

Acute Cases

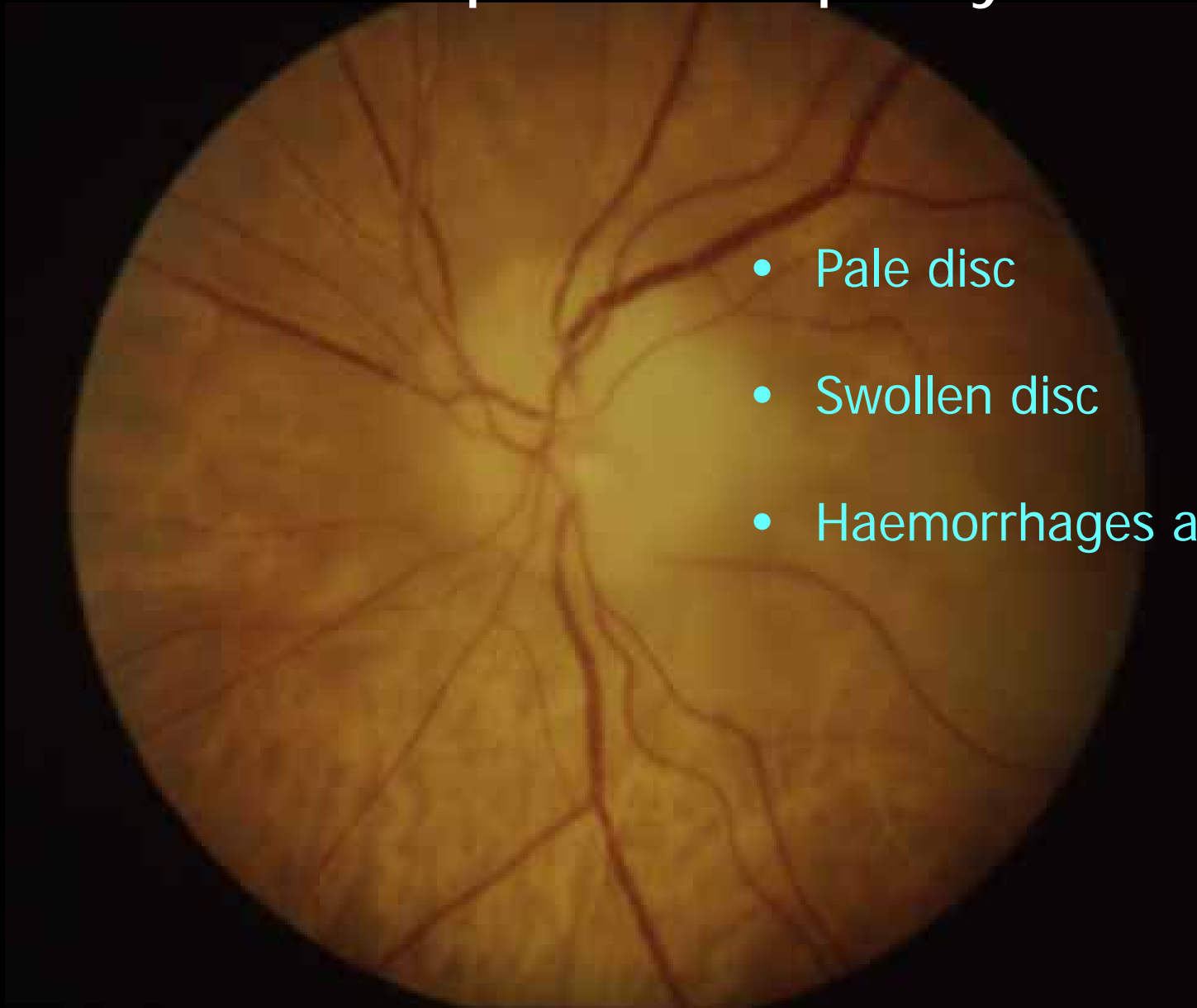


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Oxford Eye Hospital*

History

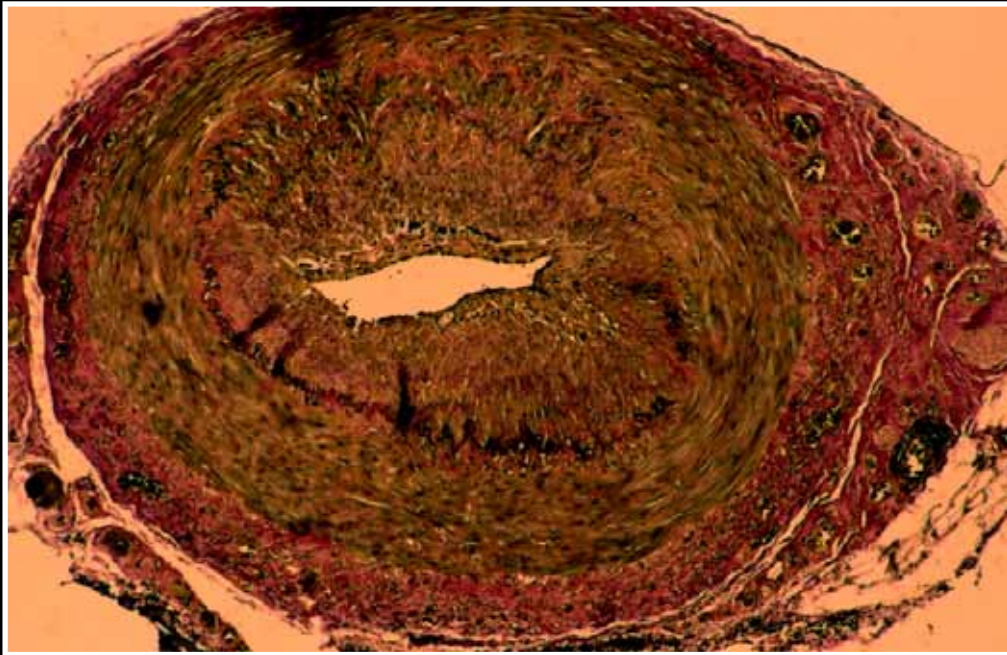
- 75-year old female presents with a one-day history of unilateral painless loss of vision
- Headache in the temporal region
- Jaw claudication
- Weight loss

