

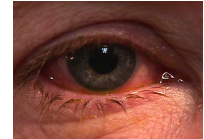
# The Red Eye

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## Introduction

- Sign of ocular inflammation
- Several causes
  - Infectious (viral vs. bacterial)
  - Allergic
  - Chemical
  - Trauma related
  - Keratitis
  - Uveitis
  - Scleritis



## Infectious Conjunctivitis

- Most common cause of “red eye”
- Acute onset redness, burning, discharge
- Viral vs. bacterial
- Contagious
- Self-limited (7-14 days)
- No eye pain or vision loss



### Viral

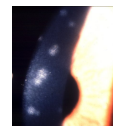
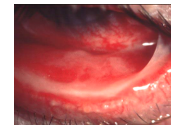
- Adenovirus
- Enteroviridae
- Coxsackie
- Herpes simplex

### Bacterial

- *Staph. aureus*
- *Staph. epidermis*
- *Strep. pneumonia*
- *H. Inf*

## Viral Conjunctivitis

- Acute diffuse hyperemia with serous discharge
- Preauricular/submandibular LAP
- Ongoing URT-I
- Adenoviral conjunctivitis
  - Contagious up to 2 weeks
    - Respiratory, direct contact, contaminated instruments
  - May involve cornea
  - Severe inflammation involving the eyelids

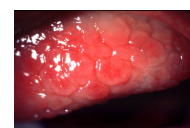


## Management

- Bacterial conjunctivitis: Broad spectrum topical antibiotics
  - Polymyxin B/trimethoprim, erythromycin
  - No need to culture
  - Continue for 2 days beyond clearing of secretions
  - No need to taper
  - Refer if: (1) Copious discharge (2) No response to treatment
- Viral conjunctivitis: Supportive treatment
  - Frequent hand-washing
  - Separate towels
  - Artificial tears for comfort
  - Refer if: (1) Severe eyelid edema (2) Pain/photophobia

## Allergic Conjunctivitis

- 2nd most common cause of conjunctivitis
- Two types
  - Type I HS (Seasonal/Perennial)
    - Common, spring&summer
  - Type I and IV (Vernal)
    - Severe and potentially blinding



**ITCHING!**

## Management

- Topical anti-allergy medications
  - Ketotifen, olopatadine, epinastine
- Artificial tears-dilute allergens
- Life style modifications
  - Avoidance of allergens
  - Frequent washing of hair
- Refer when: (1) Photophobia (2) Intense itching despite treatment
- What not to do? **Topical steroids!**

## Blepharoconjunctivitis

- Generally chronic but may have an acute onset
- Eyelid margin inflammation with spill-over conjunctival involvement
- Corneal involvement (relatively minor symptoms)
- Bilateral
- Referral needed



## When to Refer?



Pain  
Photophobia  
Blurry vision

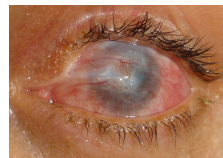
**Refer!**

H/O trauma

CL wear

## Chemical Conjunctivitis

- Pediatric age
  - Alkali > Acid chemicals
  - Household cleaning solutions (Ammonia)
  - Corneal injury



History of chemical exposure



Stop any further history taking

Irrigate the eye(s) for 10-15 minutes

Refer

## Non-Conjunctivitis Causes of Red Eye



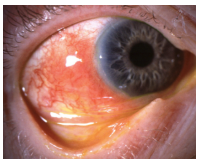
Herpetic keratitis



Herpetic keratitis



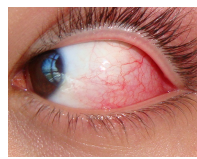
Bacterial keratitis



Scleritis



Uveitis



Myositis

## Conclusion

- Red eye-generally benign
- May be managed by pediatricians
- History is (almost) everything!
- Inquire about the 3 warning symptoms
- When in doubt: Refer!
- Do not use steroids!