Red Eye

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- *caused by* ***dilation of blood vessels*** - *cardinal sign of* ***ocular inflammation***.

Diagnostic algorithm:

1. **fluorescein staining** – detects ***corneal etiologies*** (abrasions, keratopathy, ulcers, infection).
2. **measure intraocular pressure** - detects ***acute glaucoma***.
3. **check** **anterior chamber** - inflammatory cells suggests ***iritis*** or ***endophthalmitis***.

for **types of eye vessel dilation** → see [p. Eye78 >>](http://www.neurosurgeryresident.net/Eye.%20Ophthalmology%5CEye78.%20Conjunctival%20and%20Scleral%20Disorders.pdf)



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| --- | --- | --- | --- | --- |
|  | **Acute Conjunctivitis** | Acute Iritis | **Acute Glaucoma** | **Episcleritis / Scleritis** |
| **Pain** | + (burning) | ++, photophobia | ++++ (with nausea, vomiting) | + (irritation) / +++ |
| **Vision** | normal | ↓ | ↓↓↓ | normal |
| **Discharge** | mucopurulent | lacrimation | lacrimation | lacrimation |
| **Hyperemia** | conjunctival diffuse (globe + eyelids) | circumcorneal | circumcorneal & conjunctival | large patch (20-100%) of bulbar conjunctiva |
| **Cornea** | normal | transparent, precipitates on posterior surface | cloudy (edema) | normal |
| **Iris** | normal | dull, swollen | congested and bulging | normal |
| **Pupil** | normal | irregular miosis, minimally reactive | mid-dilated, unreactive | normal |

Primary care physicians should refrain from treating any patients with steroids without ophthalmologic consultation!

Bibliography for ch. “Ophthalmology” → follow this [link >>](http://www.neurosurgeryresident.net/Eye.%20Ophthalmology%5CEye.%20Bibliography.pdf)

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