Ischaemic optic neuropathy



- Pale disc
- Swollen disc
- Haemorrhages at disc

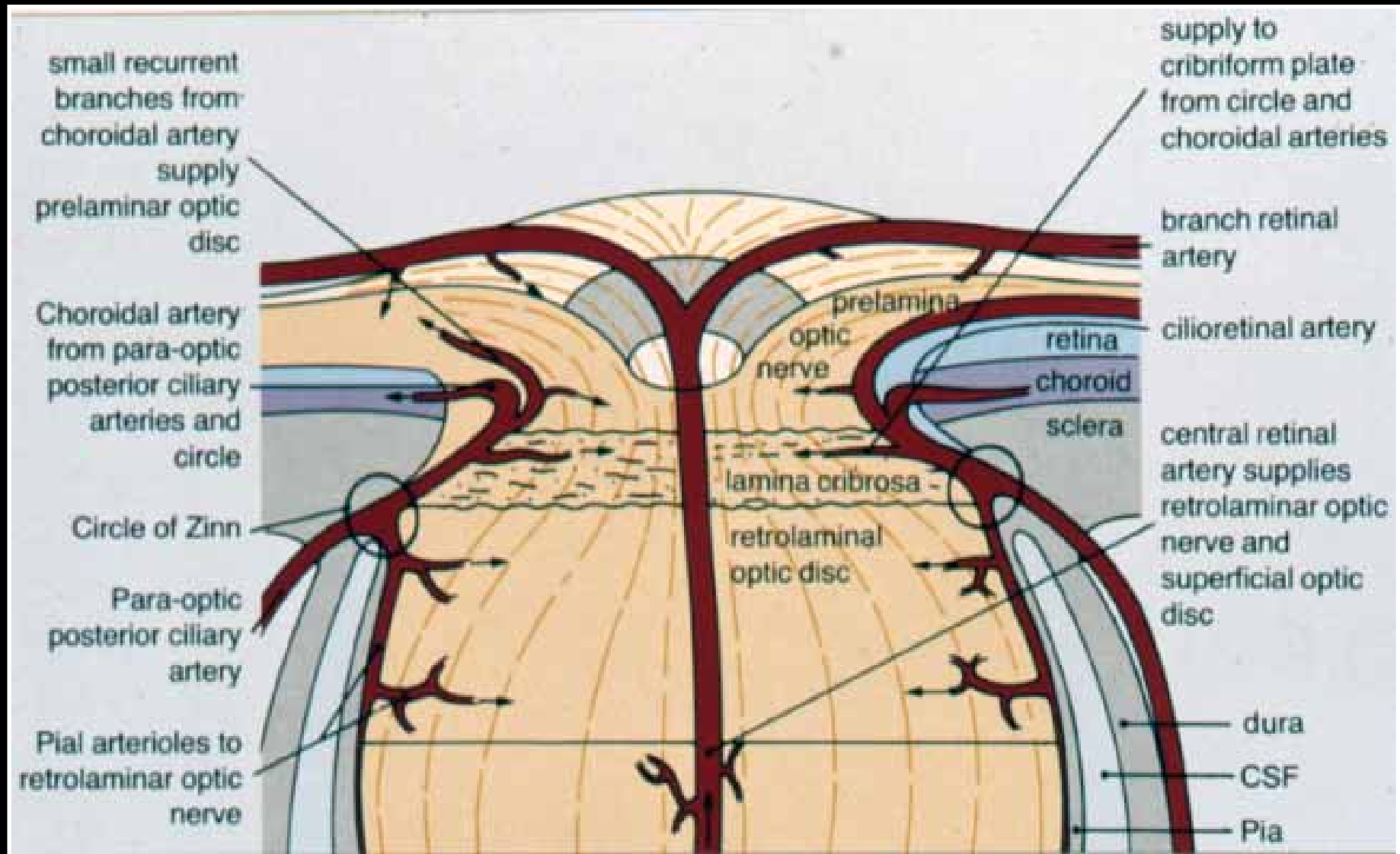
Giant cell arteritis

