	Problem	Characteristic features	Refer to opthal?	Management
Trauma	Penetrating Injury	Hx, +/- FB in eye, tear drop pupil, +/-drips of aqueous. Examine VERY carefully (risk of irreversible eye damage)	**same day assessment**	same day assessment if ANY suspicion of penetrating eye injury or embeded FB.
	tear to lid margins / damage to lacrimal duct.		**same day assessment**	
	Corneal abrasion	Hx, fluoro examination	**GP management**	Check no hyphaema/deep damage, chloro oint q2h for 24h then q4h for 7d. Oral analgesics if sig pain. No evidence for the use of eye pads. Should heal in <48h. Only refer if: large abrasion (>60%), Pain does not resolve after use of antibiotic ointment, Patient continues to experience blurred vision or a reduction in visual acuity, Patient continues to experience considerable pain, despite analgesics
	Conjunctival / corneal FB	Hx, visible FB	**may need to refer**	conjunctival FB: give LA drops and attempt to remove with cotton wool bud, refer if h/o metal/glasses exposure. Prophylac chloramph. 2d, reexamine at 24h with fluoro. Corneal FB: more difficult to remove, and caution as the cornea is very thin = refer. Refer if ocular pain not relived by LA/hyphaema/irreg pupil/deep orbital lacerations (suggests deeper eye injury) or corneal opacities or dec vis acuity or persistent rust rings. F/U at 24 and 48h (check vis acuity/rust rings/fluorescein drops to assess healing).
	Chemical burns	Hx: cement, lime, caustic soda, ammonia	**immediate / same day assessment**	Flush with saline for 20mins. Refer immediately if acid/alkali/cement. Otherwise refer for same day assessment of severe conjunctivitis. Prophylac ABx 2d, reexamine at 24h with fluoro
	UV light burns (arc eye)	Hx, severe pain and watering may develop several hours after exposure. Redness, pain, blepharospasm, photophobia, blurred vision, sensation of FB in eye. Cornea may show areas of gross opacification - Fluorescein staining shows punctate erosions which cover most of the cornea causing gross uptake of fluorescein.	**Usually GP management**	LA drops x once only, cyclopentolate 1% drops, chlor drops q2h for 24, then q4h, pad the worst affected eye.give po analgesics (opiods). Refer if not healed in 24 - 48h. Give pt worsening advice (see Dr if inc pain/ flashing lights/dec vision)
	Blunt injuries :	Hx… O/E: look for bld in ant chamber. Look for an irreg pupil/iris, check PERLA.	**Immediate referral**	all pts with vis impairment after blunt injury shouold be referred.
	subconjunctival haem	look for signs of orbital fracture: diplopia, recessed eye, ipsilat epistaxis,	**may need to refer**	check BP, check for other bleeding/bruising, check INR if on warfarin. Refer if ANY h/o trauma
Eyelid Disorders	Stye	a localised abscess on the eyelid: may be internal (around an eyelash follicle) or external (in a meibomian gland). Unlike a chalazion it IS painful.	**GP management**	if around an eyelash remove the lash to facillitate drainge. hot compresses and analgesia. CKS only recommend topical antibiotics if there is an associated conjunctivitis
	Chalzion	ie a meibomian cyst a sterile, chronic, inflammatory granuloma caused by the obstruction of a Meibomian gland -> firm painless nodule in the eyelid. The majority of cases resolve spontaneously but some require surgical drainage	**GP management**	warm compresses for 15-30mins bd, The majority of cases resolve spontaneously -takes about 6wks, but some require surgical drainage refer if persists >3m
	Dacrocystitis	watering eye (epiphora), swelling and erythema at the inner canthus of the eye	**GP management**	Management is with systemic antibiotics. Intravenous antibiotics are indicated if there is associated periorbital cellulitis

Gritty red irritable eye .				
