Management of "Sticky Eyes" on the Neonatal unit

Background

A sticky eye is a very common problem and doesn't always indicate an infection. **Purulent discharge** needs to be taken seriously and investigated and treated appropriately. Please use clinical assessment before embarking on investigation and treatment, and seek help if not clear / inexperienced.

Common Causes

- Nasolacrimal duct obstruction
- Infection
  - Viral
  - Bacterial
    - *Staphylococcus*
    - *Pneumococcus*
    - *Haemophilus*
    - *Chlamydia*
    - *Gonococcus*
- Irritation

History

Must include review of maternal notes, history of vaginal discharge, sexually transmitted diseases and microbiology results.

Management

This will depend on the degree of discharge and any associated conjunctivitis.

Minimal Discharge and No Conjunctivitis

- <u>No swabs</u> or other investigations needed
- Clean eyes with sterile 0.9% saline solution as required (usually with cares)

Moderate Purulent Discharge +/- Conjunctivitis

- Take swab of discharge for MC&S
- Consider Chlamydia swab
- Clean eyes with sterile 0.9% sodium chloride solution as required (usually with cares), and prior to installation of any treatment
- Start Chloramphenicol ointment 1% 6 hourly
- Treat both eyes and use a separate tube for each eye
- Continue treatment for 48 hours after clinical resolution

Severe Purulent Discharge +/- Conjunctivitis

- Take swab of discharge for MC&S
- Ask microbiology for gram stain to look for *Gonococcus (gram –ve diplococci)*
- Take conjunctival scraping for Chlamydia – need to request the Chlamydia swabs from the microbiology department
- Clean eyes with sterile 0.9% sodium chloride solution as required (usually with cares), and prior to installation of any treatment
- Start Chloramphenicol ointment 1% 2 hourly, increase to hourly if clinically indicated
- Treat both eyes and use a separate tube for each eye
- Continue treatment for 48 hours after clinical resolution

Gonococcus

- If Gonococcus suspected from gram stain: Give **single dose** of Cefotaxime (100 mg/kg IM) (Ceftriaxone is also acceptable)
- Once Gonococcus confirmed, mother will need to be informed and contact tracing initiated. If mother is still an inpatient, inform the midwife caring for her. If mother has been discharged, inform her directly, and recommend a referral to the nearest Genitourinary Medicine clinic.

Chlamydia

- If Chlamydia strongly suspected start oral erythromycin (12.5 mg/kg 6 hourly) for 14 days
- Once Chlamydia is confirmed, mother will need to be informed and contact tracing initiated. If mother is still an inpatient, inform the midwife caring for her. If mother has been discharged, inform her directly, and recommend a referral to the Genitourinary Medicine clinic (Blanche Heriot) at SPH.

Ophthalmology referral

- If baby does not improve on appropriate treatment they should be referred to the Consultant Paediatric Ophthalmologist.

Notification

- All cases of Gonococcus and Chlamydia must be notified to the HPA

References

1. BNF for children 2012-2013 (www.bnfc.org)
2. Health Protection Agency (www.hpa.org.uk)
3. Miller KE, Diagnosis and Treatment of *Chlamydia trachomatis* Infection, American Family Physician, 2006:73(8); 1411-1416
4. Pilling R *et al* Ophthalmia neonatorum: a vanishing disease or underreported notification?, Eye advanced online publication, 12 December 2008; doi:10.1038/eye.2008.364

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