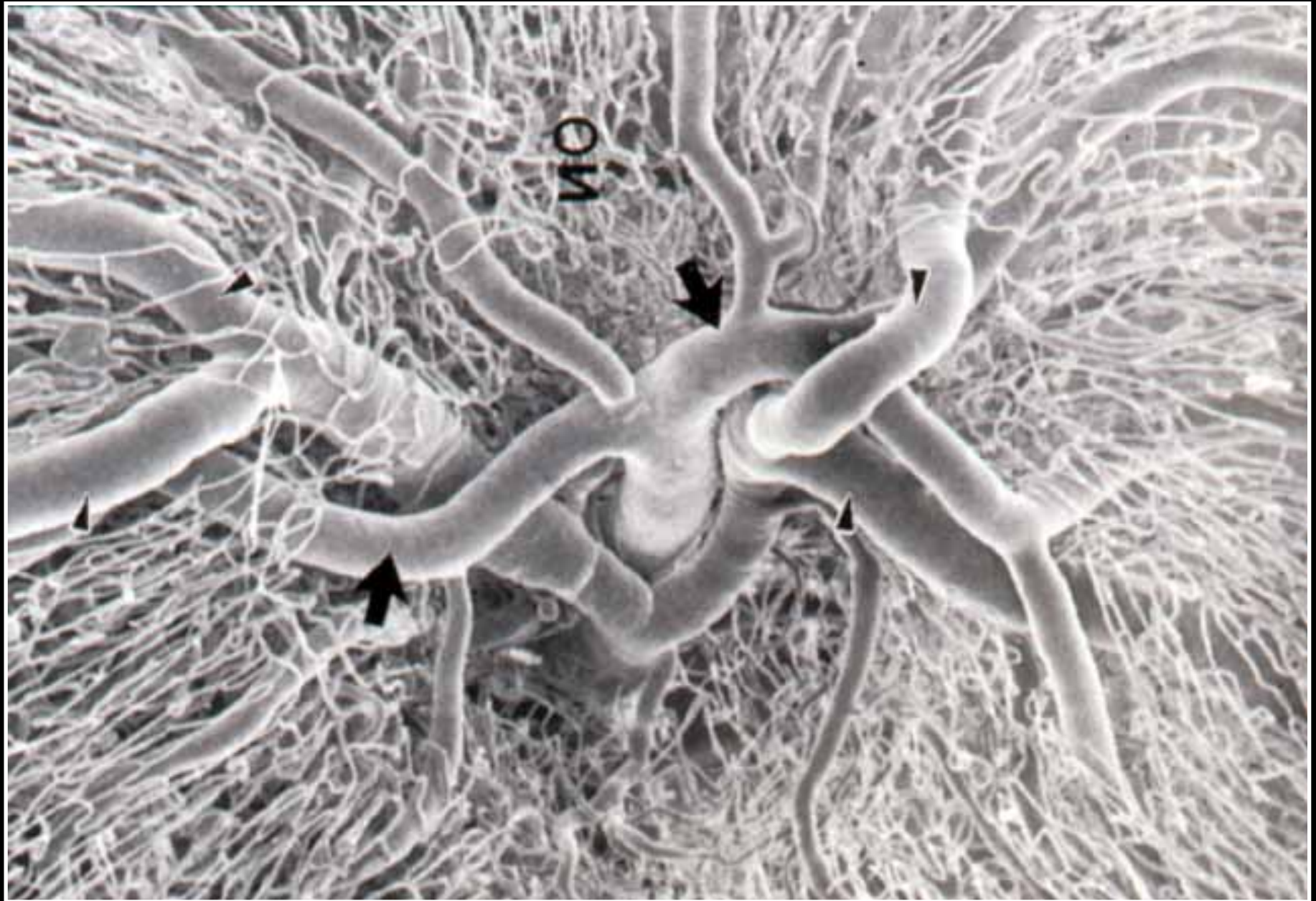


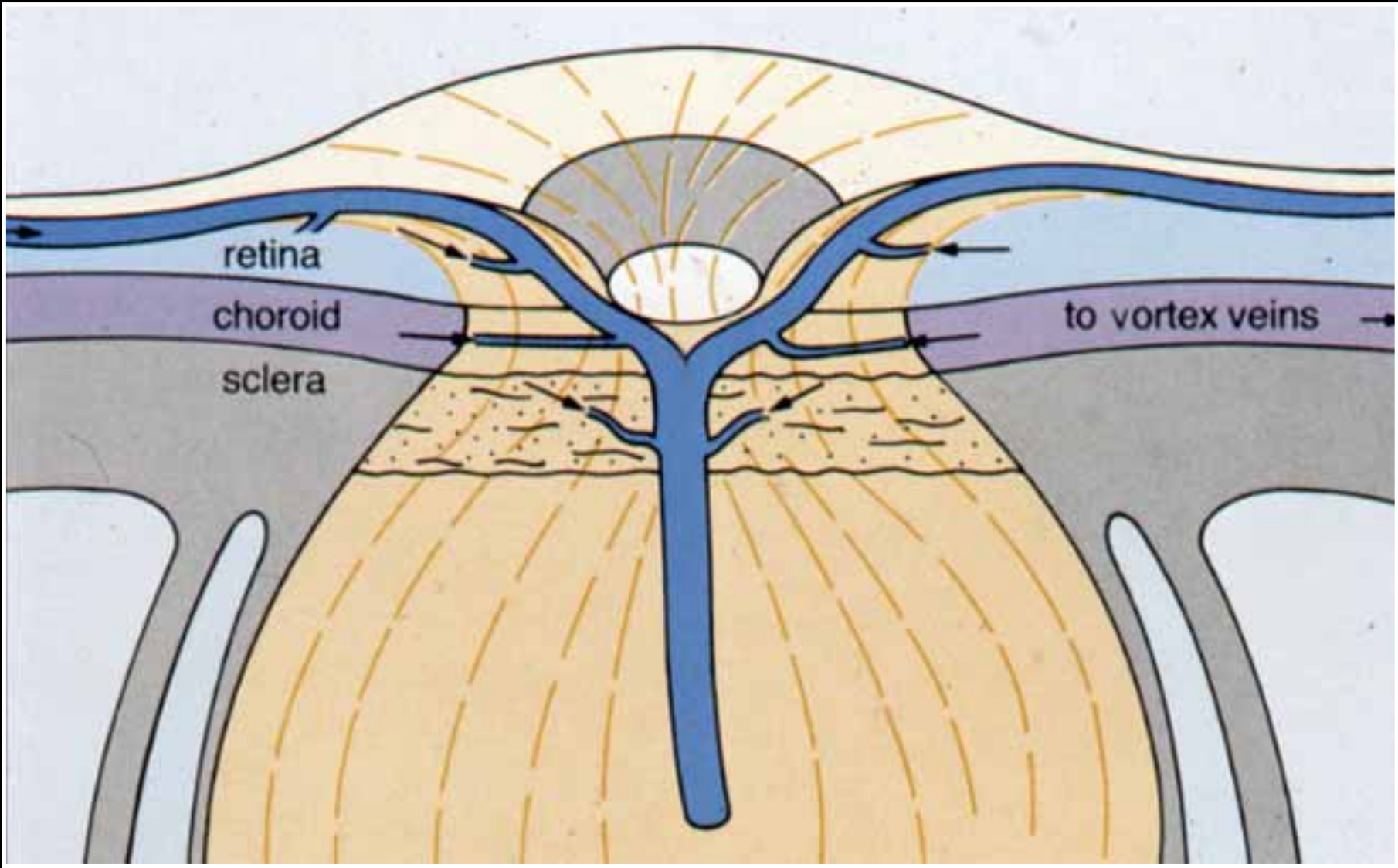
- Temporal headache
- Jaw claudication
- Polymyalgia rheumatica
- Raised ESR & CRP