	Infective Conjunctivitis	sore, red eyes associated with a sticky discharge (seroud d/c and preauric LN suggests viral)	**usually GP management**	normally a self-limiting condition that usually settles without treatment within 1-2 weeks. topical antibiotic therapy is commonly offered to patients, e.g. Chloramphenicol. Chloramphenicol drops are given 2-3 hourly initially where as chloramphenicol ointment is given qds initially. If pt is a contact lens wearer refer to optometrist to r/o keratitis. If chlamydial swabs positive refer to GUM.
	Neonatal conjunctivitis	<4wks old	**same day assessment if..**	refer for same day assessment if neonatal conjunctivitis (ie baby <4wks old)
	Allergic conjunctivtis	sore, red, bilat, tichy eyes, +/- h/o atopy.	**GP management**	topical or systemic antihistamines, topical mast-cell stabilisers, e.g. Sodium cromoglicate and nedocromil
	Blepharitis	Anterior blepharitis — the bases of the eyelashes on anterior eyelid margin are inflamed (eg staph infection/seborrhoeic). Posterior blepharitis — the posteriorly located Meibomian glands on the eyelie margin are imflammed (due to dec meibomian gland function). 2 types can coexist and can be difficult to distinguish.	**GP management**	use fluoro to check for keratitis (if present refer to opthal). Otherwise...warm compresses, clean eyelid margin, +/- massage meibomian glands +/- 6/52 trial of chloroamph ointment (to erradicate staph) …+/- oxytetracycline (esp if pt has rosacea). Refer of no improvement in wks. Urgent referral if unilat not responding to Rx (?SCC eyelid margin), urgent referral if corneal disease/dec vision/blepharitis sec to undelying systemic disease (eg sjogrens).
	Dry Eye	feelings of dryness, grittiness, foreign body sensation, red eyes, staining of cornea, soreness in both eyes, which get worse throughout the day, eyes water, particularly when exposed to wind, and reflex tearing or blurring whilst reading or driving, eyelids stuck together on waking. BUT NO abnormalities O/E.	**GP management**	For mild or moderate symptoms artificial tears alone are usually sufficient: First line treatment – hypromellose 0.3% QDS 1/12 (cheaper to buy the OTC). If treatment with artificial tears does not completely resolve the irritation, the patient may additionally wish to use liquid paraffin based eye ointment before sleeping - Lacri-Lube or Lubri Tears eye ointment (available over the counter). NB Eye ointments containing paraffin may be uncomfortable and blur vision - should only be used at night, and never with contact lenses.
The painful red eye that is not gritty .	Acute glaucoma	severe pain (may be ocular or headache), decreased visual acuity, patient sees haloes, semi-dilated pupil, hazy cornea, tender hard eye. May be pptd by adrenergic/antimusc drugs. Often occurs in the evening.	**Immediate referral**	
	Corneal ulcers (Keratitis): HSV or bacterial (or Pseud. in lens wearers)	red, painful eye, photophobia, epiphora, visual acuity may be decreased, fluorescein staining may show an epithelial ulcer: feathery pattern suggests HSV keratitis. In bacterial keratitis may have corneal ulcers due to trauma eg contact lenses.	**Immediate referral**	
	Herpes zoster ophthalmicus	vesicular rash around the eye, which may or may not involve the actual eye itself, Hutchinson's sign: rash on the tip or side of the nose. Indicates nasociliary involvement and is a strong risk factor for ocular involvement. …….conjunctivitis, keratitis, episcleritis, anterior uveitis	**Immediate referral**	ocular involvement requires urgent ophthalmology review, oral antiviral treatment for 7-10 days, ideally started within 72 hours. Oral CS.
