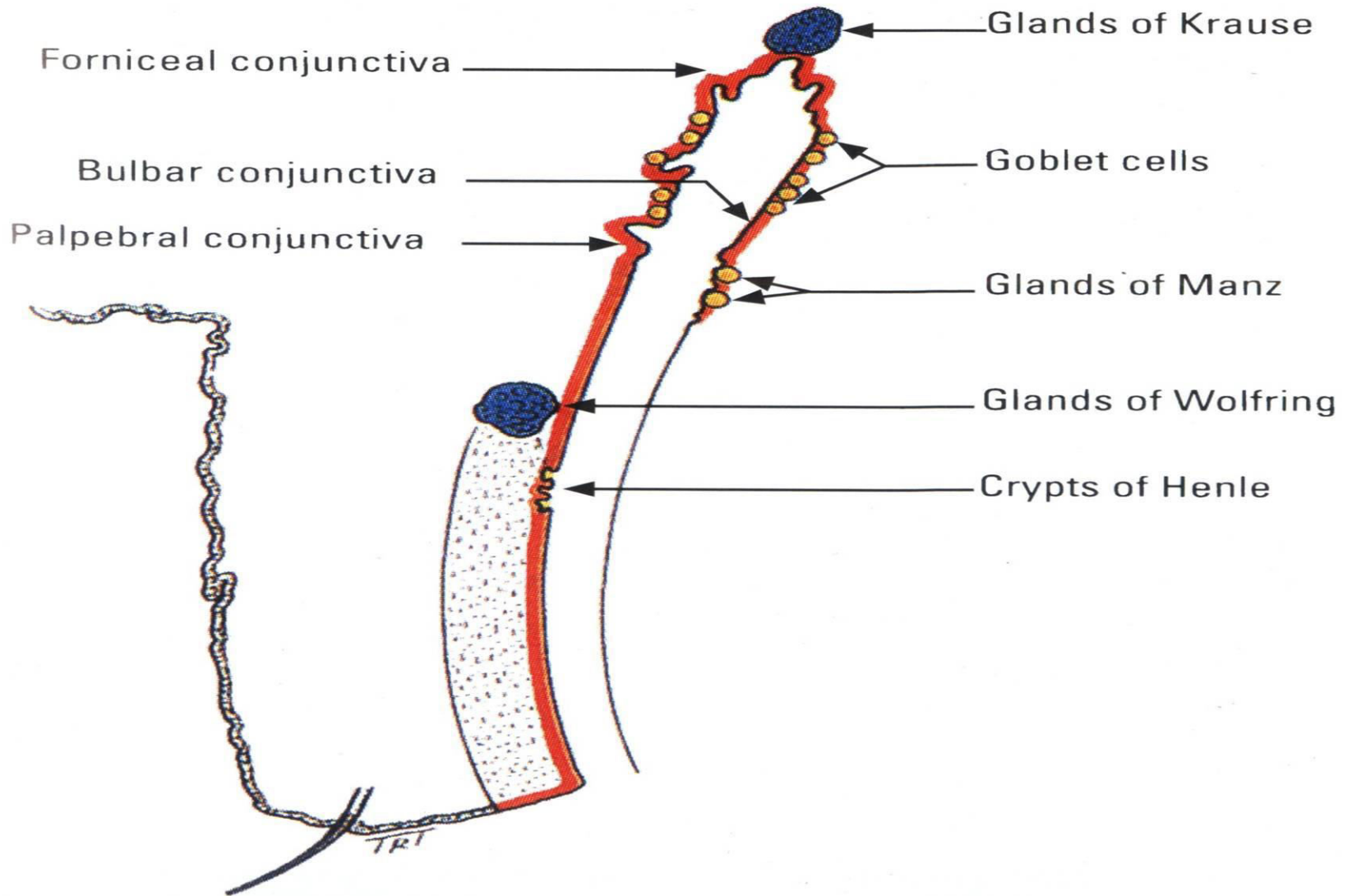


# CONJUNCTIVITIS

Dr. Afzal Qadir  
MBBS, ICO, FCPS

# ANATOMY

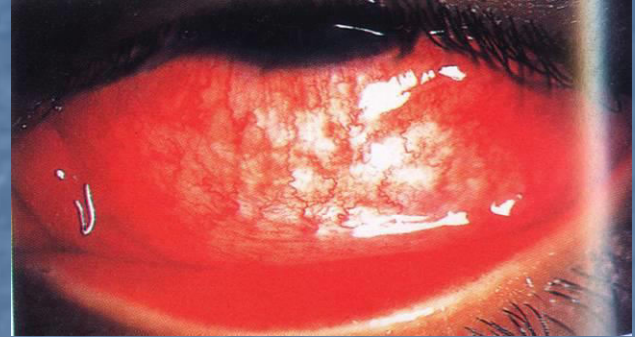


# SYMPTOMS

- PAIN & FOREIGN BODY SENSATION
- ITCHING
