



# DIAGNOSTIC & THERAPEUTIC APPROACHES IN OPHTHALMOLOGY

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## Chapter 4

### Skills 28-33

- Conjunctivitis
- Conjunctival tumors
- Criteria for D/D

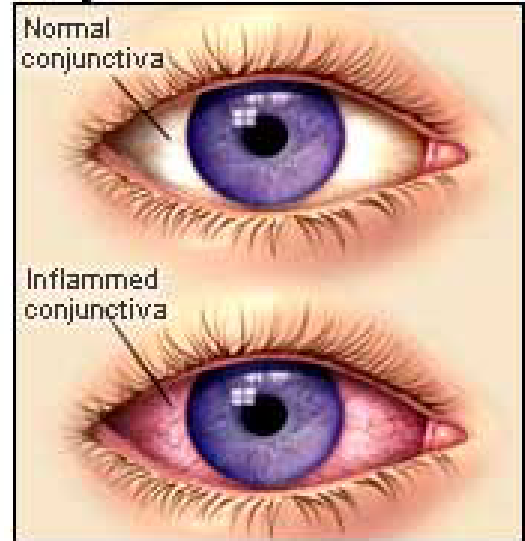
# TS 28 : Conjunctivitis symptoms

Depends on the cause !!!

## ■ Conjunctivitis types

- **Infectious**
  - Bacterial
  - Viral
- Allergic
- Toxic (irritations)

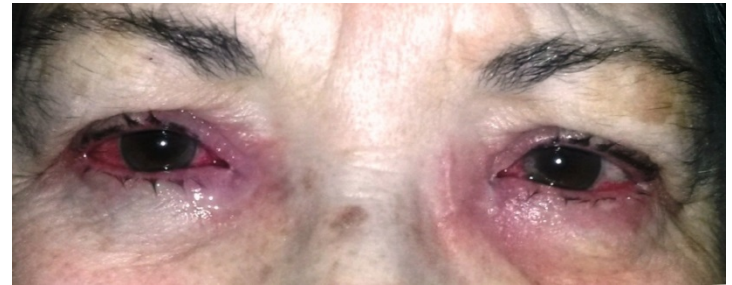
### Conjunctivitis



- Common symptoms → **Red eye, Chemosis, Pain**

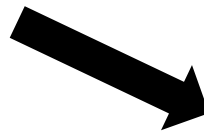
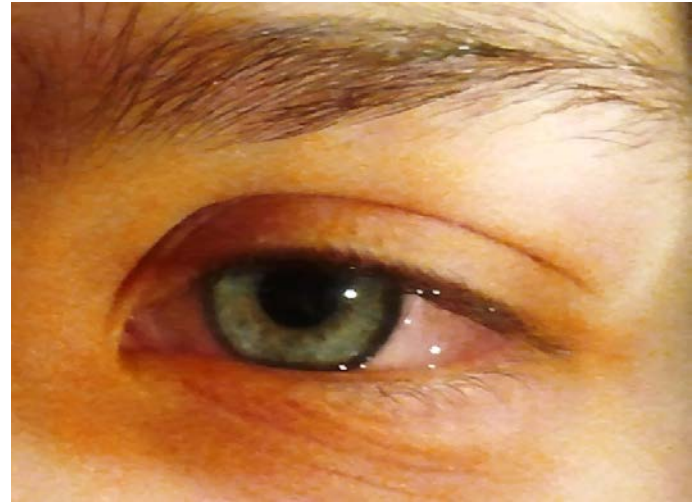
# TS 28 : Conjunctivitis symptoms

- Frequent involvement of
  - Lid margins → Blepharitis
  - Cornea → Keratitis
- Chronic conjunctivites...
  - Dry eye-related
  - Exacerbate with UV & dry environment
  - Mucous discharge
  - Do not interfere with vision



# Allergic conjunctivitis

- Itchiness
- Watery or mucous discharge
- Conjunctival papillae
- Seasonal distribution
- Younger patients



