

Differential diagnosis of red eye with no injury

	CONJUNCTIVITIS	CORNEAL ULCER	ACUTE IRITIS	ACUTE GLAUCOMA
Eye	Usually both eyes	Usually one eye	Usually one eye	Usually one eye
Vision	Normal	Usually decreased	Often decreased	Marked decrease
Eye pain	Normal or gritty	Usually painful	Moderate pain, light sensitive	Severe pain (headache and nausea)
Discharge	Sticky or watery	May be sticky	Watery	Watery
Conjunctiva	Generalised (variable) redness	Redness most marked around the cornea	Redness most marked around the cornea	Generalised marked redness
Cornea	Normal	Grey, white spot (fluorescein staining)	Usually clear, (keratic precipitates may be visible with magnification)	Hazy (due to fluid in the cornea)
Anterior chamber (AC)	Normal	Usually normal (occasionally hypopyon)	Cells will be visible with magnification	Shallow or flat
Pupil size	Normal and round	Normal and round	Small and irregular	Dilated
Pupil response to light	Active	Active	Minimal reaction as already small	Minimal or no reaction
Intraocular pressure (IOP)	Normal (but do not attempt to measure IOP)	Normal (but do not attempt to measure IOP)	Normal	Raised
Useful diagnostic sign / test	Pusy discharge in both eyes	Fluorescein staining of the cornea	Irregular pupil as it dilates with drops	Raised IOP

First aid management of a red eye with no injury

			
Conjunctivitis	Corneal ulcer	Acute iritis	Acute glaucoma
Discharge in both eyes with clear cornea and normal pupil	White spot or mark on the cornea which stains with fluorescein	Small pupil which becomes irregular as it dilates	Very painful eye with poor vision and dilated pupil
Treat	Refer	Refer	Refer
Antibiotic ointment x 3/day for 5 days. Advise on hygiene	Hourly antibiotic drops or ointment	Dilate the pupil if possible	Oral diamox 500 mg and pilocarpine drops if possible