- LACRIMATION
- IRRITATION
- PHOTOPHOBIA
- STINGING & BURNING

# TYPES OF DISCHARGE

- WATERY



- MUCOID



- PURULENT

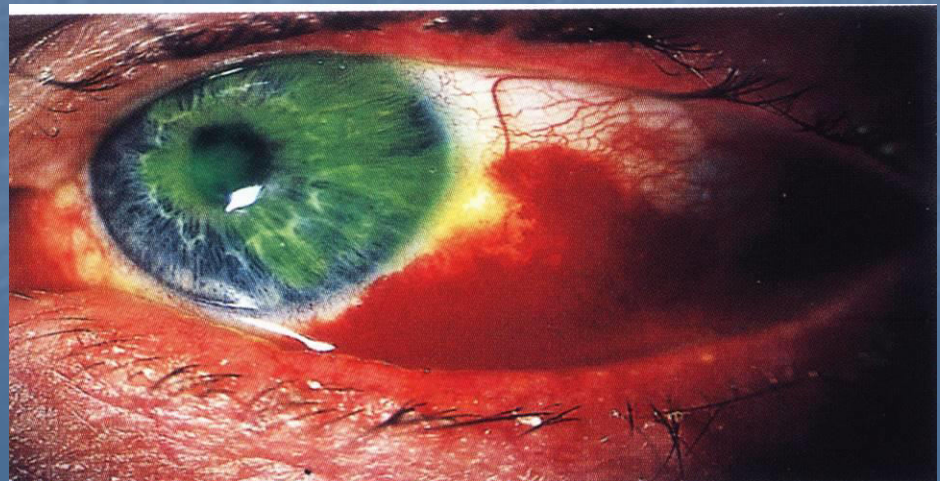
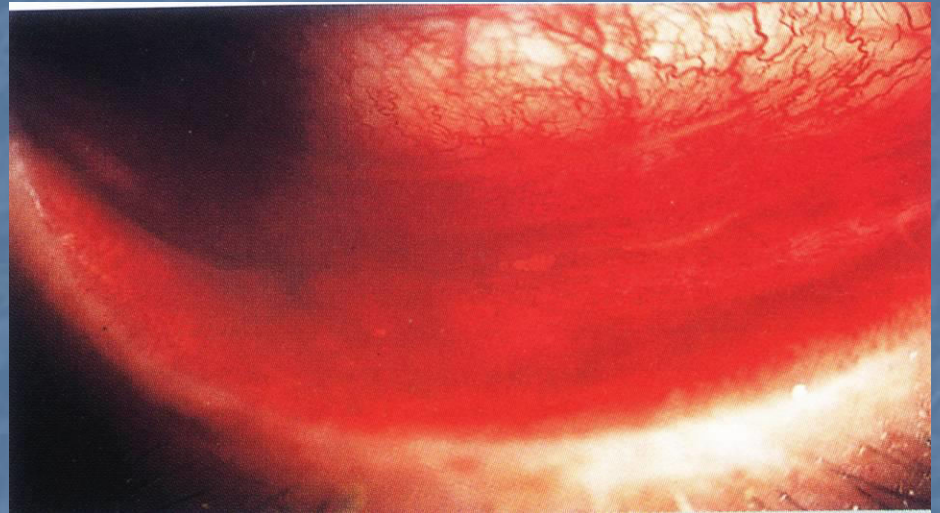