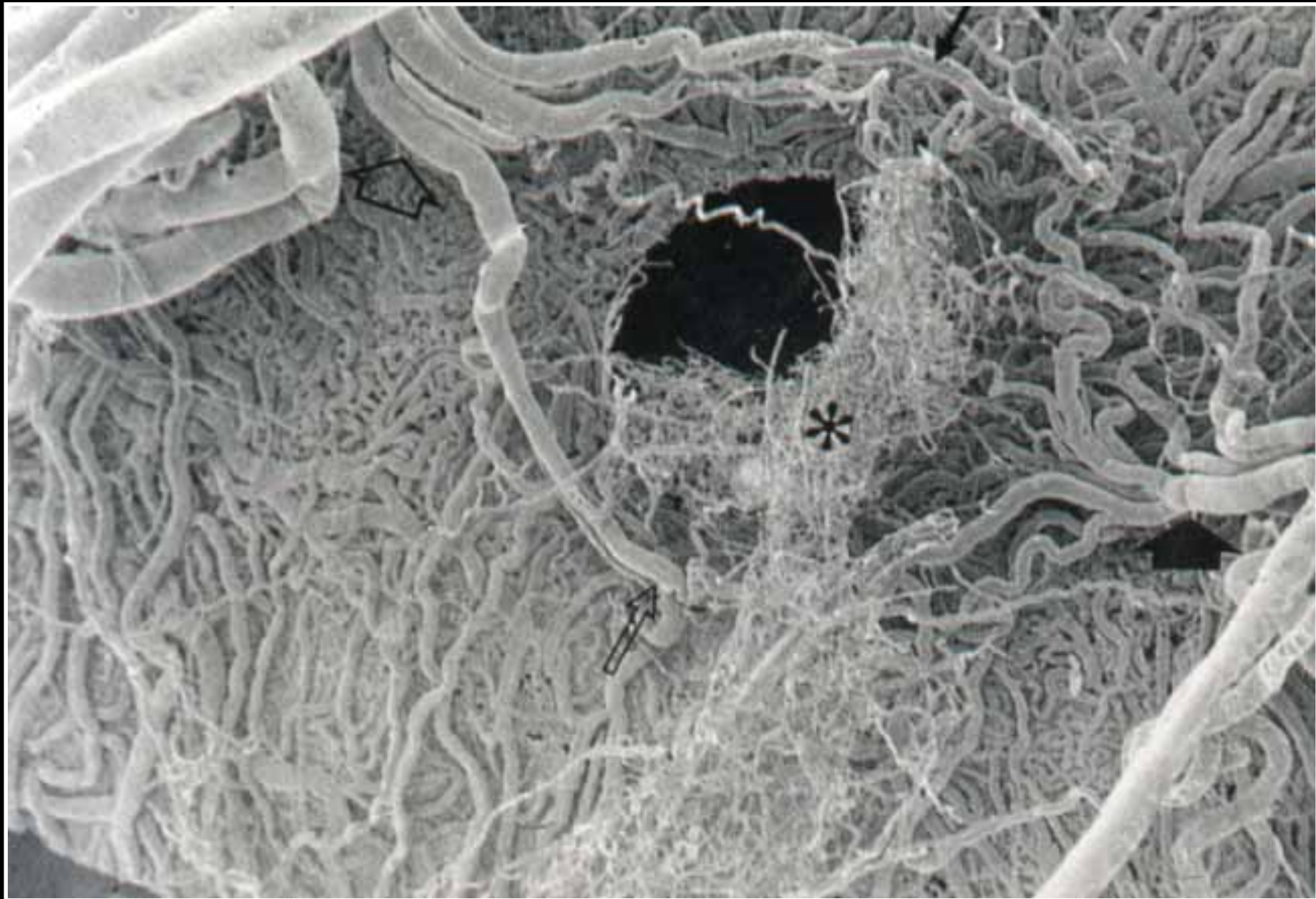
Treatment

- Urgent intra-venous methyl prednisolone 500 mg
- Refer for specialist opinion





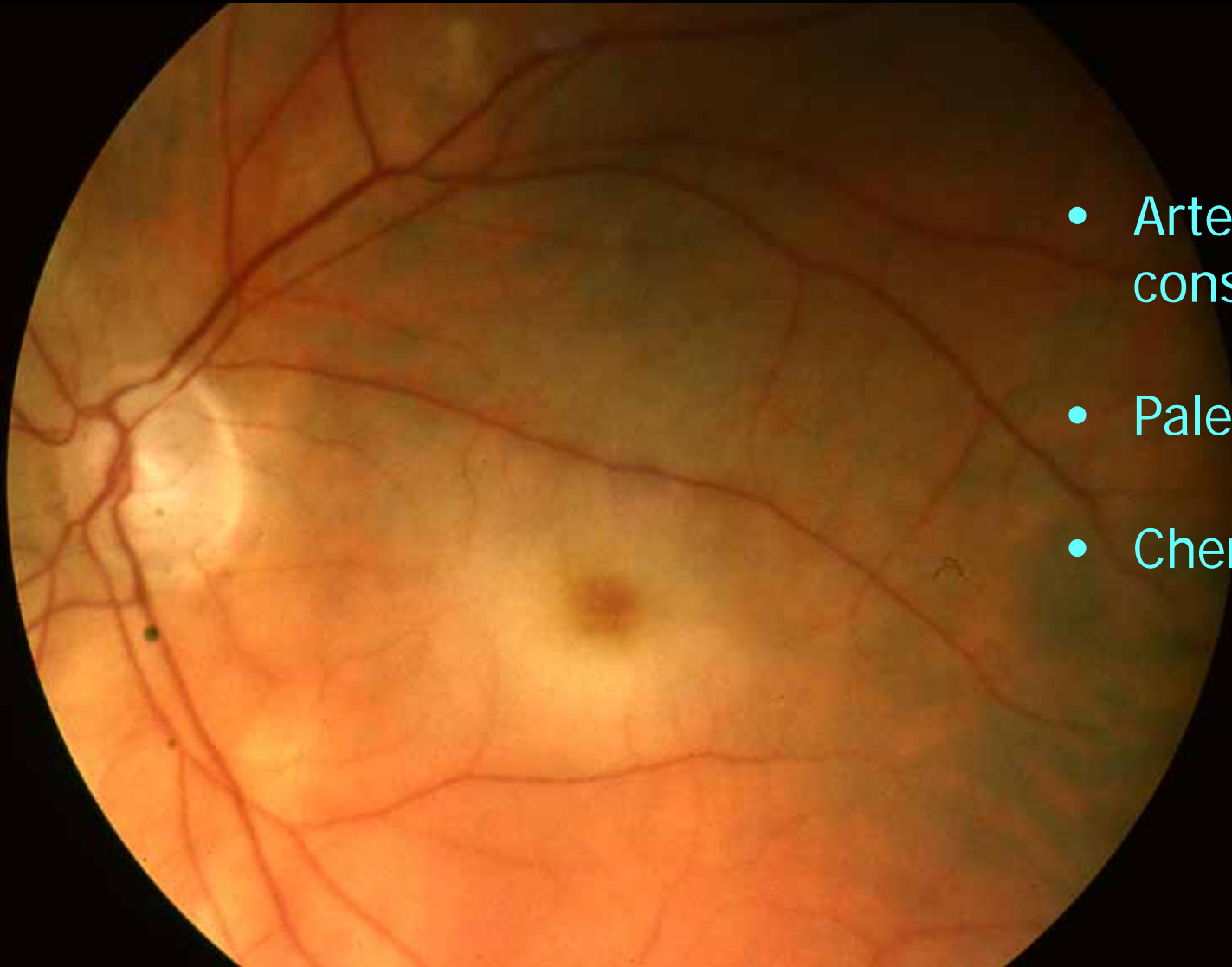




Take home messages

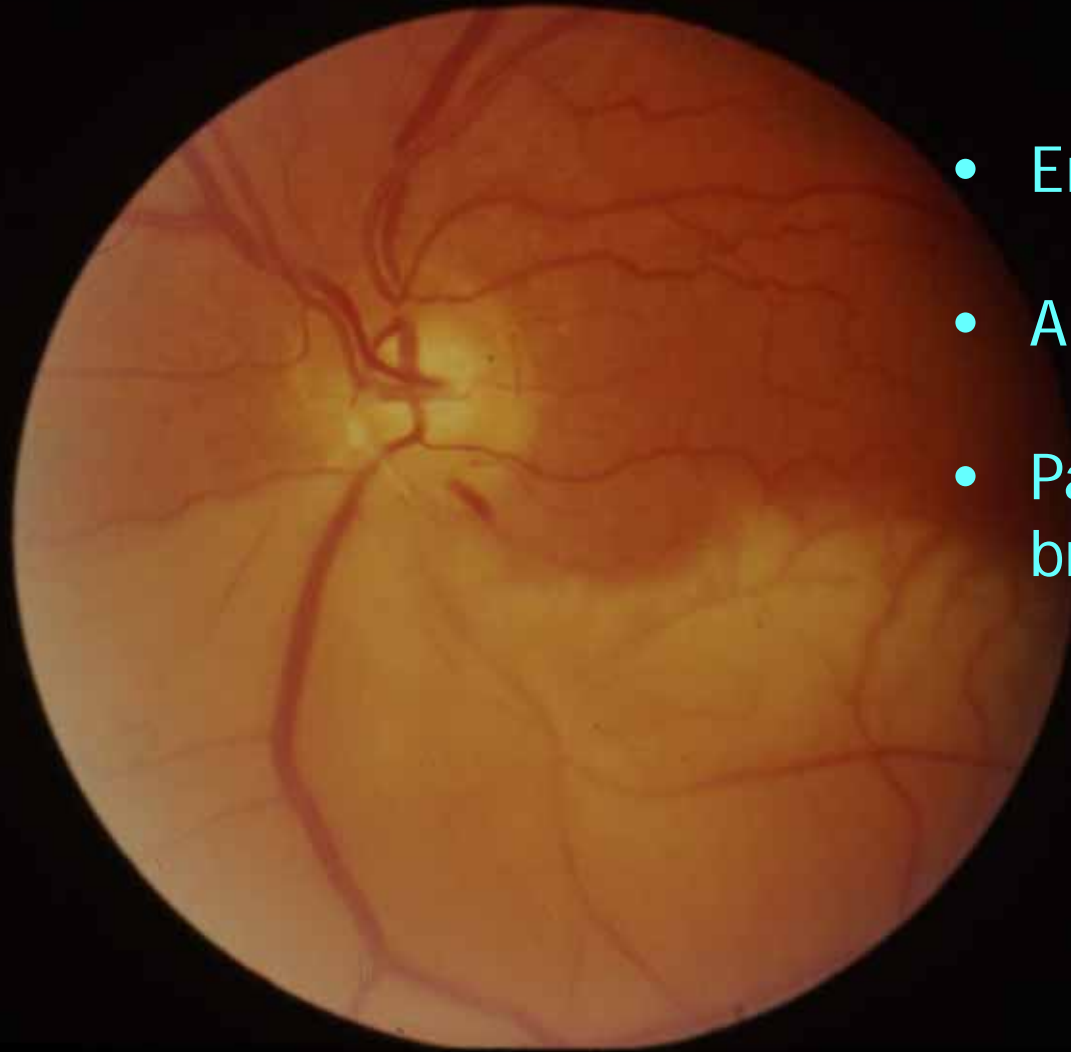
- Remember to exclude temporal arteritis by checking the ESR and CRP
- Consider non-arteritic causes especially the risk factors of hypertension, diabetes and smoking

