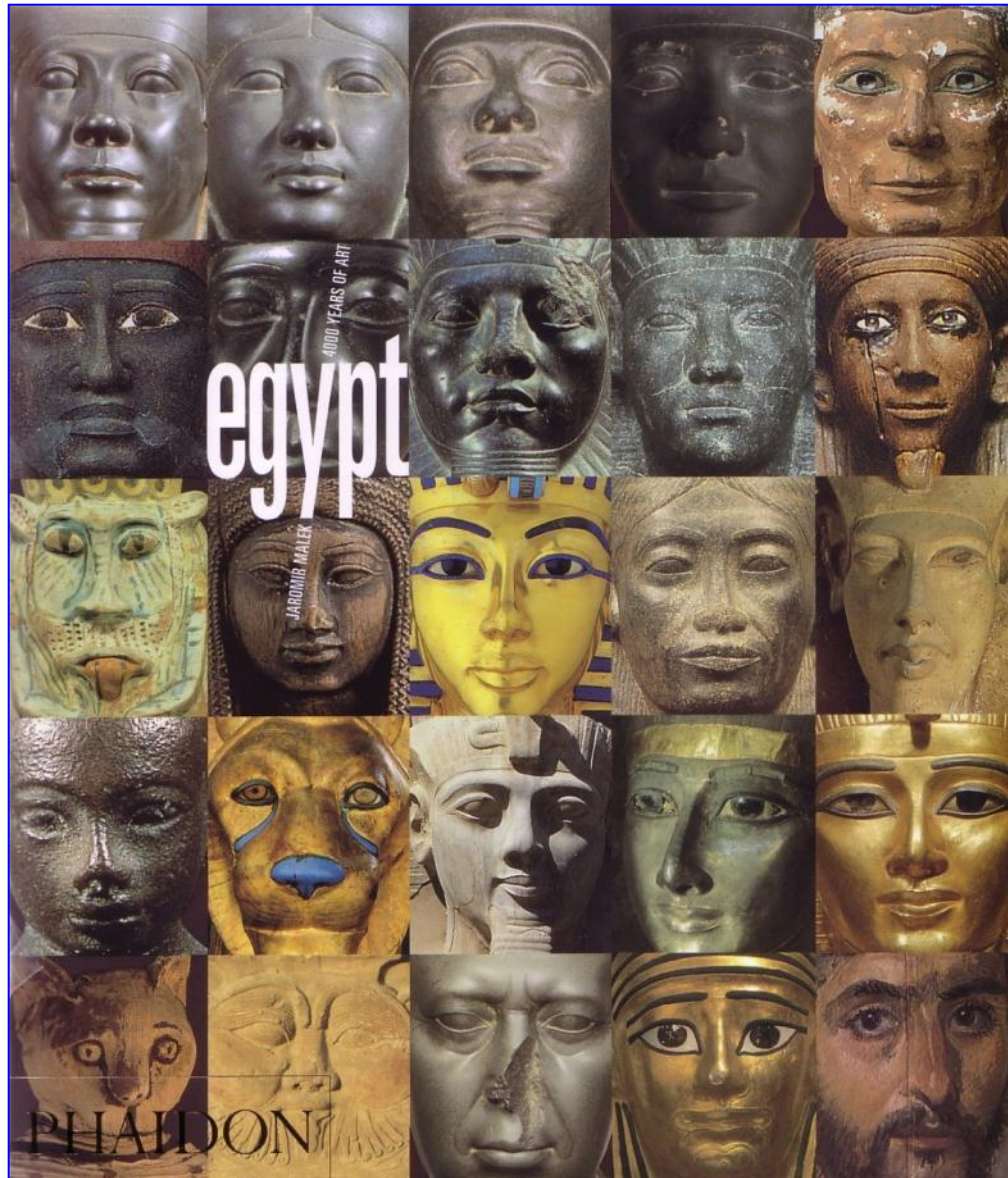
# Q 7 : Stevens Johnson Syndrome (Erythema multiforme major)

Topical or systemic drugs

- Sulfonamides
- Penicillin
- Aspirin
  
- Tropicamide
- Proparacaine



# Question 8: Ancient Egyptian eyes



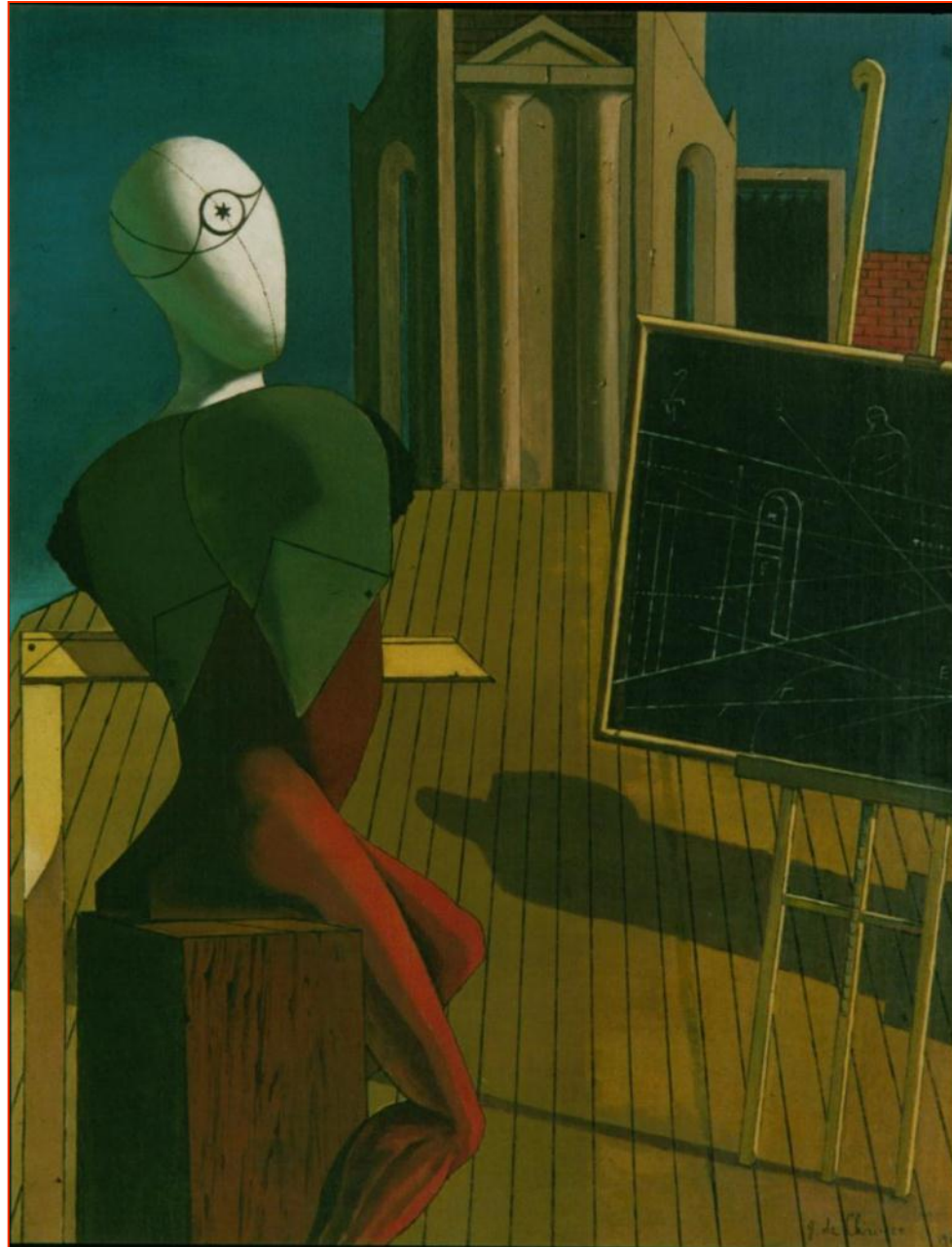
# Question 8: Cleopatra

Which plant did Cleopatra use on Caesar ?