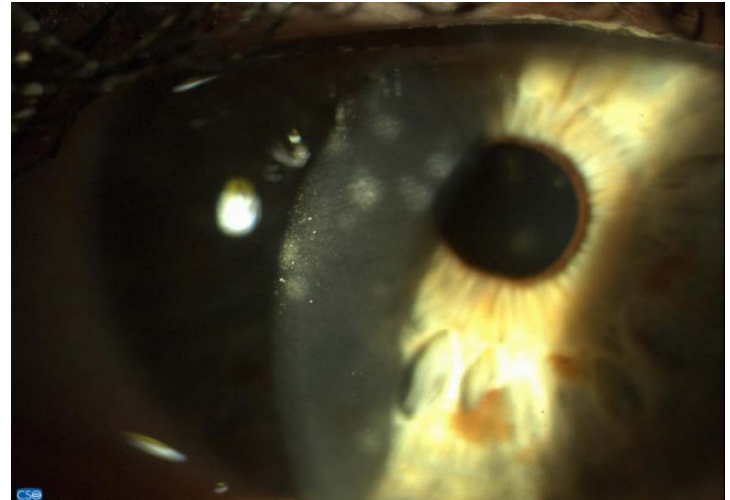
# Bacterial conjunctivitis

- Mucopurulent discharge
- Does not interfere with vision
- Sticky eyelashes
- Frequently unilateral
- Antibiotics



# Viral conjunctivitis

- Epidemic (adeno-virus)
- Cornea is often affected  
↓  
Pain/Photophobia/Blurry vision
- Very watery eye
- Fellow eye usually involved within the first week after initial appearance





# Recurrent conjunctivitis

Unilateral in elderly



Chronic dacryocystitis-  
associated



Bilateral



Blepharitis-associated



# TS 29 : Conjunctivitis causes

## Acute

- *Infectious:*
  - ✓ Bacterial
  - ✓ Viruses (adenoviruses)-  
seasonal distribution
  - ✓ Chlamydia-end of summer
  - ✓ Mimics allergic conjunctivitis
- *Allergic:*
  - ✓ Allergies during spring and  
blooming seasons

## Chronic

- *Environmental-refractive errors:*
  - ✓ Dry Eye, UV
  - ✓ Hyperopia, astigmatism,  
presbyopia
- *Infectious:*
  - ✓ Local spreading and flare ups
  - ✓ Dacryocystitis
  - ✓ Blepharitis



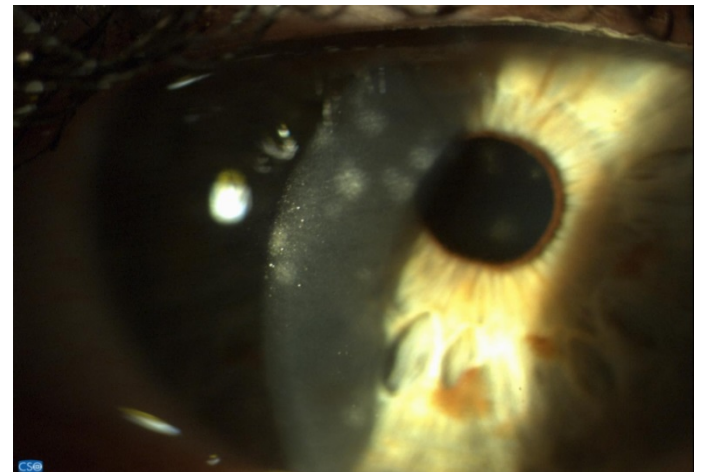
# TS 30 : Ophthalmia neonatorum

- Newborns
- 1-3 days postnatal
- Bilateral
- Maternal genitourinary track contamination during delivery
- Very rare in developed world
- Penicillin fortified drops



# Keratoconjunctivitis epidemica

- Contamination: Direct or indirect
- Incubation period: 3-7 days lasting  $\geq 2$  weeks
- Watery discharge
- Fellow eye is affected 3-5 days after initial presentation
- Pre-auricular lymph node sensitive
- Symptomatic treatment