Central retinal artery occlusion



- Arteriolar constriction
- Pale retina
- Cherry red spot

Branch retinal artery occlusion

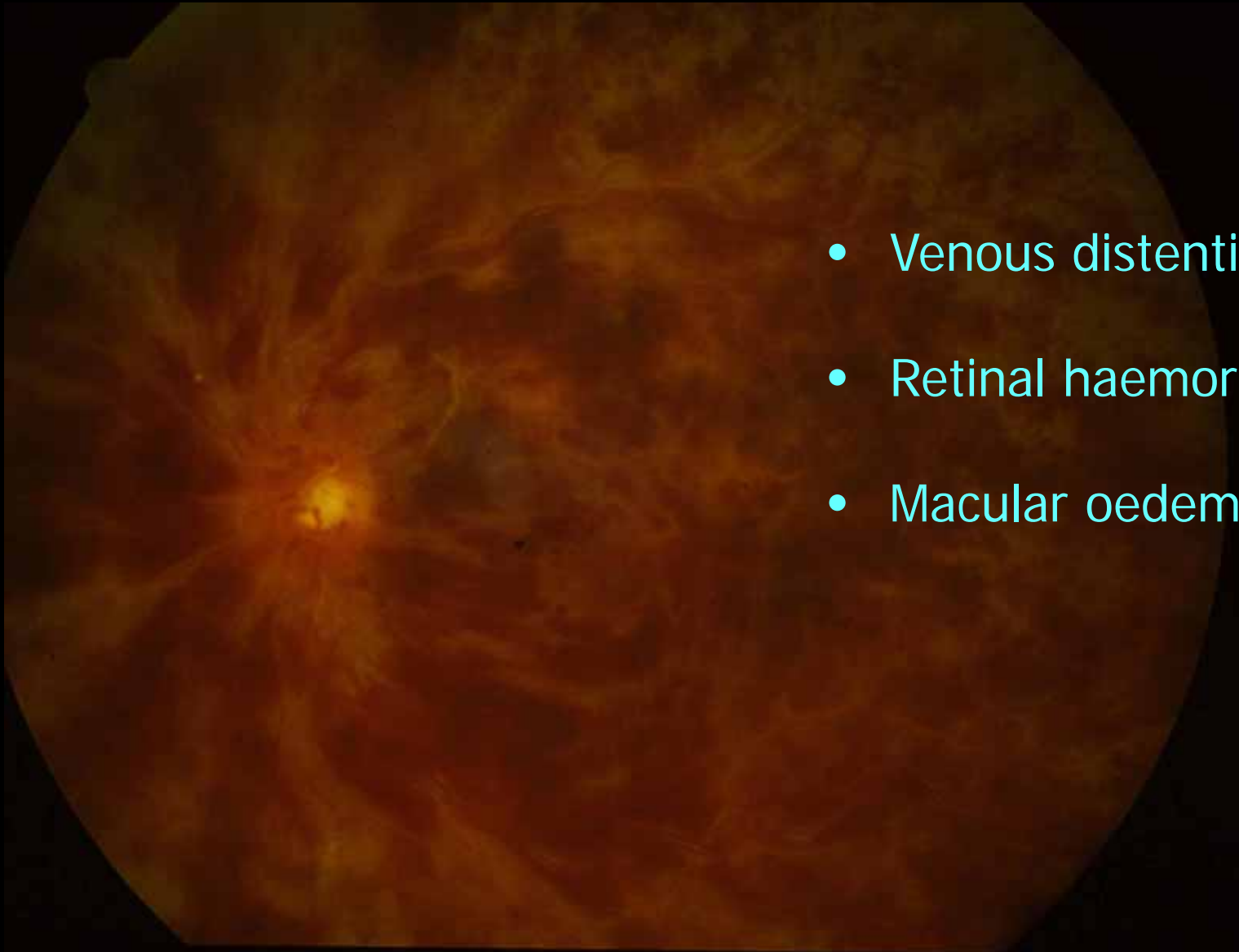


- Embolus at disc
- Arteriolar constriction
- Pallor in distribution of branch retinal artery

Take home message

Remember to look for the source of the embolus in the cardiovascular system

Central retinal vein occlusion



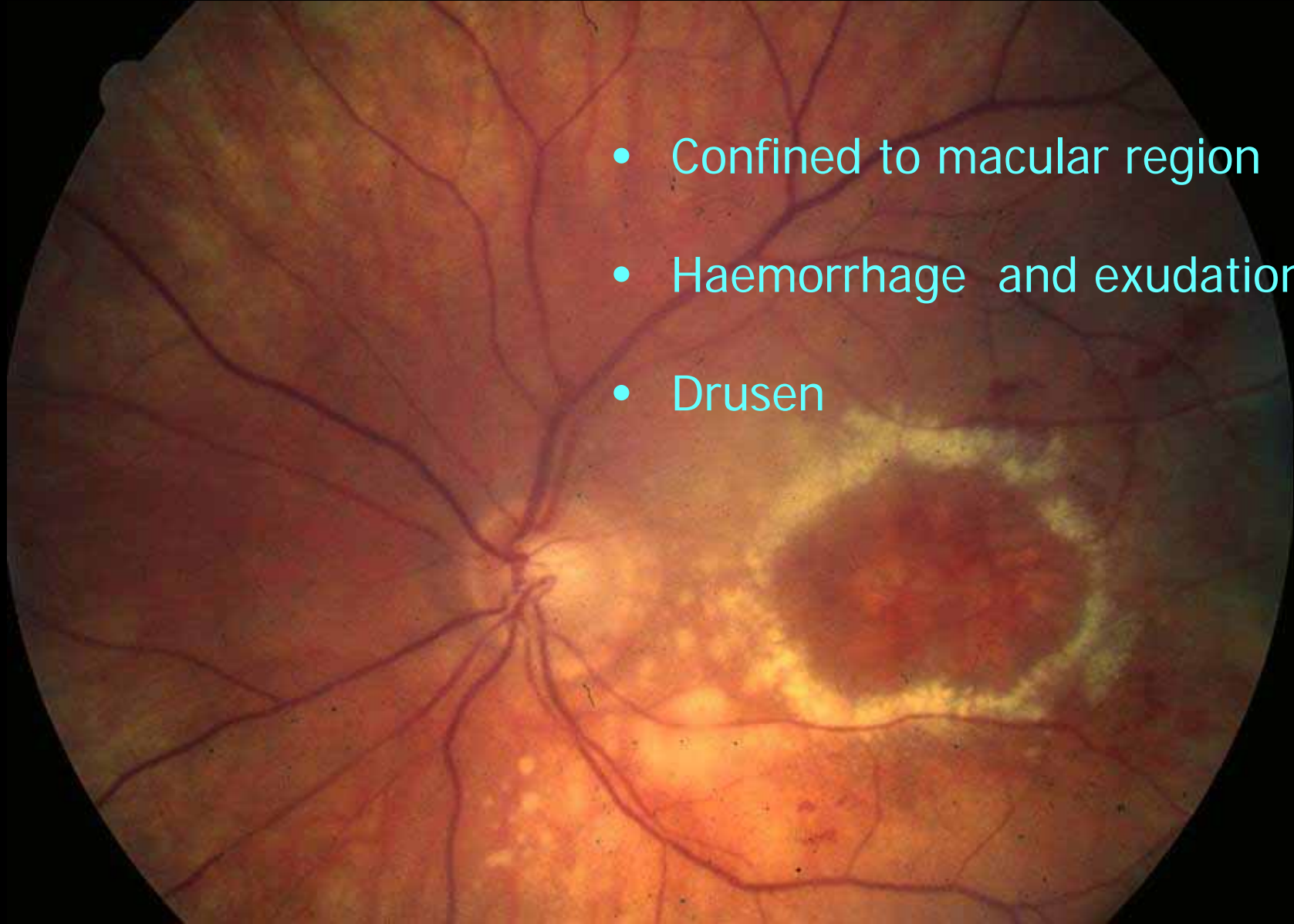
- Venous distention
- Retinal haemorrhages
- Macular oedema