1. Juniper berries
2. Foxglove extract
3. Belladonna extract
4. Acacia gum



The seer



# Question 9 : a routine refraction?

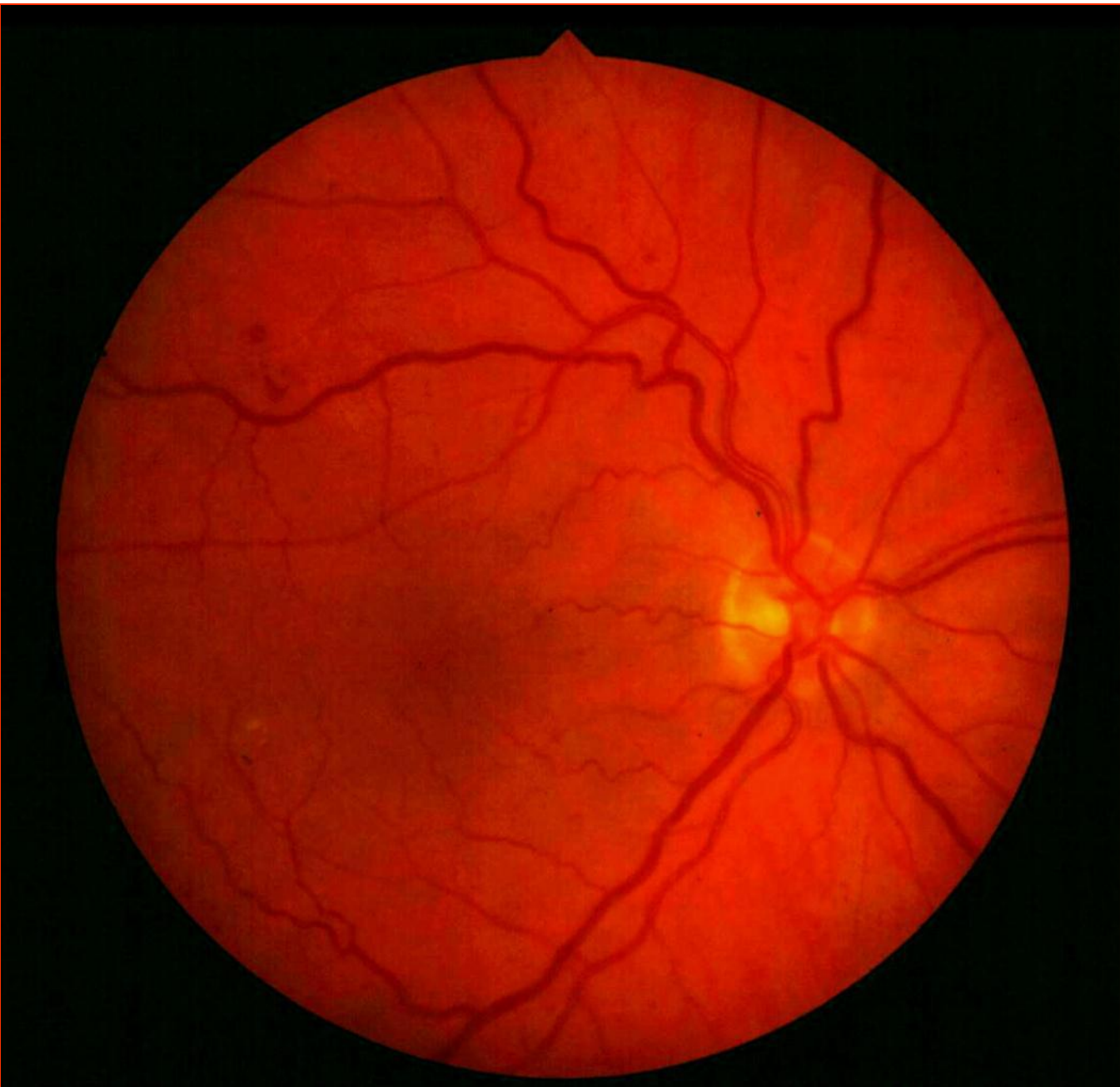
## HISTORY

- In a hurry to get new spectacles and get back on the road – chose optometry practice from the web-site whilst having a cappuccino and donut during regular pit-stop at the internet cafe
- 48 year old business man, low myope
- Overweight, Rx for hypertension, otherwise well
- notes problem driving at night over last 12 months, last saw optometrist 2 years ago

# Question 9: signs

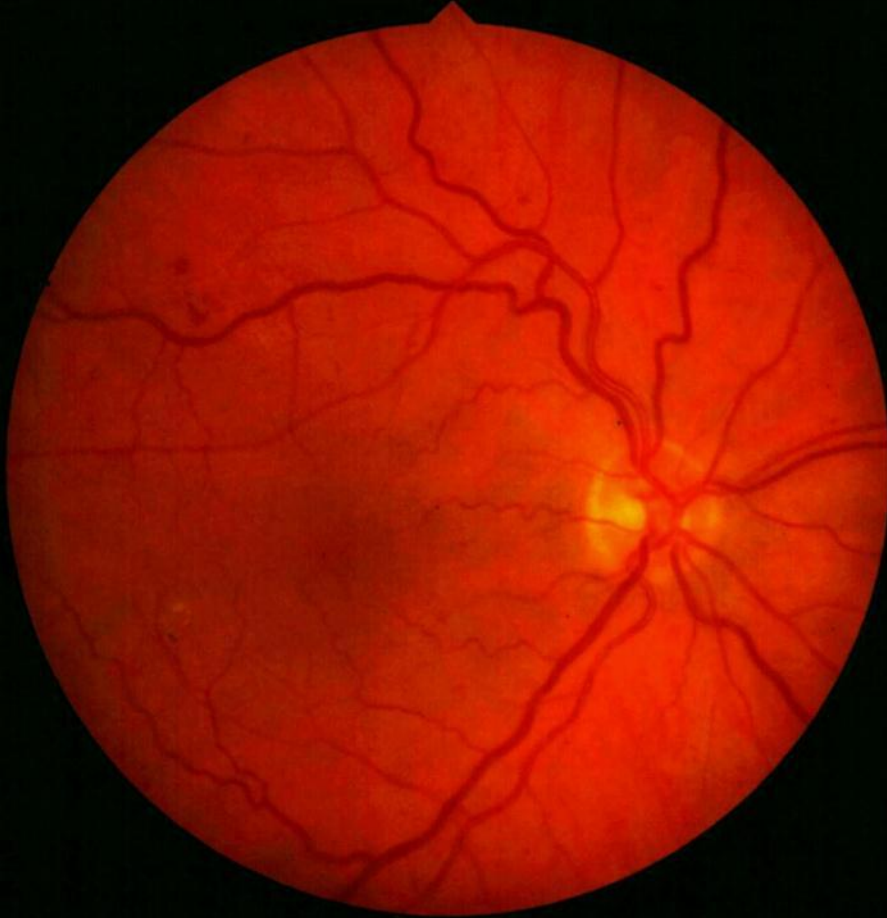
- On examination
  - Visual acuity 6/9 Right & Left with
  - Existing spectacles
  - Right  $-1.50D$ , Left  $-1.75D$
  - Pinhole 6/5 each eye
- Optometrists Refraction today
  - VAR 6/6 with  $-2.50/-0.25 \times 80$
  - VAL 6/5 with  $-3.00D$

