The Red Eye

21/05/2012

The painful red eye

Condition	Common features	Management
	Abnormal eyelid	
Chalazion, stye	Chalazion(Meibomian cyst): nodule in eyelid. Stye (hordeleum): red painful external lesion.	Warm compresses. Topical/PO ABx if stye.
Acute blepharitis	General eyelid inflammation	Daily lid hygiene, lubrication, topical ABx.
Herpes zoster	Monocular vesicular rash. V_{I}n distribution. If tip of nose involved then cornea too (nasociliary n.)	Oral **aciclovir** <72h. Refer if eye red or ↓vision.
	Abnormal cornea	
HSV Keratitis	May be Hx/signs of other HSV site (cold sores). Dendritic ulcer with fluorescein	Topical **aciclovir**. Refer <24h.
Marginal keratitis	Secondary to blepharitis, peripheral ulcer.	Discuss with ophthalmologist.
Bacterial ulcer or acanthamoebal	History of contact lens wear. Epithelial defect with opacified base.	Refer immediately.
Trauma/Arc eye	See Ocular trauma.	Remove FB. Topical ABx, cycloplegics, analgesia.
	Conjunctivitis	
Viral	Burning sensation & watery d/c. Recent contact with URTI (esp children). May spread to other eye. Highly contagious. Commonly adenovirus.	Cool compresses, lubricants q2h. May take weeks to heal. **CI:** Steroids. Refer if photophobia or ↓acuity. Consider Chlamydia or other Dx if >3wk.
Bacterial	Tender conjunctivae. Purulent d/c. Often bilateral.	Hygiene. Topical ABx qid x5d. Refer if persistent or ↓acuity.
Allergic	Itchy. Hx atopy. Prominent papillae. Clear d/c.	Cool compresses, lubricant. **Cromaglycate** drops (Opticrom) or topical vasoconstritor.
Dry eyes	Chronic, worse in evening. ?systemic disease.	Lubricants. Refer non-urgently.
	Other	
Acute angle closure glaucoma	Severely painful, haloes around lights, may be systemically unwell (nausea, vomiting, headache). Usually > 50yo. Decreased acuity, hazy cornea, fixed, semi-dilated or oval pupil. IOP>21mmHg.	Urgent referral. Stop any precip drugs (anticholinergic/β-agonist/mydriatics). Rx: **Acetazolamide** 500mg IV stat then 250mg PO q8h or **mannitol**. **Pilocarpine** 2% 1 drp q5m x6 then qid. **Timolol** 0.5% 1 drp bd. ± prednisone 0.5% TOP. Analgesia. Surgery.
Acute anterior uveitis (Iritis)	Photophobia, blurred vision, headache, pain. May ↓acuity & ciliary injection. Pupils may be small or irregular ±hypopyon. Can→glaucoma.	Within 24 hours. Urgent referral if hypopyon. May req. steroids if no evidence of corneal infection.
Scleritis	Gradual onset of boring pain ± ↓vision, thickened red sclera ±blue nodules. ?systemic disease (connective tissue diseases, RA, gout, syphilis and less commonly, TB, sarcoidosis and HT), drugs (NSAIDs, steroids, anti-metabolites)	Urgent referral. Analgesia, topical steroids if no infections, cycloplegics.

The painless red eye

Condition	Common features	Management
Blepharitis	General eyelid inflammation	Lid hygiene, lubrication, refer if not improving
Ectropion	Lower lid out-turned showing conjunctiva	Topical lubrication, refer if not improving
Entropion	Lower lid in-turned ± corneal abrasion	Lubricate. Tape eyelid back from cornea. Mx as for corneal abrasion.
Pterygium	Raised yellow fleshy lesion at limbus (can become inflamed & painful)	Lubrication, sunglasses, non-urgent ophthalmology referral
Subconjunctival haemorrhage	Blood under conjunctiva. Assoc with minor trauma or sudden increase in local BP.	Check BP, coags if indicated, treat any cough or vomiting. Reassure: should resolve over 3wk.
Episcleritis	Normal acuity, localised patch of redness/injection. No discharge.	Refer if there is more than slight discomfort or if it fails to settle spontaneously over ~ 1 week.