Take home message

Remember to check for hypertension,
diabetes, and blood dyscrasia

“Wet” age-related macular degeneration

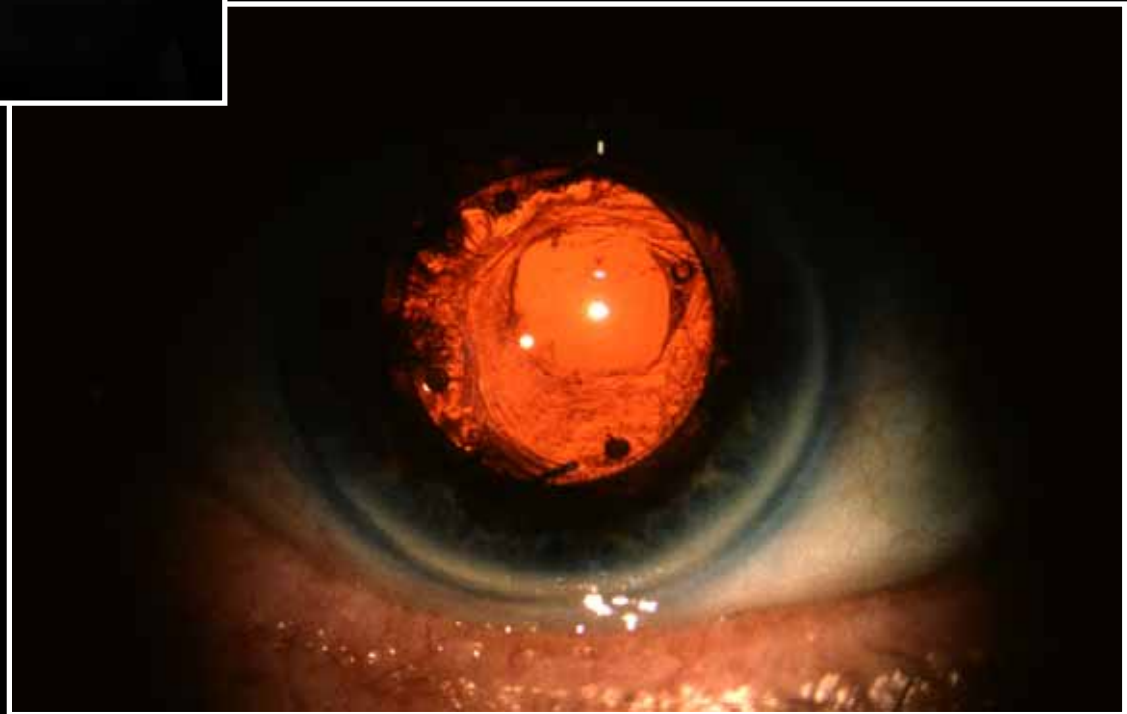
- Confined to macular region
- Haemorrhage and exudation
- Drusen



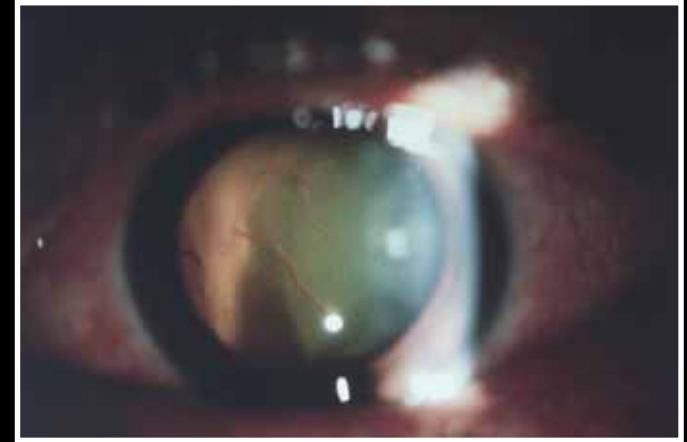
Take home messages

- The vision can be stabilised by injecting intra-ocular antibody against VEGF (Lucentis or Avastin)
- Refer within 2 weeks of onset of symptoms

Vitreous haemorrhage



Retinal tear or detachment



Proliferative diabetic retinopathy



Choroidal neovascular membrane



Take home message

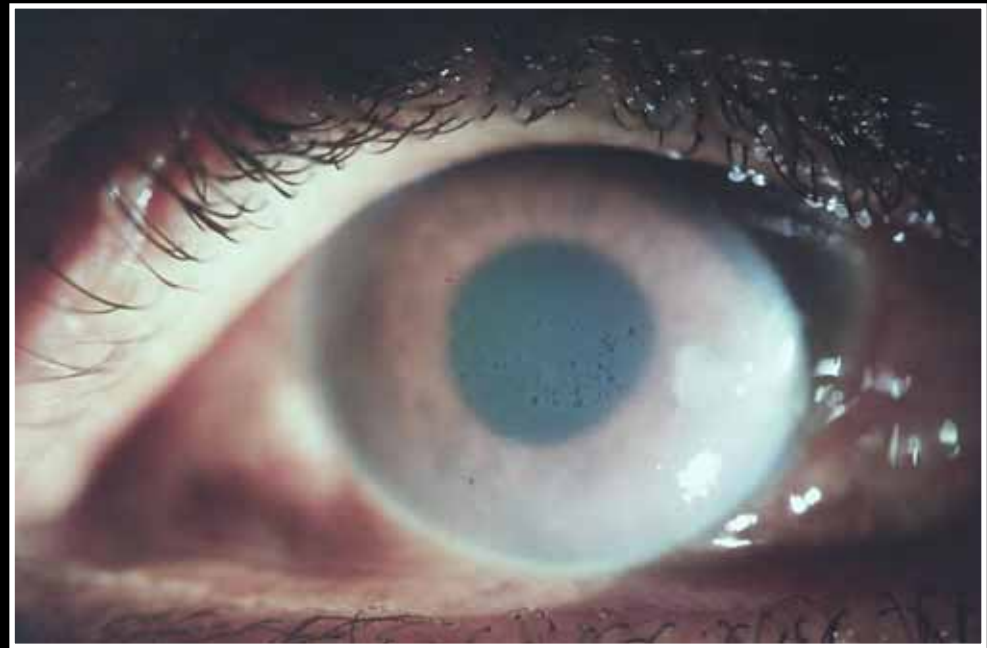
Acute loss of the red reflex is a sign of vitreous haemorrhage and underlying retinal pathology is often present