9 : examination





# Question 9: fundi



# Question 9 : Cause of reduced VA

1. Non-pathological myopic progression
2. Diabetic maculopathy
3. Hypertensive retinopathy
4. Acquired lenticular myopic shift

# Question 9: Cause of reduced VA

1. Non-pathological myopic progression
2. Diabetic maculopathy
3. Hypertensive retinopathy
4. **Acquired lenticular myopic shift**

## End of section 2



Young woman receives gifts from Venus and the three graces: Sandro Botticelli (1444-1510)

# Question 10: Painful red eye 6 weeks

- Keratoconic difficulty with RGP CL fit for 2 years
- Awoke to Sudden pain & redness
- Red eye
- Photophobic
- Watering
- Vision CF

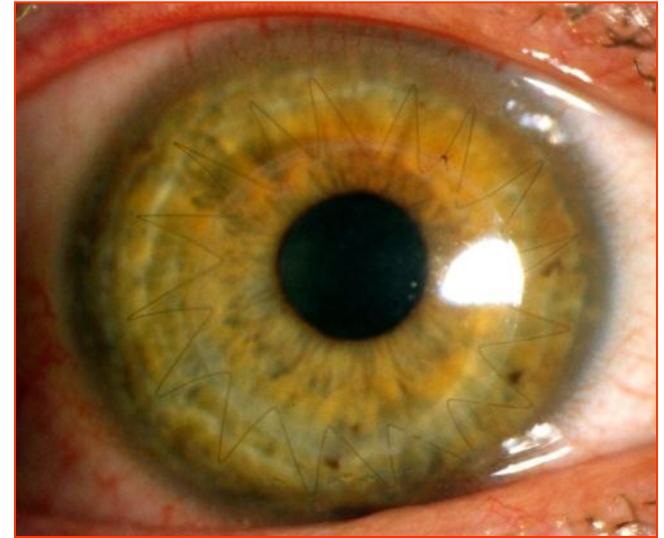


# Case 10: diagnosis

1. Bacterial Keratitis
2. Acute corneal hydrops
3. Acanthamoeba keratitis
4. Fuchs endothelial dystrophy

# Question 10: diagnosis

1. Bacterial Keratitis
2. **Acute corneal hydrops**
3. Acanthamoeba keratitis
4. Fuchs endothelial dystrophy



When the going gets tough...





Bonus question:  
eye on the artist

1. Claude Monet
2. Rene Magritte
3. Edouard Manet
4. Henri Matisse



# *Au revoir* Rene



# Question 11. Confused red eye

- 77 year old brought in by son
- Often confused and poorly oriented
- Red painful eye for 3 days
- Watery discharge
- Complains vision is blurred
- Rx g chloramphenicol QDS

