## Priority Topic: RED EYE

# **Key Features:**

The book Basic Ophthalmology (Richard Harper) has a whole chapter on Red Eye that is excellent. It is available in hardcopy at the McGill Libraries (no e-book).

 In addressing eye complaints, always assess visual acuity using history, physical examination, or the Snellen chart, as appropriate.

#### What you should study:

- √ How to measure VA
- ✓ Childhood Eye Exam AAFP 2013
- In a patient with a red eye, distinguish between serious causes (e.g., keratitis, glaucoma, perforation, temporal arteritis) and non-serious causes (i.e., do not assume all red eyes are caused by conjunctivitis):
  - a) Take an appropriate history (e.g., photophobia, changes in vision, history of trauma).
  - b) Do a focused physical examination (e.g., pupil size, and visual acuity, slit lamp, fluorescein).
  - c) Do appropriate investigations (e.g., erythrocyte sedimentation rate measurement, tonometry).
  - d) Refer the patient appropriately (if unsure of the diagnosis or if further work-up is needed).

#### What you should study:

- ✓ Approach to Red Eye Dr Moore FMF 2015
- ✓ EM Cases Episode 9: Non-traumatic Eye Emergencies
- ✓ Color Atlas of Family Medicine: Chapter 25 Ddx of Red Eye (on Access Med)
- ✓ Dx and Mgmt of Red Eye AAFP 2010 AND Evaluation of Painful Eye AAFP 2016
- ✓ Common Eye Emergencies AAFP 2013

3. In patients presenting with an ocular foreign body sensation, correctly diagnose an intraocular foreign body by clarifying the mechanism of injury (e.g., high speed, metal on metal, no glasses) and investigating (e.g., with computed tomography, X- ray examination) when necessary.

## What you should study:

- √ Corneal Foreign Body RACGP 2017
- 4. In patients presenting with an ocular foreign body sensation, evert the eyelids to rule out the presence of a conjunctival foreign body.
- √ Just do it!
- In neonates with conjunctivitis (not just blocked lacrimal glands or "gunky" eyes), look for a systemic cause and treat it appropriately (i.e., with antibiotics).

#### What you should study:

- ✓ Ophthalmia Neonatorium CFP 2013
- ✓ Pediatric Conjunctivitis AAP 2010 includes a page on neonatal conjunctivitis but you should know about general peds conjunctivitis also
- 6. In patients with conjunctivitis, distinguish by history and physical examination between allergic and infectious causes (viral or bacterial).

## What you should study:

- √ Conjunctivitis Review JAMA 2013 (excellent article!)
- 7. In patients who have bacterial conjunctivitis and use contact lenses, provide treatment with antibiotics that cover for *Pseudomonas*.

#### What you should study: Conjunctivitis and Corneal Abrasions

√ Evaluation and Management of Corneal Abrasions AAFP 2013 Table 2

8. Use steroid treatment only when indicated (e.g., to treat iritis; avoid with keratitis and conjunctivitis).

## What you should study:

- ✓ GP Factsheet Steroids and the Eye
- 9. In patients with iritis, consider and look for underlying systemic causes (e.g., Crohn's disease, lupus, ankylosing spondylitis).

## What you should study:

✓ Uveitis AAFP 2014

## More articles that may be clinically relevant, or for more detailed studying:

- ✓ Swollen Red Eyelid Ddx AAFP 2015
- √ Glaucoma AAFP 2016
- √ Giant Cell Arteritis in the clinic AIM 2016