Causes of sudden painless monocular loss of vision

- Ischaemic optic neuropathy
- Retinal artery occlusion
- Retinal vein occlusion
- Acute haemorrhage from choroidal neovascular membrane
- Vitreous haemorrhage

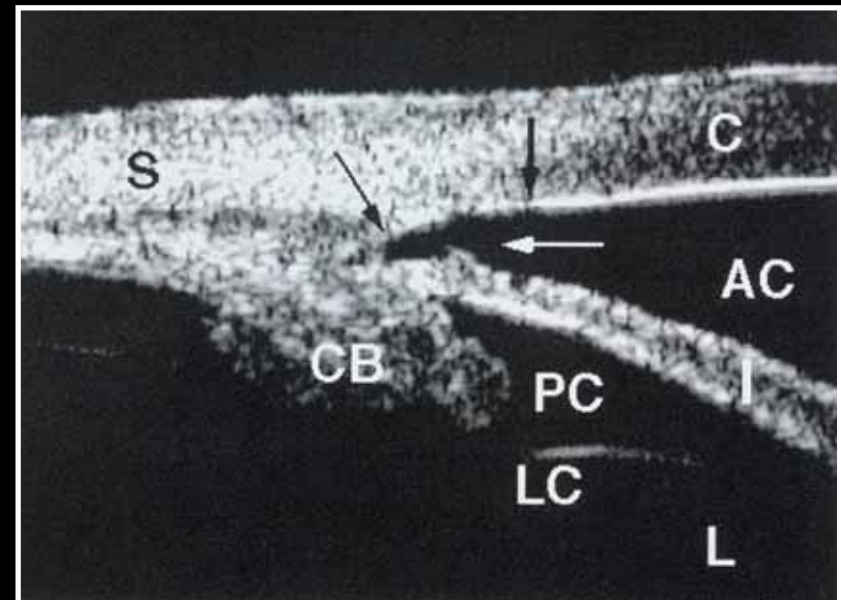
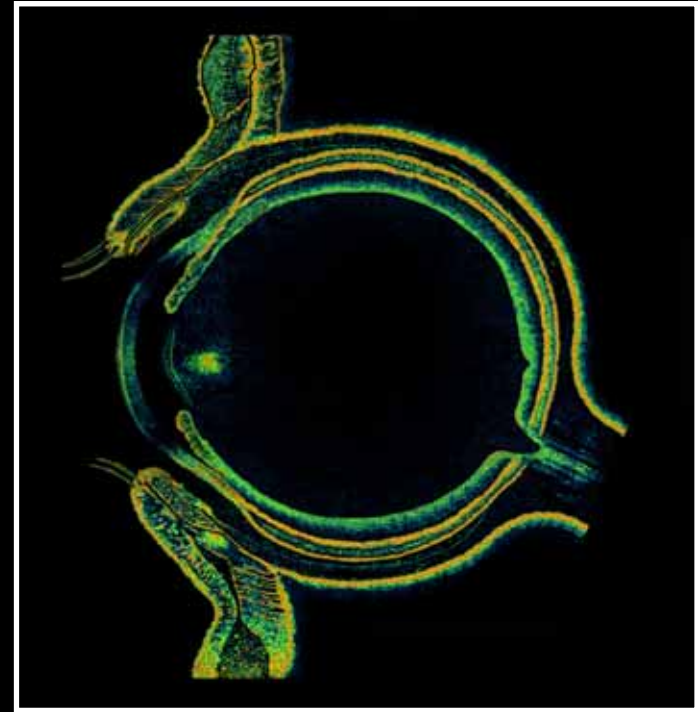
History

- A 62-year old woman presents with a painful left eye with visual loss and haloes
- Diagnosis: acute congestive angle closure