# Case 11: Signs

- VAR 6/12
- VAL 6/36
- Red eye
- Poorly cooperative
- Appears dehydrated

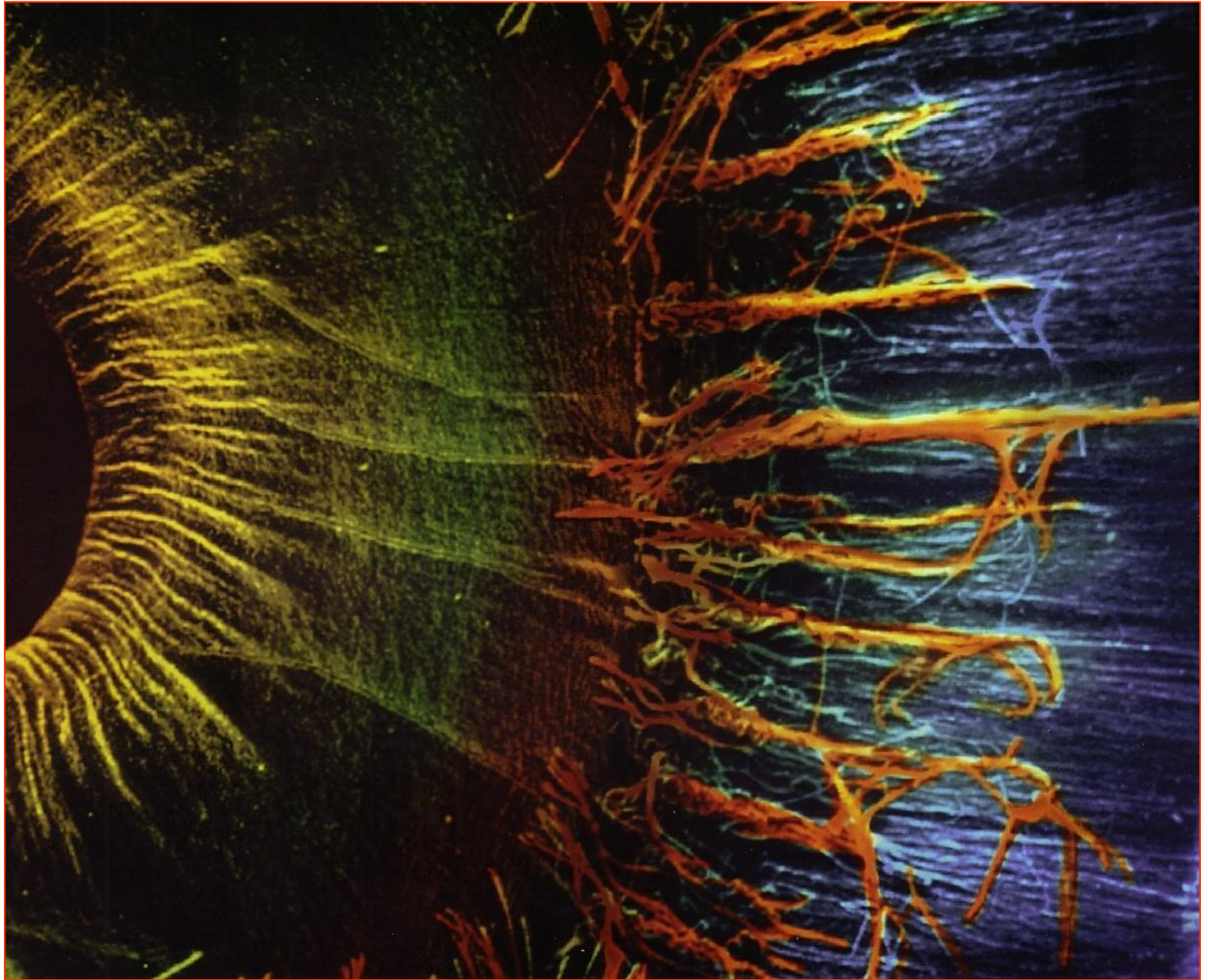


# Case 11. Differential Diagnosis

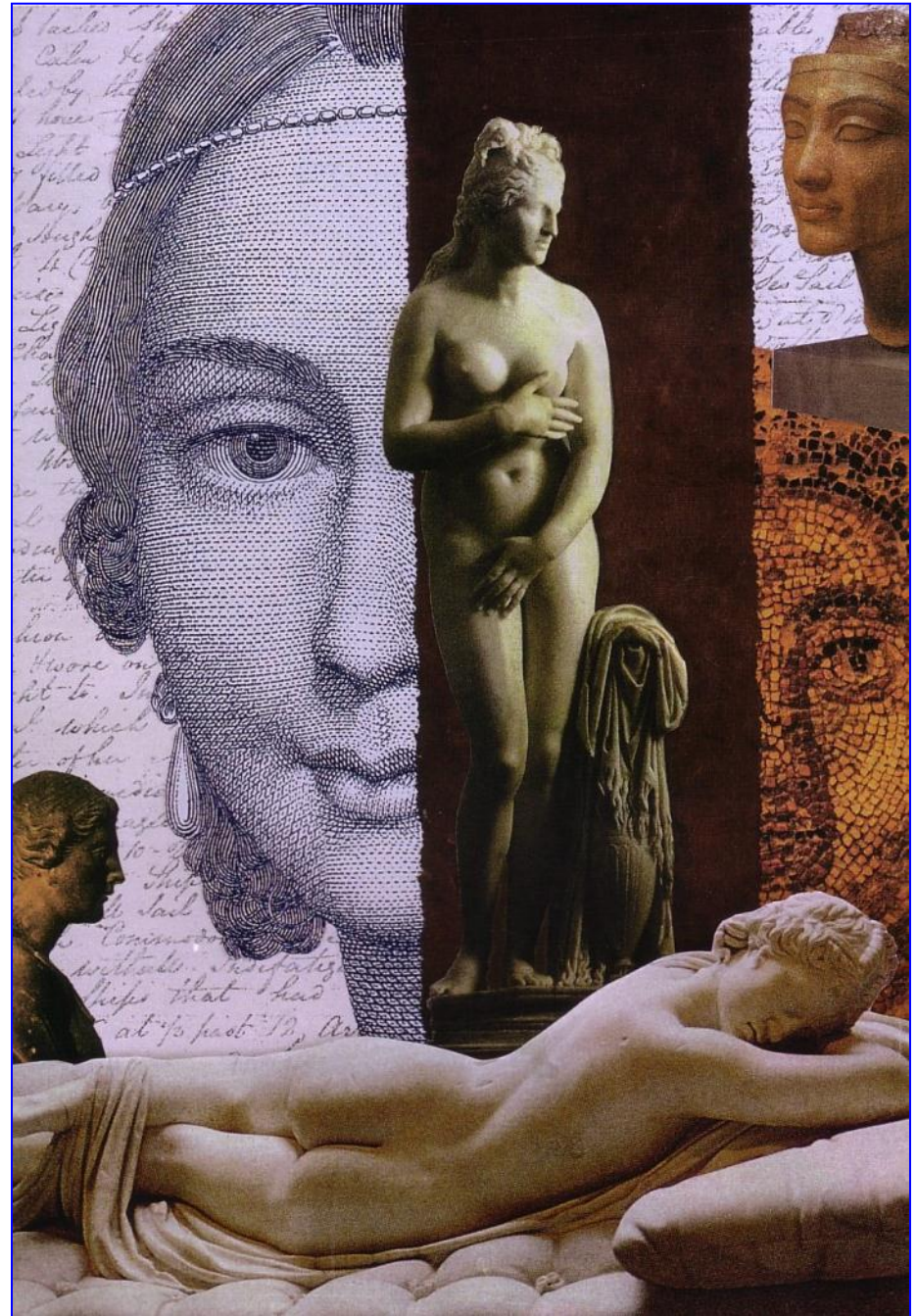
1. Microbial keratitis
2. Acute closed angle glaucoma
3. Acute anterior uveitis/iritis
4. Adenoviral keratoconjunctivitis

# Case 11. Differential Diagnosis

1. Microbial keratitis
2. **Acute closed angle glaucoma**
3. Acute anterior uveitis/iritis
4. Adenoviral keratoconjunctivitis



Eye of the beholder 1:  
Gerry Charm





# Question 12: Whose Eyes?



# Question 12: Whose Eyes?



WOLF



HIPPOPOTAMOUS



CROCODILE



TIGER



EAGLE



RABBIT

# Question 13:

what is this red lump on my eye?

- 25 year old male  
tour guide
- Chronic red eye for  
3 months
- Raised “lump”
- Otherwise well
- BSCVA 6/4



# Question 13: diagnosis

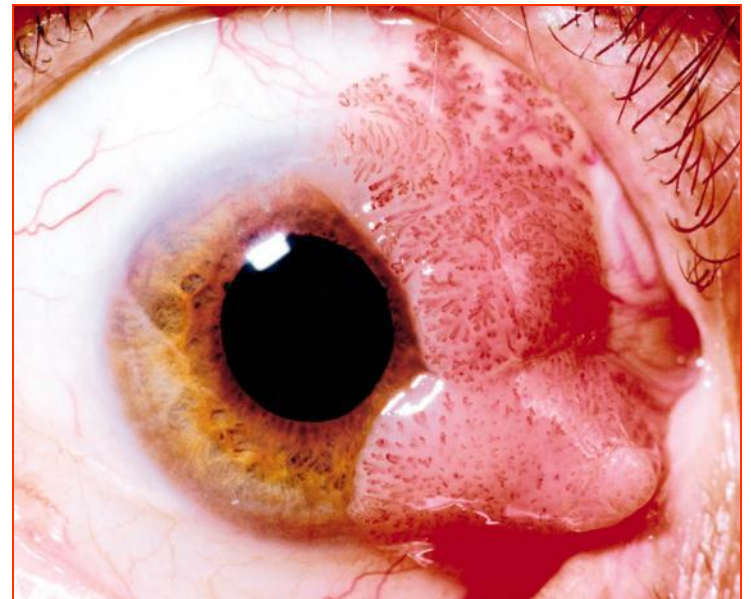
1. Kaposi's sarcoma
2. Squamous cell carcinoma of conjunctiva
3. Conjunctival papilloma
4. Pseudo-pterygium

# Question 13 : diagnosis

1. Kaposi's sarcoma
2. Squamous cell carcinoma of conjunctiva
3. **Conjunctival papilloma**
4. Pseudo-pterygium

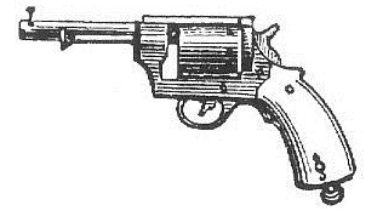
# Question 13: Conjunctival papilloma

- Benign
- Multiple fibrovascular tissue cores with overlying epithelium
- Sessile or pedunculated
- Papilloma virus
- May be pre-malignant in older adults



FORGOTTEN ENGLISH

one-eyed scribe



A Texas term for a revolver. Its argument is always persuasive, and sometimes unanswerable.

