RED EYE

Mahmood AR, Narang AT. Dx & Manag of Acute Red Eye. *EMCNA* (2008). 26:35-55.

CONJUNCTIVITIS

1. Allergic: IgE mediated, usually associated with itching. Tx = cold compresses, OTC **topical vasoconstrictors**, **histamine-blocking eyedrops**.
2. Viral: Most common form of infectious conjunctivitis (usually adenovirus). Preauricular LAN, global conjunctival injection, watery d/c, follicular reaction of inferior tarsal conjunctiva. Tx= cold compresses, artificial tears, **topical decongestants**, **+/- topical abx** if not able to discern from bacterial etiology.
   * **Epidemic keratoconjunctivitis** (adenovirus): Eye pain, decreased visual acuity, corneal subepithelial infiltrates (1-2 mm gray-white crumb-like defects).
   * **HSV conjunctivitis**: More prevalent in HIV pts. Foreign body sensation in eye (unlike typical viral conjunctivitis)
     - No skin or corneal involvement: Tx= topical antivirals(**trifluridine** or **vidarabine**) x 10-14 days
     - Corneal involvement (dendrites seen): topical **trifluridine** and oral **acyclovir** x 7-10 days. NO STEROIDS.
   * **HZV ophthalmicus** (VZV virus): reactivation through V1 nerve. Hutchinson sign = herpes pustules at nose tip and is predictive of ocular involvement. Dendrites on exam. Tx=**systemic vs topical antiviral agents**, +/- **steroids** only with ophtho consult.
3. Bacterial: Often assoc with morning crusting. Injection more pronounced at fornices.
   * **Contact lens wearer**: Pseudomonas risk. Tx=**topical fluoroquinolone**, **cycloplegic**
   * **Gonorrheal conjunctivitis**: sexually active patients and neonates (from birth canal), "hyperacute conjunctivitis", abrupt onset, copious purulent discharge. Tx=**topical abx**, usually with **systemic abx** b/c assoc with venereal disease
   * **Inclusion conjunctivitis (Chlamydia)**: sexually active patients and neonates, mucopurulent discharge, FB sensation. Check for concurrent STI (symptomatic only ½ patients). Tx=**topical erythro** and po **azithro** x 1

EPISCLERITIS

* Episclera = thin membrane over the sclera and beneath conjunctiva
* Benign self-limited inflammatory cond with focal area of dilated episceral vessels
* Seen w/RA, PAN, lupus, inflam bowel dz, sarcoid, Wegener's, gout, HZV, syphilis
* Tx= **NSAIDs po**

SCLERITIS

* Most common immune cause = RA. Most common vascuilitis cause = Wegener's
* Sx: Severe eye pain radiating to ear, scalp, face, and jaw. Dull pain. Photophobia.
* Exam: Deep episcleral plexus is vascularly engorged – appears blue-violet, vessels non-blanching with vasoconstrictor, scleral edema
* Tx: **NSAIDs po** +/- **steroids po** per ophtho consultation

UVEITIS

* Divided into anterior (iris, ciliary body) vs posterior (retinochoroiditis)
* Etiologies: inflammatory (50% assoc w/ systemic inflam dz), traumatic, infectious
* Consider CMV in posterior uveitis in HIV patients
  * **Anterior uveitis**: sudden, severe, painful eye; photophobia; perilimbal injection, consensual photophobia from unaffected eye
  * **Posterior uveitis**: "floaters", flashing light– no redness or pain.
* Exam: inflammatory cells, proteinaceous flare
* Complications: cataracts, glaucoma, retinal detachment
* Tx: **mydriatic** or **cycloplegic drops** +/- **steroids po** only with ophtho consult

ACUTE ANGLE CLOSURE GLAUCOMA

* Sx: blurred vision, halos around lights, N/V, HA
* Pearl: Consider in all patients with "migraine HA's" – check pupil reactivity.
* Exam: corneal edema, mid-dilated NON-reactive pupil
* IOP with >30 mmHg requires prompt treatment
* Tx: Topicals - **timolol**, **prednisolone**, **apraclonidine**; Oral – **acetazolamide**