- MUCOPURULENT



# TYPES OF CONJ. REACTION

- CONJ. INJECTION
- SUBCONJ. HAEMORRHAGE



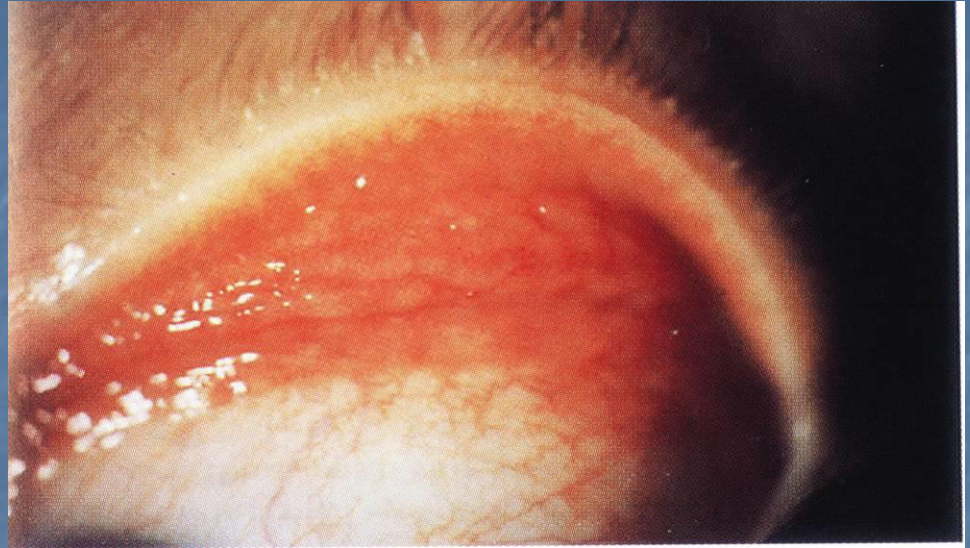
# TYPES OF CONJ. REACTION

- ODEMA ( CHEMOSIS )

