Conjunctivitis is a potentially blinding condition with associated systemic manifestations

RECOGNITION AND ASSESSMENT

- Conjunctival redness
- · Swelling of conjunctiva and eyelids
- Purulent or mucopurulent discharge
- Vesicles on lids or adjacent skin (herpes simplex)

Differential diagnosis

- Sticky eye with blocked tear duct in which there is no inflammation of conjunctiva
- Congenital glaucoma in which there is corneal opacity
- Swelling of conjunctiva and eyelids as part of preseptal or orbital cellulitis

AETIOLOGY

Bacterial

- Staphylococcus aureus
- Haemophilus influenzae
- Streptococcus pneumoniae
- Serratia spp, E. coli, Pseudomonas spp
- Neisseria gonorrhoeae typical onset aged 0–5 days: mild inflammation with sero-sanguineous discharge to thick, purulent discharge with tense oedema of eyelids
- Chlamydia trachomatis typical onset aged 5–14 days: mild-to-severe swelling with purulent discharge (may be blood-stained)

Viral

• Herpes simplex virus (HSV)

MANAGEMENT

- 4-6 hrly eye toilet using sodium chloride 0.9%
- cooled, boiled tap water acceptable for home use

Conjunctivitis (see signs above)

- Swab all for:
- Gram stain and bacterial culture and sensitivities
- if other suspicions of HSV (e.g. vesicles etc.), swab for HSV PCR
 - use dry swab/moistened with viral transport media
 - place in dry tube/pot
- swab using dry swab/moistened with viral transport media, and place in dry tube/pot (check for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* PCR)
- Treat both eyes with:
- frequent eye toilet as necessary
- chloramphenicol 0.5% eye drops
- fusidic acid 1% eye drops for Staphylococcus
- Presentation ≤24 hr of birth suggests gonococcal infection inform consultant paediatrician
- If herpes suspected, begin treatment with aciclovir IV and aciclovir eye ointment while awaiting results

SUBSEQUENT MANAGEMENT

In severe non-resolving cases

- Take throat and eye swabs for viral PCR
- If herpes suspected, look for other signs of herpetic infection
- Treat suspected herpes with aciclovir IV and topical for 14 days
- Refer to ophthalmology

Neisseria gonorrhoeae suspected

- Request urgent Gram stain and culture
- Assess baby for sepsis
- Swab for PCR

CONJUNCTIVITIS • 2/2

Neisseria gonorrhoeae confirmed

- Give single dose ceftriaxone 25–50 mg/kg IV (maximum 250 mg) or if hyperbilirubinaemia or premature give cefotaxime 100 mg/kg IV
- Refer to ophthalmology

Chlamydia

- If result positive treat:
- azithromycin 20 mg/kg IV single dose
- and azithromycin eye drops twice daily for 3 days
- If maternal chlamydia treated successfully in pregnancy, baby does not require prophylactic treatment
- if unsure, swab baby's conjunctiva using nucleic acid amplification test (NAAT) swab
- if high risk, send bacterial swab for gonococcus and HIV antibody, HBsAg and HCV antibody from mother or baby

Gonococcal or chlamydia infection detected

• Refer mother and partner to genitourinary medicine for immediate treatment