	Scleritis,	severe deep pain (may be worse on movement) and tenderness, +/- dec vision. may be underlying autoimmune disease e.g. rheumatoid arthritis	**Same day assessment**	
	Ant Uvetis (Iritis)	acute onset, pain, blurred vision and photophobia, small, fixed oval pupil, ciliary flush	**Immediate referral**	
	Episcleritis:	localised area of redness +/- mild irritation/photophobia. Distinguish from conjunctivitis by lack of involvement of the palpebral conjunctivae. 15% devlop a mild irritis	**GP management**	usually self limiting. oral NSAID (eg diclofenac) 2/52 +/- artificial tears if sl irritated. If this treatment doesn't keep the eye comfortable patient should be seen by opthal within 2-3days. Beware risk of iritis.

	Condition	Features	Action	Management
Painless Acute Visual Loss .	CRAO	due to thromboembolism (from atherosclerosis) or arteritis (e.g. temporal arteritis), features include afferent pupillary defect, 'cherry red' spot on a pale retina	**Immediate referral**	
	ant isch optic neuropathy due to arteritis (TA) or atherosclerosis	altitudinal loss of vision. Sxs of GCA/PMR or RFs for atherosclerosis,	**Immediate referral**	high dose pred for TA
	CRVO/BRVO	severe retinal haemorrhages are usually seen on fundoscopy, RFs: glaucoma, polycythaemia, hypertension	**Immediate referral**	
	Vit Haem	Large bleeds cause sudden visual loss, Moderate bleeds may be described as numerous dark spot, Small bleeds may cause floaters. causes: diabetes, bleeding disorders	**Immediate referral**	[NB single longstanding floater with no flashes doesn't need urgent ref, likely to be and old vit haem no acute threat]
	Post vit detach	flashes of light or floaters	**Immediate referral**	
	ret detach.	Dense shadow that starts peripherally progresses towards the central vision, A veil or curtain over the field of vision, Straight lines appear curved, Central visual loss	**Immediate referral**	
Painful Acute Visual loss .	AACG	severe pain: may be ocular or headache, decreased visual acuity, symptoms worse with mydriasis (e.g. watching TV in a dark room), hard, red eye, haloes around lights, semi-dilated non-reacting pupil. corneal oedema results in dull or hazy cornea, systemic upset may be seen, such as nausea and vomiting and even abdominal pain	**Immediate referral**	reducing aqueous secretions with acetazolamide and inducing pupillary constriction with topical pilocarpine
	Optic neuritis	unilateral decrease in visual acuity over hours or days, poor discrimination of colours, 'red desaturation', pain worse on eye movement, relative afferent pupillary defect, central scotoma	refer neurol	
	post-op dec pain and vision		**Immediate referral**	
Visual distortion	Wet ARMD	reduced visual acuity: 'blurred', 'distorted' vision, central vision is affected first, central scotomas, fundoscopy: drusen, pigmentary changes	**urgent referral (to be seen within 1wk)**	stop smoking, consider vitamins, photocoag etc for wet ARMD

Gradual visual loss .				
	Cataracts	A dimming/blurring of vision. Lights may appear too bright, Glare from lamps or the sun, Poor night vision. Double vision or multiple images in one eye, Dulled colour vision, Nearsightedness, accompanied by frequent changes in eyeglass prescription	**Refer to optometrist**	Refer children urgently, Young adults: look for DM/systemic disease, then refer. In elderly refer to optician and then refer to opthal if no isg improvement after new lens prescription (ie vis aciuty <6/9 after correction with glasses)
	ARMD	asympt detected by optometrist / gradual painless blurring/loss of central vision or c/o a scotoma. O/E vis acuity, get them to look at graph paper/amsler chart	**refer urgently as per ARMD fast track pathway**	should be seen within a week. Give pt worsening advice (if not seen within one week or if worsening Sxs they shouod contact eye casualty (or get in contact with you and you''ll chase it up!)….. Advice re diet/vitamins. Stop smoking.
	COAG	usually asympt until late in the disease. Thus often picked up incidentally on eye testing (raised IOP and large optic disc cup, visual field loss.	**refer according to the glaucoma/ ocular HTN pathway**	