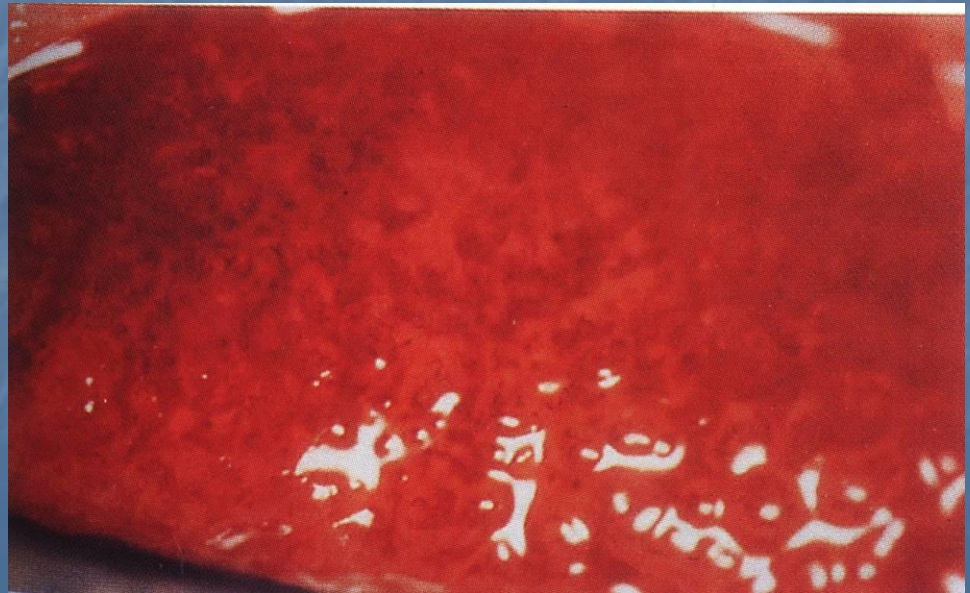




- FOLLICULAR REACTION



- PAPILLARY REACTION



# OTHER SIGNS

- **CONJ. SCARRING**



- **MEMB. FORMATION**



- **LYMPHADENOPATHY**



# CLASSIFICATION

BASED ON DURATION OF ONSET

- ACUTE
- SUBACUTE
- CHRONIC

# CLASSIFICATION

## BASED ON TYPE OF EXUDATE

- **SEROUS-** VIRAL,ALLERGIC,TOXIC.
- **CATARRHAL-** ALLERGIC
- **PURULENT-** BACTERIAL,CHLAMYDIAL
- **MEMBRANOUS-** BACTERIAL
- **PSEUDOMEMBRANOUS-**BACTERIAL

# CLASSIFICATION - AETIOLOGY

## ■ INFECTIOUS

- BACTERIAL
- VIRAL
- CHLAMYDIAL
- FUNGAL
- PARASITIC

## ● NON-INFECTIOUS

- ALLERGIC
- IRRITANTS
- ENDOGENOUS OR AUTOIMMUNE
- DRY EYE
- TOXIC (CHEMICAL OR DRUG-INDUCED)
- SELF INFLICTED/FACTITIOUS
- IDIOPATHIC



# INVESTIGATIONS

- CULTURE SENSITIVITY
- CYTOLOGICAL INVESTIGATION TO IDENTIFY CELLULAR INFILTRATE
- DETECTION OF VIRAL & CHLAMYDIAL ANTIGENS
- IMPRESSION CYTOLOGY
- PCR

# TREATMENT

- TREAT THE CAUSE
- RESTORING NORMAL ANATOMY
- LID HYGIENE
- ANTI BACTERIAL THERAPY
- USE OF STEROIDS
- USE OF ANTI-HISTAMINES
- ROLE OF MAST CELL STABILIZERS

# BACTERIAL CONJUNCTIVITIS



# BACTERIAL CONJUNCTIVITIS

- CAUSATIVE ORGANISMS:
  - Staph Epidermidis
  - Staph Aureus
  - Strep Pneumonia
  - H Influenza
  - Moraxella Lacunata

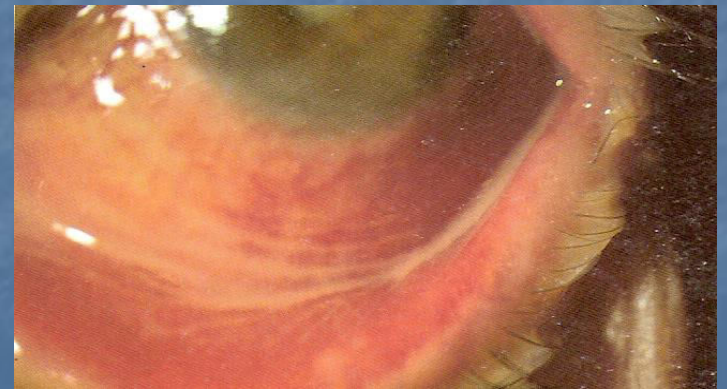
# BACTERIAL CONJUNCTIVITIS

- SYMPTOMS:

- Common, self limiting disease
- Redness, grittiness, burning and discharge
- Eye lids stuck together

# BACTERIAL CONJUNCTIVITIS

- SIGNS:
  - Crusted and edematous eye lids
  - Mucopurulent discharge
  - Velvety beefy red conjunctiva
  - Inflammatory membranes in severe cases
  - PEE and peripheral corneal infiltrates (rare)