# TS 31 : Antibiotic eye drops

- 1<sup>st</sup> line:
  - Tobramycin
  - Gentamycin
  - Chloramphenicol
- 2<sup>nd</sup> line:
  - Quinolones (1-2 drops every 4-6 hours)
- 5-7 days treatment at least!
- *Caution: Not every acute conjunctivitis is bacterial in nature*

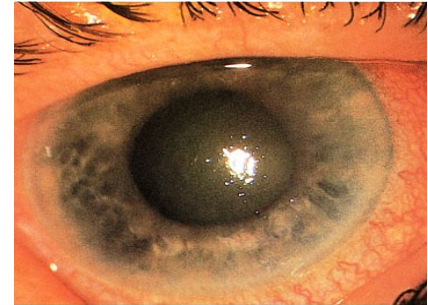
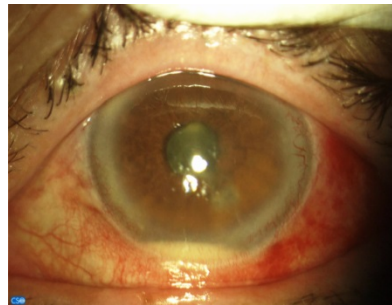
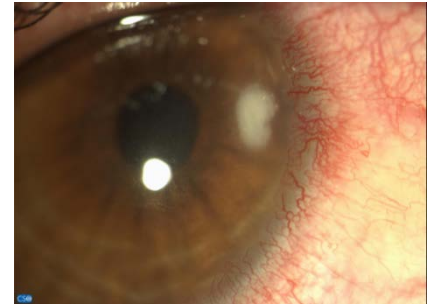
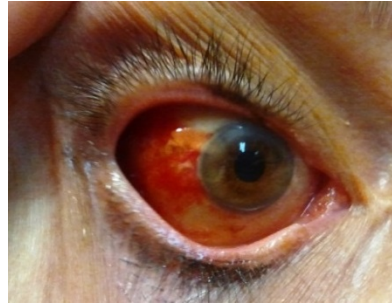


NB: Tobradex contains dexamethasone (steroid)



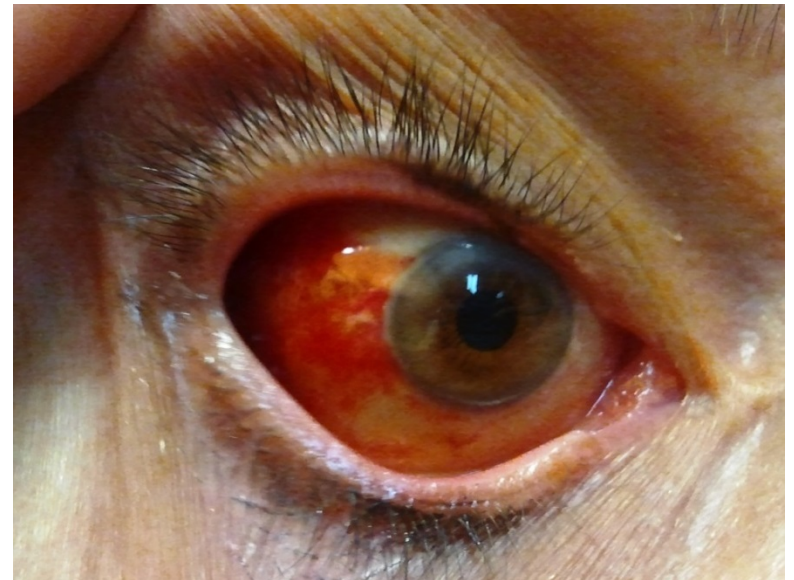
# TS 32 : Criteria for D/D

- Between:
  - i. Subconjunctival haemorrhage
  - ii. Conjunctivitis
  - iii. Scleritis
  - iv. Keratitis
  - v. Iritis
  - vi. Acute angle closure glaucoma