—John Farmer's *Americanisms Old and New*, 1889

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# Question 14 : It became worse after my bowel operation

- 23 year old female
- Sectorial redness 4/52
- Gritty
- 6/5
- Crohns disease





# Q 14: Episcleritis clinical features

Which of the following statements is most true of episcleritis:

1. Usually self-limiting
2. Typically requires topical steroids
3. Frequently progresses to scleritis
4. Usually associated with systemic disease

# Q 14: Episcleritis clinical features

Which of the following statements is most true of episcleritis:

1. **Usually self-limiting**
2. Typically requires topical steroids
3. Frequently progresses to scleritis
4. Usually associated with systemic disease

## Question 15 : I get terrible headaches when I study too hard!

- 31 year old Italian male registrar
- Studying for postgraduate medical degree
- Severe frontal headaches, from brow spreading back to occiput
- No visual phenomena but occasionally has to lie in dark when really severe
- Worse in the last 3 months
- Often worst at night

# Question 15 : signs

- UAVA OD 6/9 OS 6/12
- Refraction +2.50D +3.00D
- BSCVA 6/5 6/5
- Eyes quiet and comfortable

# Question 15 : clinical signs



# Question 15 : management

1. Urgent referral to Ophthalmologist
2. Routine referral to ophthalmologist
3. Referral to GP
4. Update spectacles and review

# Question 15 : management

1. Urgent referral to Ophthalmologist
2. Routine referral to ophthalmologist
3. Referral to GP
4. **Update spectacles and review**

## Q 15: Diagnosis & management

- Normal or abnormal?
- Headaches with apparently swollen discs
- However, has uncorrected hyperopia
- Studying hard – near work +++
- Otherwise well
- Management – trial with correction, reassurance, no referral, but inform GP





"Since my corrective laser surgery,  
I have 20/20/20/20 vision."

# Question 16: flying and the untoward effects of infra-red light

1. Narcissus
2. Icarus
3. Daedelus
4. Iapetus



# Question 16: flying and the untoward effects of infra-red light

1. Narcissus

2. Icarus

3. Daedelus

4. Iapetus



# Q 17 : My glasses hurt the side of my head

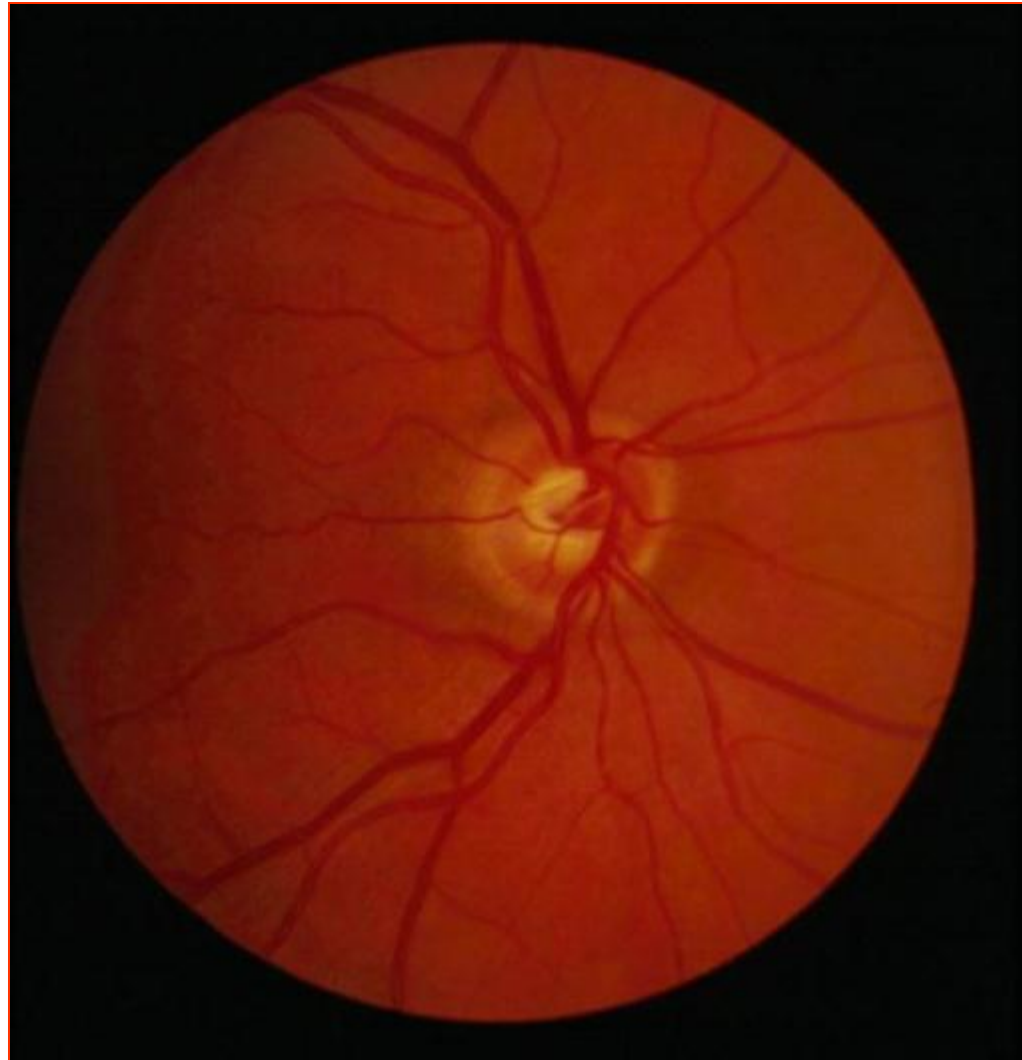
## History

- 85 year old lady
- Rather frail looking, feels tired, otherwise well
- Notes that spectacles hurt right side of head when she puts them on and off
- Generally had a bit of a right sided headache for a few weeks
- Noted vision “blurred” for about 10 minutes, in one or other eye – cant remember which - last week

# Question 17 : signs

- UAVA 6/12 OD, 6/7.5 OS
- Refraction +2.00D OD, +1.00D OS
- Pupil reactions normal
- Eye movements normal
- Gonioscopy – angles open