# BACTERIAL CONJUNCTIVITIS

## ■ TREATMENT:

- Resolves within 10-14 days

- Antibiotic drops:-

- Fusidic acid

- Chloramphenicol

- Others (Ciprofloxacin, Ofloxacin, Gentamicin, Tobramycin, Neomycin)

- Antibiotic ointments:-

- Gives higher conc for longer durations but blurs the vision

- Chloramphenicol, Polyfax, Tetracycline

# ADENOVIRAL KERATOCONJUNCTIVITIS

- Occupational hazard of Ophthalmologists
- Transmission via respiratory and ocular secretions
- Dissemination by contaminated towels or equipment such as tonometer heads
- Incubation period is 4 – 10 days
- Following onset of conjunctivitis virus is shed for about 12 days



# PREVENTION OF TRANSMISSION

- Thorough washing of hands after examining the suspected case
- Meticulous disinfection of ophthalmic instruments
- Infected hospital personnel should not come in contact with patients
- Separate towels for infected persons

# CAUSATIVE VIRUSES

- PHARANGOCONJUNCTIVAL FEVER:
  - Caused by adenovirus types 3, 4 and 7 and occasionally 5
  - Transmitted by droplets
  - Typically affects children who also develop upper respiratory tract infection
  - Keratitis develops in 30% of cases

## ■ EPIDEMIC KERATOCONJUNCTIVITIS:

- Caused by adenovirus types 8 and 19
- Infection is transmitted by hand to eye contact, instruments and solutions
- Keratitis is severe and develops in about 80% of cases



# CONJUNCTIVITIS

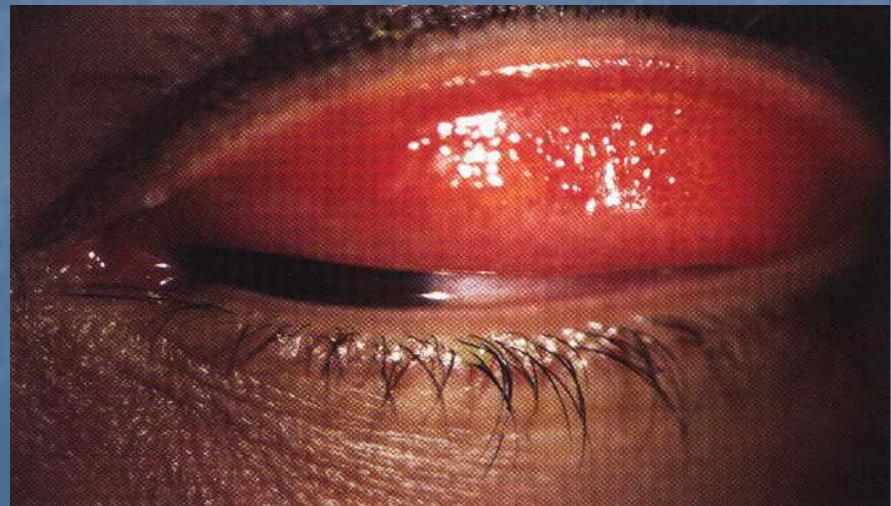
- PRESENTATION:

