

Surrey Total Health

Your Health. Our Reputation.





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Special interest
Cataract Microsurgery, Cornea and External Diseases



Ophthalmic Emergencies What not to miss!





"If two people agree on everything, then only one of them is thinking."

- Senator Sam Rayburn



What is an Emergency?

- Vision threatening?
- Life threatening?
- Recognition
- Appropriate investigations/imaging
- Appropriate referral



History: Red eye

- Onset
- Location (unilateral /bilateral /sectoral)
- Pain/ discomfort (gritty, FB sensation, itch, deep ache)
- Photosensitivity
- Watering +/or discharge
- Change in vision (blurring, halos etc)
- Exposure to person with red eye
- Trauma
- Travel
- Contact lens wear
- Previous ocular history (eg hypermetropia)
- URTI
- PMHx eg autoimmune disease



Examination







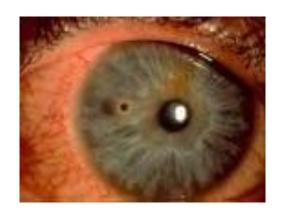


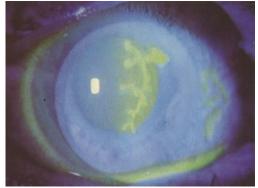




Case scenarios













- A 53 year old patient with acute diplopia
- Previous episodes few years ago, which lasted two months and recovered.
- Diabetes, and hyperlipedemia.
- Visual acuity: 6/6 both eyes.
- Pupils: Equally reactive, pupils equal in size.



Pupil-Sparing Third Nerve Palsy



- Diabetes, hypertension, hyperlipedemia, smoking, high hematocrit.
- Pupils is spared.
- Improve within 4-12 weeks (defer neuro-imaging).



Pupil-involving 3rd Nerve Palsy

- Pupil involvement indicates compression of the pupillary fibers.
- Posterior communicating artery aneurysm, or mass.
- Appropriate neuro-imaging (MRI/MRA, MRI/CTA, Angiogram is the gold standard for aneurysm detection).

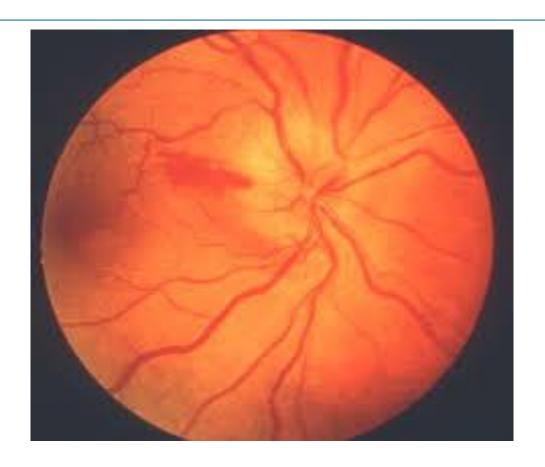




- A 75 year old patient with sudden loss of vision in the right eye.
- History of episodes transient loss of vision.
- Diabetes for 30 years.
- Feeling unwell lately with, and loss of appetite, malaise and myalgias.
- Visual acuity: Count finger right, 6/6 left.
- Right RAPD.









Arteritic Ischemic Optic Neuropathy (GCA)

- New onset of headache (temporal), acute or transient loss of vision, jaw claudication, weight loss, fever, and myalgias.
- Age usually over 60.
- A true neuro-ophthalmic emergency (54-95% second eye involvement if untreated)!
- Giant cell arteritis (systemic vasculitis, Aortitis in 20% consider PET/MRA).

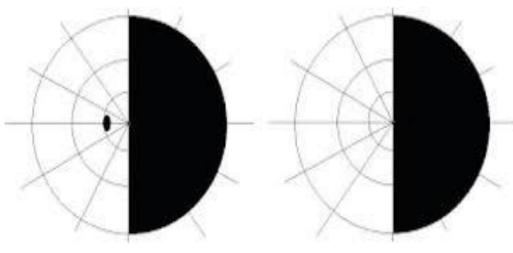


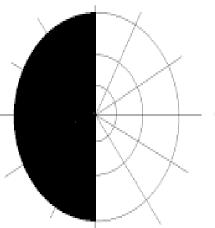
Management

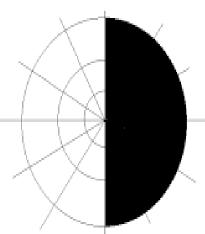
- Stat ESR , CRP and CBC (platelets).
- ESR can be normal in 15-20% of cases.
- CRP is more sensitive and specific.
- CRP and CBC(Platelet count) have 97% sensitivity and specificity.
- Start high dose systemic steroids (IV or Oral) immediately upon suspicion
- Arrange for temporal artery biopsy within 2 weeks, while patient is on steroids.













