Eye Emergencies (https://galwayem.ie/index.php/guidelines/trauma-and-musculoskeletal/eye-emergencies)

Category
Trauma and Musculoskeletal (https://galwayem.ie/index.php/guidelines/trauma-and-musculoskeletal)

The unilateral red eye is a common presentation to Emergency Departments. The most common cause is probably conjunctivitis but there are some important diagnoses to exclude first. Visual acuity must be recorded in all cases.

Red Flags in the Red Eye
The following things suggest a more serious cause for a red eye than simple conjunctivitis:
- Decreased visual acuity
- Photophobia
- Abnormal fluorescein staining of cornea
- Severe pain
- Cloudy anterior chamber
- Contact lens wearer
- Past history of iritis or associated conditions
- Foreign body sensation (suggestive of active corneal process)
- Irregular or non reactive pupil

Conjunctivitis
- Common
- Normal cornea on fluourescein stain, with no corneal opacities
- Beefy red conjunctiva under the lids
- Purulent discharge, especially in the morning
- Normal vision (apart from a bit of blur from discharge on the cornea)
- The differentiation between viral, bacterial and allergic conjunctivitis can be difficult for the non-ophthalmologist
- If you think it may be of bacterial origin it is reasonable to treat conjunctivitis with chloramphenicol drops 1-2 hourly during the day and ointment at night-time.

Corneal Ulcer (non-traumatic)
- Usually more painful than conjunctivitis, often with decreased visual acuity
- Diagnosis obvious on fluorescein staining of cornea. Dendritic pattern is suggestive of herpes simplex
- Use of contact lenses is suggestive of microbial infection
Treatment:

Refrain from contact lens use until healed
Refer to Ophthalmology

Acute Angle-closure Glaucoma
Rare but serious.
The presentation is often dramatic
Keys to diagnosis:
- Pain, often severe
- Decreased visual acuity
- Cloudy cornea
- Patient generally looks and feels unwell
- Pupil may be fixed mid-dilated
- Photophobia
- Increased intraocular pressure
Treatment
- Immediate referral to Ophthalmology.

Iritis (Anterior uveitis)
- Not uncommon cause of red eye
- Auto-immune inflammation of iris +/- ciliary body
- Sometimes associated with other auto-immune conditions.
Keys to diagnosis:
- Painful red eye
- Photophobia ++
- No discharge
- Often have a past history of iritis
- Cloudy anterior chamber activity
- Pupil may be irregular and poorly reactive to light.
All patients should be referred to Ophthalmology.
Treatment essentially consists of topical steroids and mydriatics.

Subconjunctival Haemorrhage
- Common, usually spontaneous but may be caused by straining
- Painless except for mild foreign body sensation
- Check BP
- No specific treatment is needed.
- Usually resolves within two to six weeks

Corneal Foreign Bodies
- Orbits should be x-rayed if Hx of using power tools or hammer and chisel.
- Corneal Foreign Bodies (CFB's) should be removed using the slit-lamp
- Instil one drop of Benoxinate (local anaesthetic) into the affected eye
- Examine the cornea
- A fluorescein examination should always be performed to assess for further corneal damage
- Use a 25 gauge needle on a 5ml syringe to remove the FB. Ask how to do this.
- Most rust-rings from metallic FBs can be removed on the same day with the 25 gauge needle. If unable, refer to Ophthalmology. Avoid over vigorous attempts at removal.
- All patients should be examined for subtarsal foreign bodies by eversion of the lids
- Prescribe antibiotic ointment, such as chloramphenicol tds until the foreign body sensation disappears
- Follow-up for small foreign bodies or abrasions is on a prn basis

Those with large abrasions or decreased visual acuity should be followed up by ophthalmology
- Eye patching is only indicated for a couple of hours after using local anaesthetic.
- Oral analgesia may be required

Steroid eye drops are NOT to be prescribed by Emergency Department Staff
Local anaesthetic drops should not be given as TTAs.