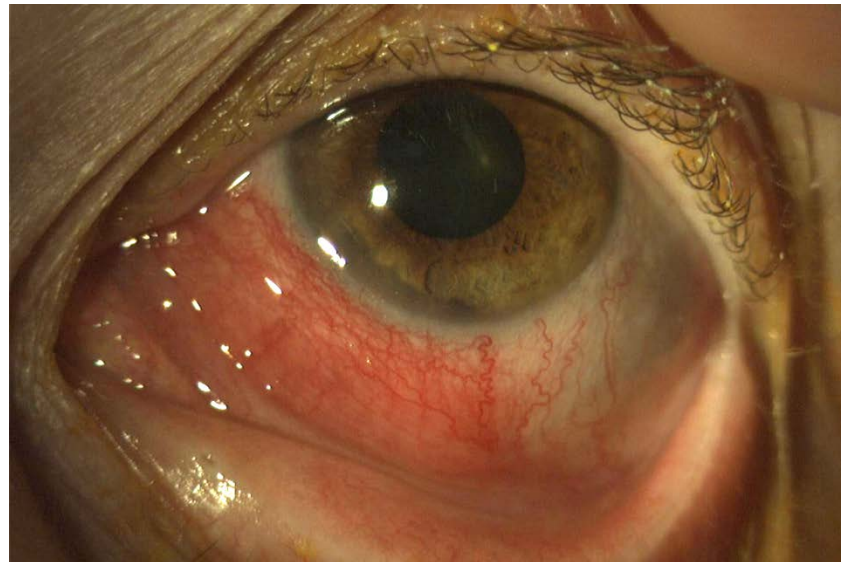
# Hyposphagma - Subconjunctival hemorrhage

- Although impressive in appearance, condition is trivial
- Painless
- Visual acuity remains unaffected
- Hx: ? diabetes or BP
- Recurrences may be common



# Scleritis

- Local redness
- Deep pain, sensitivity
- Vision is not affected
- Autoimmune disease affecting connective tissue





# Keratitis

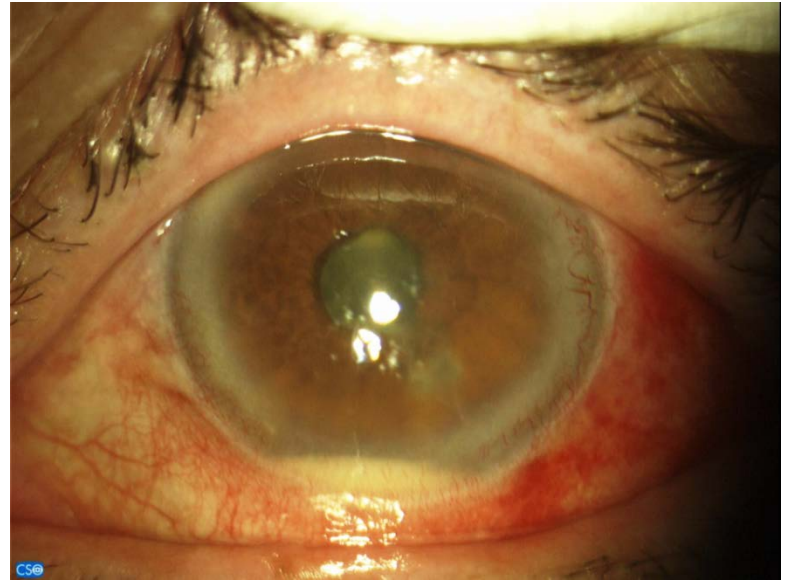
- Acute superficial pain worsening during blinking
- Blurry vision/Photophobia
- Purulent discharge is associated with corneal ulcer
- Limbal injection
- Causes: CL, trauma, immuno-compromised patients