# Question 17 : Fundus



# Question 17 : referral

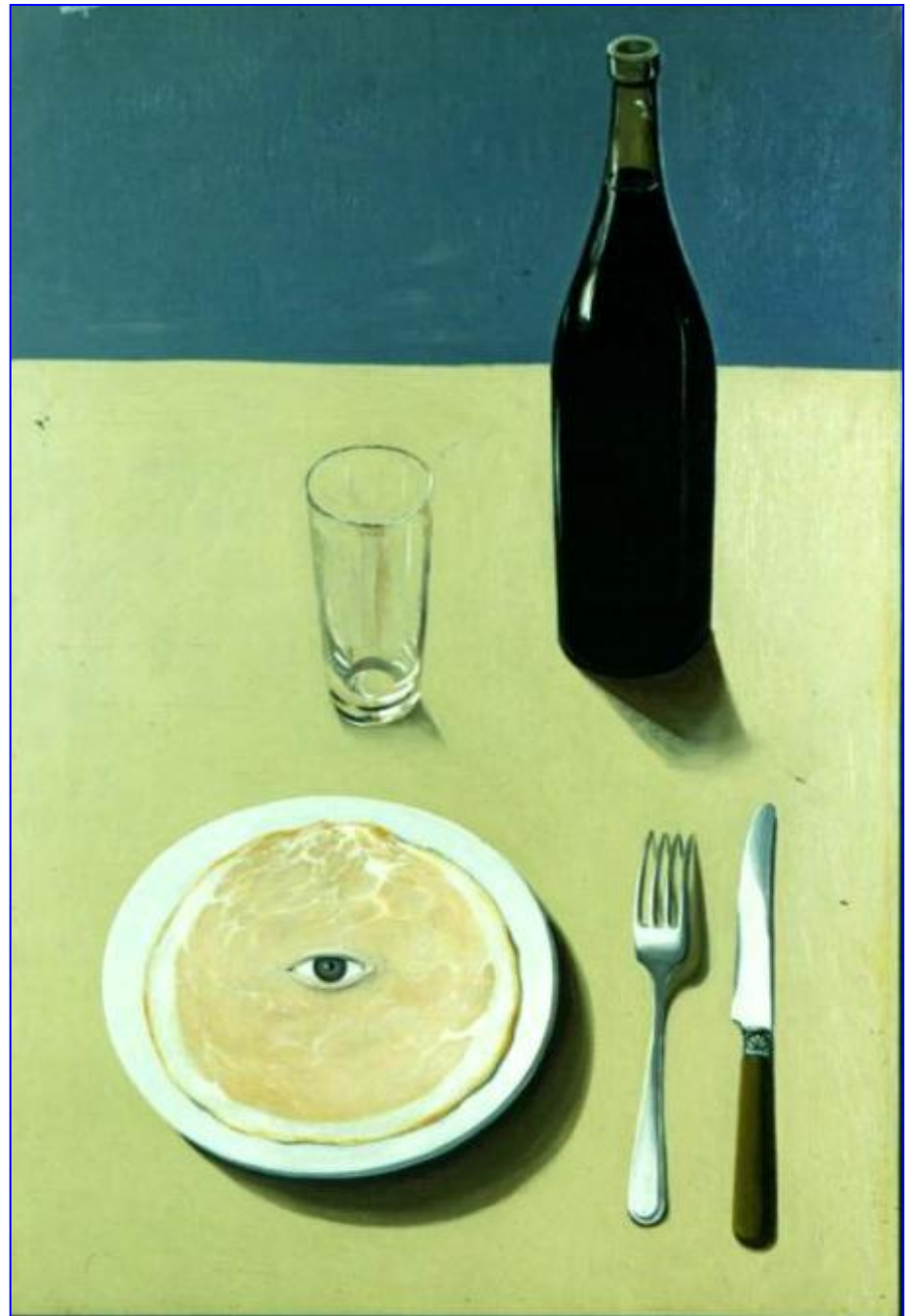
1. Urgent referral to Ophthalmologist
2. Routine referral to ophthalmologist
3. Referral to GP
4. Update spectacles and review

# Question 17 : referral giant cell (temporal) arteritis

1. **Urgent referral to Ophthalmologist**
2. Routine referral to ophthalmologist
3. Referral to GP
4. Update spectacles and review



An emergency lunch



# Question 18 : bilateral acute painful red eye over 1 week

56 year old female

Rheumatoid arthritis

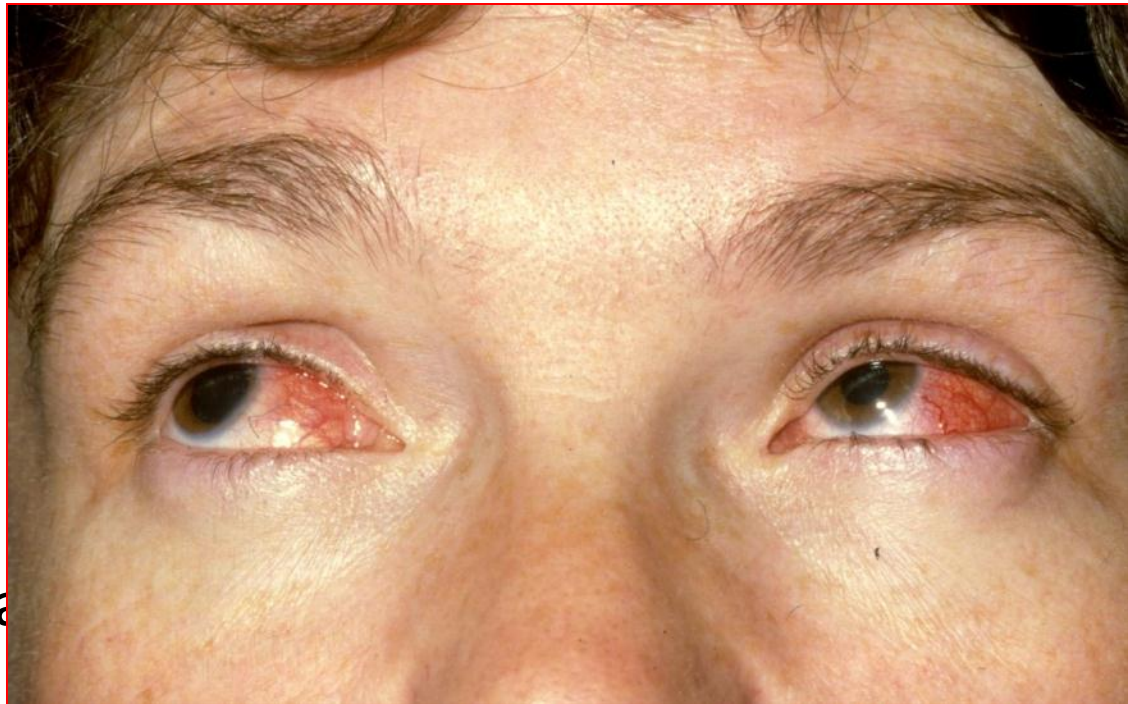
Onset over 2-3 days

No discharge

Pupils reactive

Pain keeping patient awake  
at night

BSCVA 6/6 and 6/5



# Question 18 : bilateral acute painful red eye over 1 week

## Diagnosis?

1. Conjunctivitis
2. Anterior uveitis
3. Keratitis

4. Anterior scleritis



## Question 19.

The news doesn't look so good!

- 42 year old overweight female
- Recently noticed problems reading newsprint
- Distance vision fine - never had eye test for spectacles before
- Diagnosed with type II diabetes, 6 months ago - diet controlled
- Has mildly elevated blood pressure - takes ACE inhibitor

## Question 19 : Signs

- VAR: 6/7.5 VAL: 6/6
- Rx: R: +1.50 / -0.50 x 100 6/5-  
L: +1.00 / -0.25 x 75 6/5-
- Reads N5 R & L with above Rx
- Gross examination: media clear and eyes white/quiet

# Question 19: Ophthalmoscopy RE



# Question 19 : referral ?

1. Urgent referral to Ophthalmologist
2. Routine referral to ophthalmologist
3. Referral to GP
4. Update spectacles and review

# Question 19 : referral ?

1. Urgent referral to Ophthalmologist
2. Routine referral to ophthalmologist
3. Referral to GP
4. **Update spectacles and review**