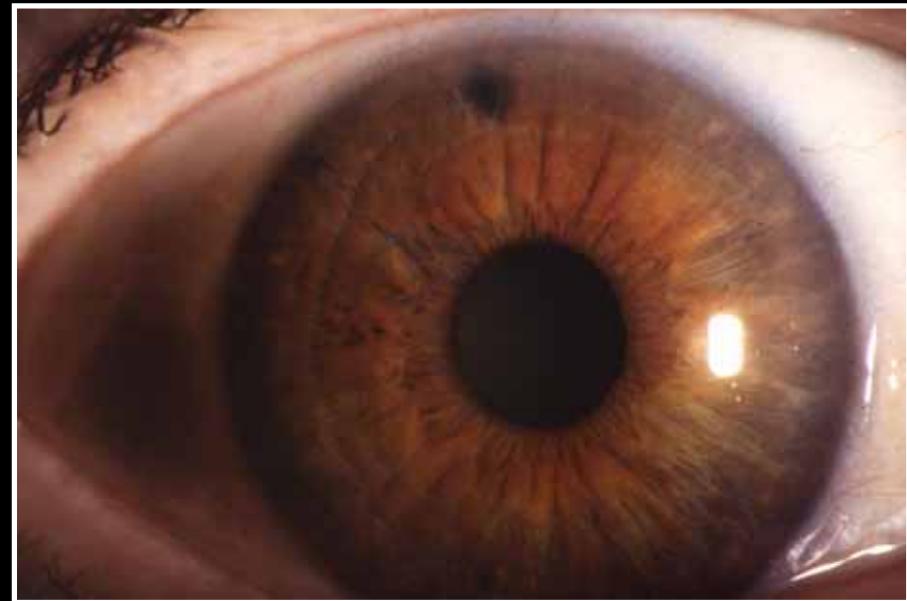


Anatomical factors

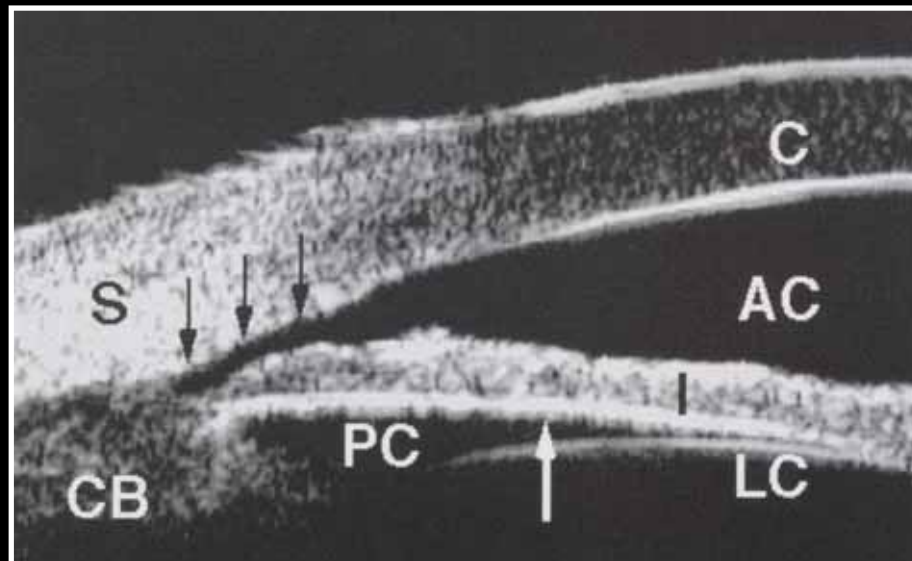
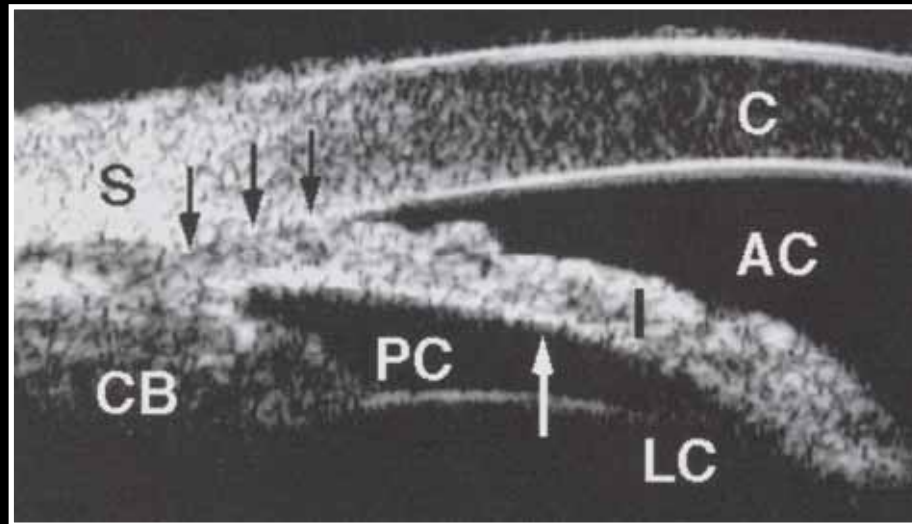
- Short axial length results in anterior lens position
- Lens thickness increases with age
- Lens thickness is greater than age-matched normals



- Medical treatment to reduce intraocular pressure and corneal oedema
- Laser iridotomy solves the problem



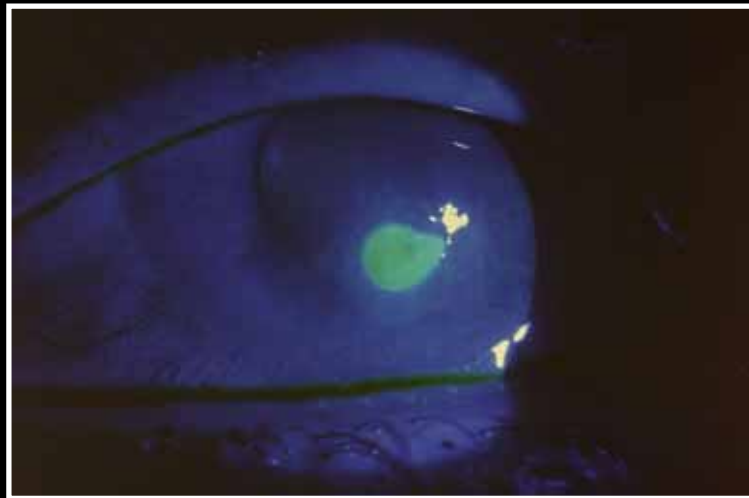
Pupillary block treated with laser iridotomy



Take home message

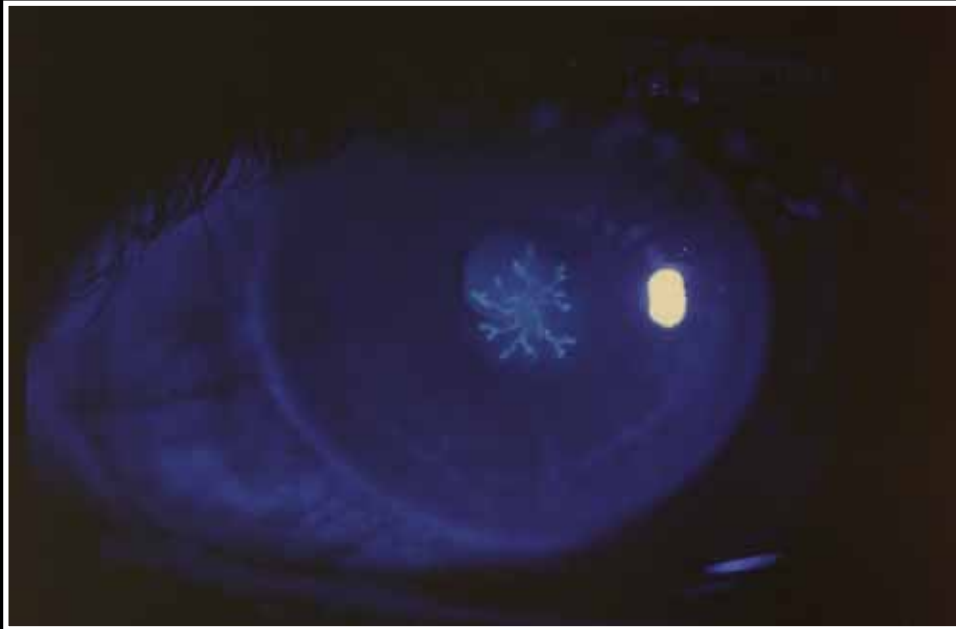
Refer any patient with a unilateral painful red eye and visual loss for urgent ophthalmic assessment

Bacterial corneal ulcer



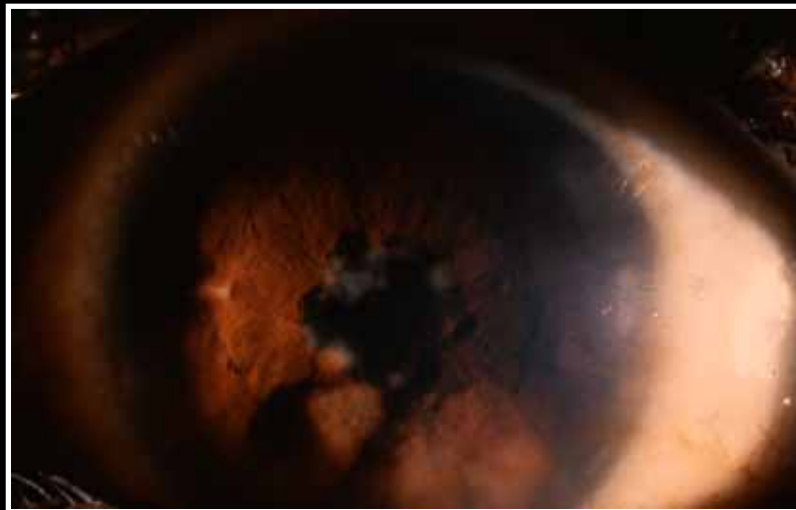
- Unilateral painful red eye
- Often secondary to contact lens wear
- Insert fluorescein
- Do not use antibiotics before a corneal scrape is undertaken
- Refer to specialist

Herpetic corneal ulcer



- Unilateral painful red eye
- Dendritic pattern
- Avoid topical steroids
- Responds to acyclovir

Acute iritis



- Unilateral painful red eye
- Visual loss & photophobia
- Refer to specialist
- Usually responds to intensive topical steroids
- Look for underlying cause

Acute scleritis



- Acute painful red eye
- Visual loss
- Commonly associated with rheumatoid arthritis
- Commence anti-inflammatory treatment
- Refer urgently to specialist