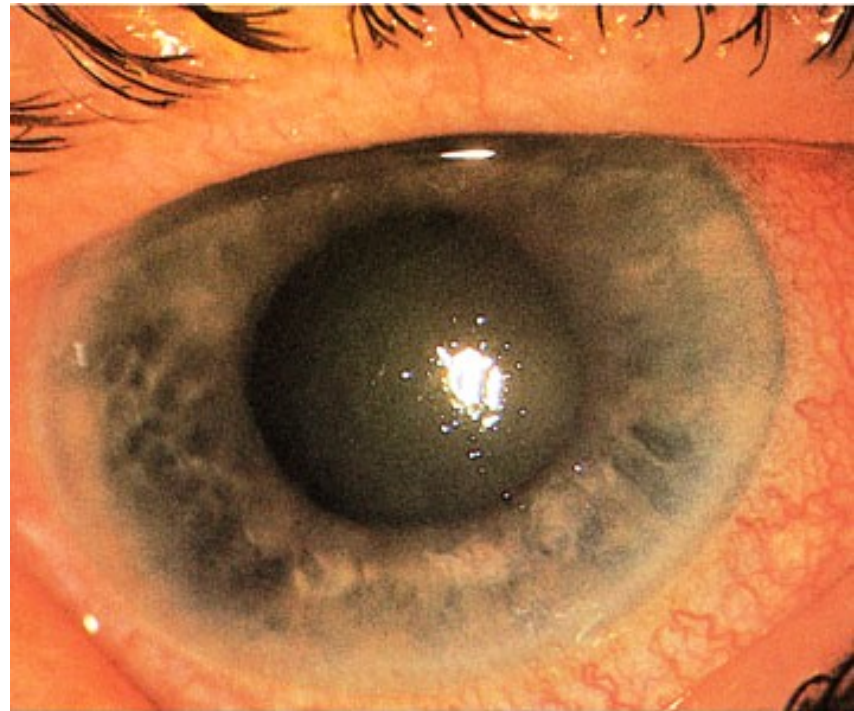
# Iritis

- Redness, limbal injection
- Photophobia: light evokes miosis and causes slow, deep pain
- Infectious or systematic causes
- Blurry vision



# Acute angle closure Glaucoma

- Deep slow pain, projecting to orbit
- Cloudy cornea
- Mid-dilated, non-reacting pupil
- Blurry vision, photophobia



# TS 33 : Conjunctival tumours

## ■ Benign degenerative changes

### • Pterygium

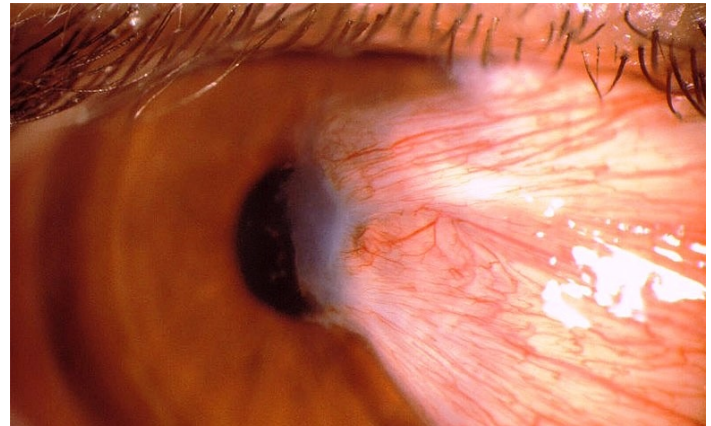
- Vascularized granulation tissue that invades cornea

### • Pingueculum



- Triangular conj. patch consisting of hyaline and elastotic degeneration

- ## ■ Differentiate from **nevi**, **papillomas** & **malignancies** (squamous cell Ca)



# Electronic Referrals - 4<sup>th</sup> Chapter

1. <http://emedicine.medscape.com/article/797874-overview>
2. <http://emedicine.medscape.com/article/1191730-overview>
3. <http://emedicine.medscape.com/article/1191370-overview>
4. <http://emedicine.medscape.com/article/1191467-overview>
5. <http://webeye.ophth.uiowa.edu/eyeforum/cases/68-Adult-Chlamydial-Conjunctivitis-Red-Eyes-Chronic.htm>
6. <http://www.aafp.org/afp/2010/0115/p137.html>
7. <http://emedicine.medscape.com/article/1192190-overview>
8. <http://www.aoa.org/documents/CPG-11.pdf>
9. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2776793/>
10. <http://emedicine.medscape.com/article/1192527-overview>