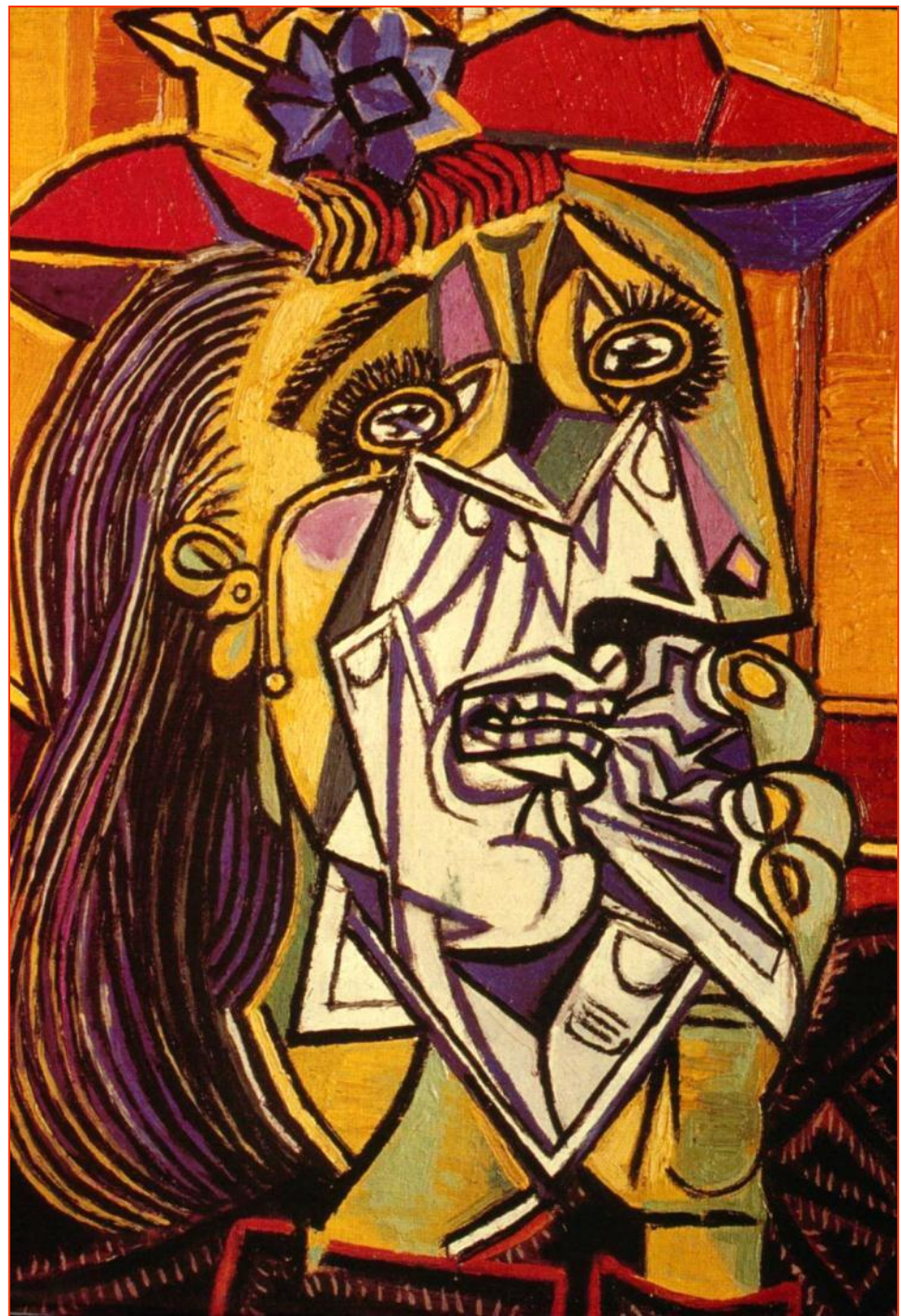


# Q 19: Diagnosis & management

- Normal or abnormal?
- Symptoms of presbyopia
- However, has uncorrected hyperopia
- Systemic disease controlled
- Myelinated nerve fibres
- Management – reassurance, no referral, prescribe spectacles

End of Section

5



## Question 20: My eye stings & waters when I wake up early in the morning

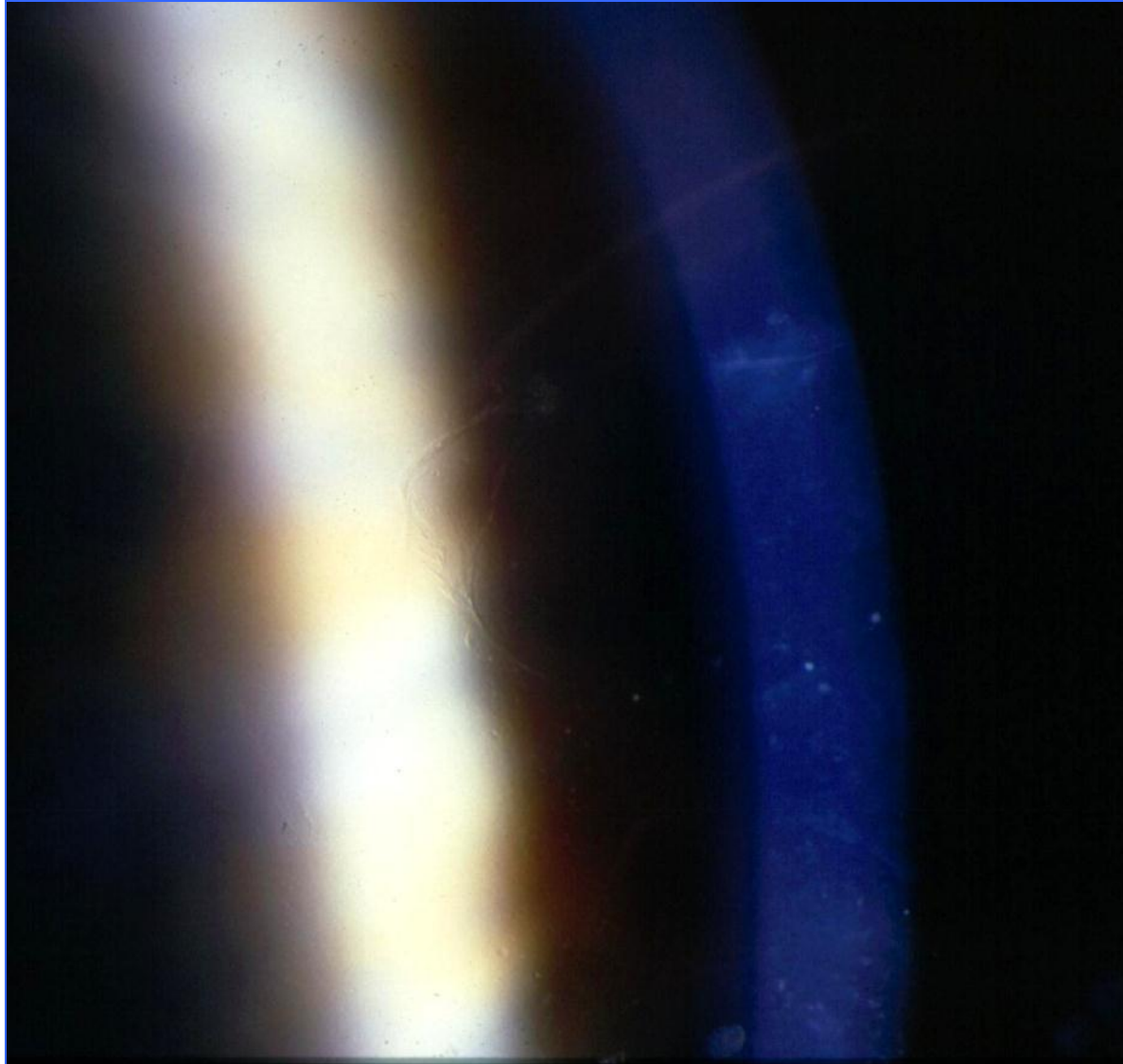
- 54 year old astrologer, daily wear SCL
- After driving from London to Glasgow noted a sudden stinging pain in right eye, pain and watering lasted about 30 minutes
- Since then has been awoken on about 7-8 occasions in the early hours of the morning over a three month period
- Sharp stabbing pain, watering, lasts about 5-20 minutes, only when awakening from sleep

# Question 20 : clinical signs

- -3.00D OU SCL
- VAR 6/5 VAL 6/5



# Question 20: clinical signs



# Q 20: Diagnosis & management

1. Sterile infiltrates
2. Map dot fingerprint dystrophy
3. Recurrent corneal erosion syndrome
4. CL related corneal flecks

# Q 20: Diagnosis & management

1. Sterile infiltrates
2. **Map dot fingerprint dystrophy**
3. Recurrent corneal erosion syndrome
4. CL related corneal flecks

# The Blind Girl

George Everett Millais





Question 21:  
who is the patron saint  
of oculists?