Endophthalmitis



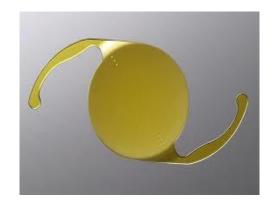
85yr old patient presents with a 1 day Hx of red and painful Right eye with reduced vision.

He had undergone cataract surgery 1 week ago.



Refractive lens exchange





Toric implants for astigmatism

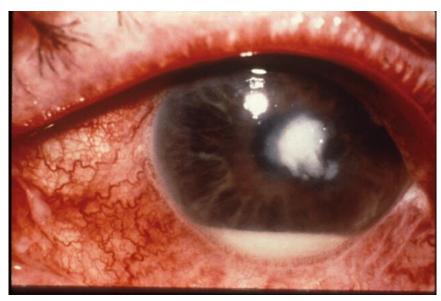


Multifocal/ trifocal



Red eye in a contact lens wearer







Swimming with contact lenses?



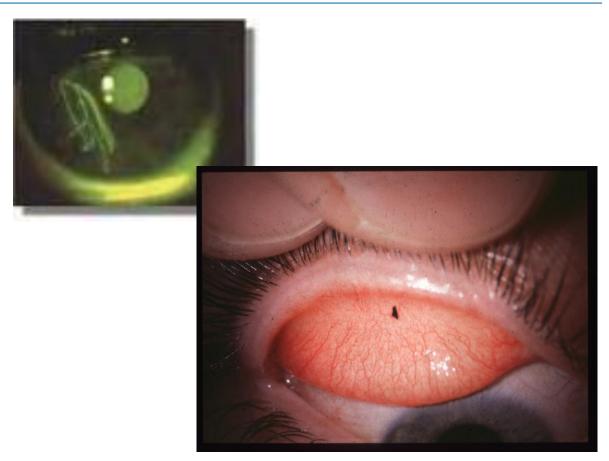
PUBLIC SWIMMING POOLS





Corneal abrasion



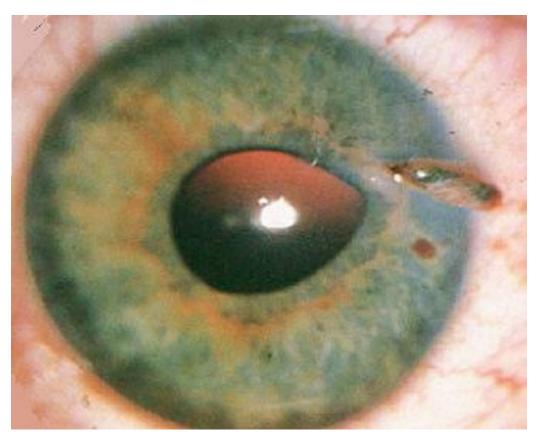




History of injury 2 days ago









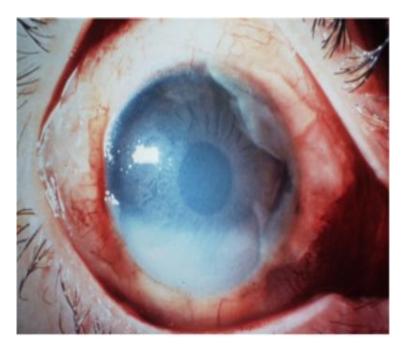
Chemical injury



Alkali or Acid

Immediate irrigation

May result in limbal stem cell failure







1 day history of reduced/ blurred vision Corneal transplant 4 years ago





Acute angle closure glaucoma



69 year old female

Severe headache

Vomiting





Summary





Red: Very Urgent

- Penetrating eye injury
- Acute post-op endophthalmitis
- Severe chemical injury
- Orbital cellulitis
- GCA with visual symptoms



Red: Urgent

- Painful red eye with visual loss
- Retinal detachment with good VA
- Corneal ulcer, esp. with CL wear
- Blunt trauma with hyphaema & 个 IOP
- Corneal graft rejection
- Painful diplopia







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