- ACUTE WATERING, REDNESS, PHOTOPHOBIA AND DISCOMFORT

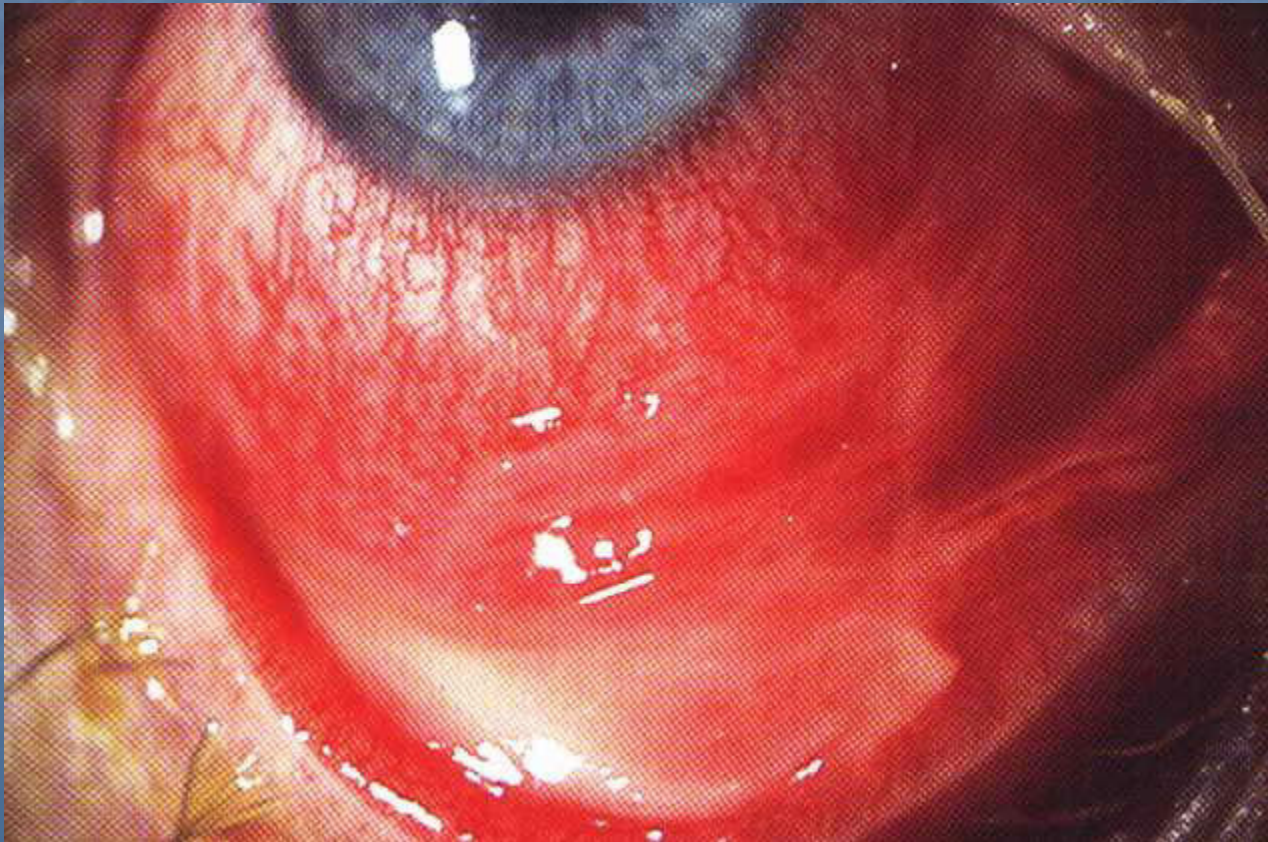
- SIGNS:

- EYELID OEDEMA

- WATERY DISCHARGE AND CONJUNCTIVAL FOLLICLES



- Subconjunctival hemorrhages
- Chemosis
- Pseudomembranes
- Tender lymphadenopathy





# TREATMENT OF CONJUNCTIVITIS

- Largely symptomatic and supportive
- Spontaneous resolution occurs within 2 weeks
- Antiviral agents are ineffective and
- Topical steroids to be avoided unless infection is very severe



# KERATITIS

- SIGNS:
  - STAGE 1:
    - Occurs within 7 – 10 days of the onset of symptoms
    - characterized by a punctate epithelial keratitis which resolves in 2 weeks



- STAGE 2:

- Characterized by focal, white, subepithelial opacities which develop beneath fading epithelial lesions
- They are thought to represent immune response to the virus and may be associated with mild transient anterior uveitis



- STAGE 3:

- characterized by anterior stromal infiltrates which gradually fade over months or years





# TREATMENT

- With topical steroids is indicated only if eye is uncomfortable or visual acuity is reduced
- Steroids do not shorten the natural course of disease but merely suppress corneal inflammation so that the lesions tend to recur if steroid therapy is stopped prematurely