Question 29:  
who is the patron saint  
of oculists?

1. Saint Kylie
2. Saint Winifred
3. Saint Lucy
4. Saint Charlene



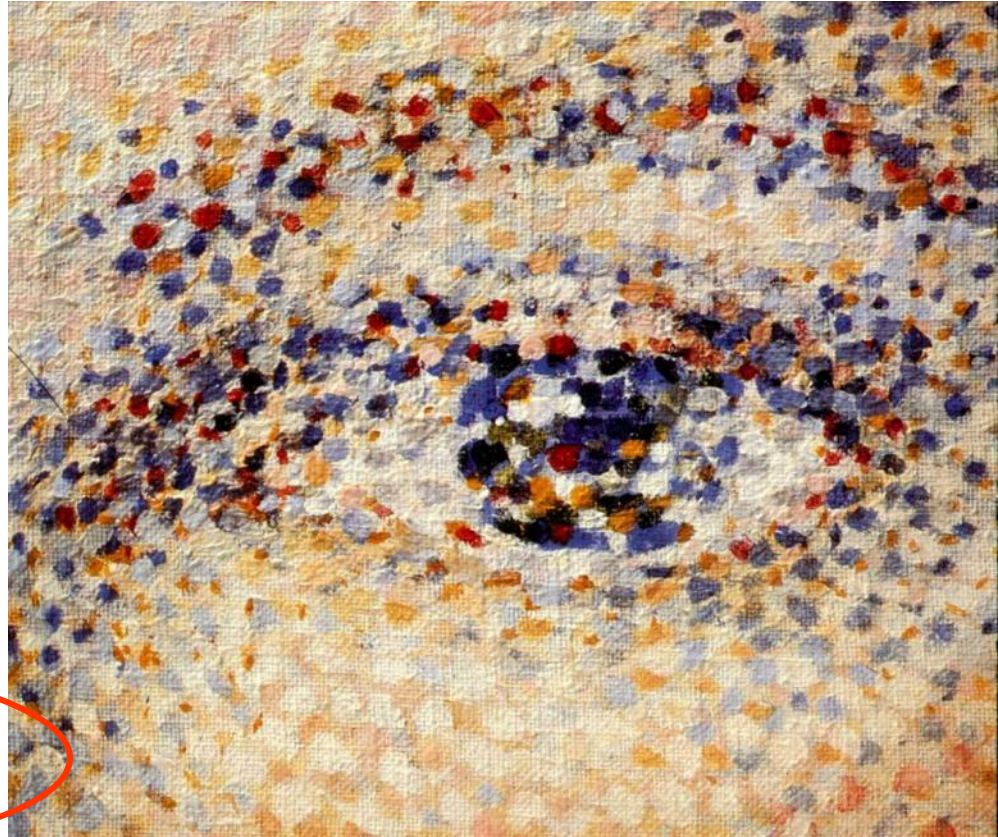
# End of section 6



# Final Bonus Question 22

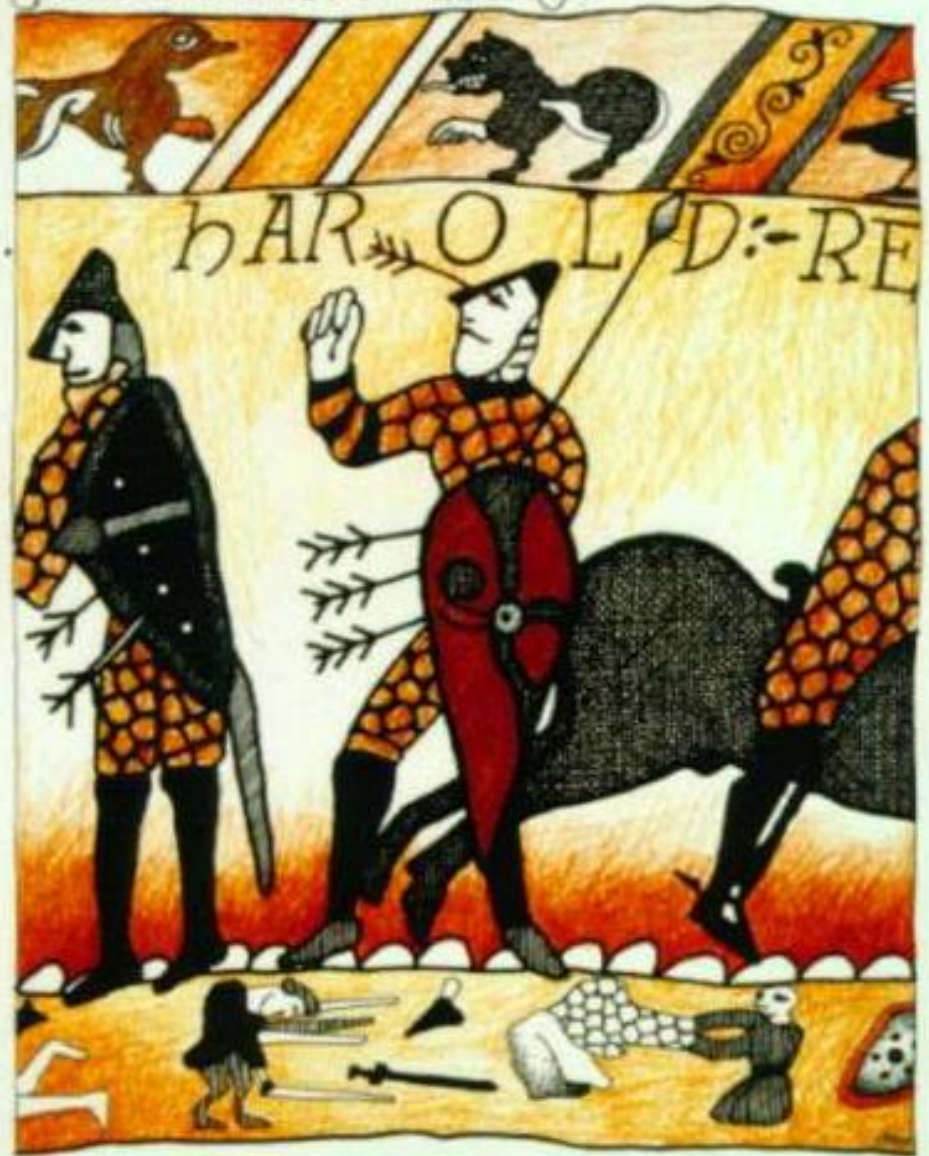
Name the artist

1. Jackson Pollock
2. Claude Monet
3. Andy Warhol
4. Georges Seurat



Thank you

great mistakes of history:



I spy with my little eye  
something beginning with A.