INTRODUCTION

Retinopathy of prematurity (ROP) is a condition due to abnormal growth of blood vessels in the baby’s eye. This is commonly seen in babies who are very premature. In normal development, blood vessels grow from the back central part of the eye (the retina) out toward the edges. This process is completed just a few weeks before the normal time of delivery. In premature babies this process is interrupted. If blood vessel growth proceeds normally, the baby does not develop ROP. If the vessels grow and branch abnormally the baby has ROP.

AIM:

• To prepare the neonate for an eye examination.
• To detect for Retinopathy of Prematurity.

EQUIPMENT

• Oral Sucrose 24%
• Sterile eye retractor and vectis
• Medication chart
• Consent for Cyclomydrl (If no consent for Cyclomydrl use Cyclopentolate and Phenylephrine)

NOTE: The Nurse Unit Manager (NUM) provides a list of infants due for screening on a weekly basis to the Ophthalmologist.

Eye check should be performed on the following infants who are:

• 4-6 weeks postnatal age
• or 31-22 weeks gestation (whichever is later).
• Minimum weekly examinations for infants with ROP developing until regression seen or when treatment is offered or as per Ophthalmologist
• Every 2 weeks thereafter for infants with retinal vessels seen in Zone 3

PROCEDURE

1. Identify the correct infant is prescribed for the eye check (R1).
2. Ensure eye-drops for pre-eye examination is prescribed (R2).
3. Obtain sterile eye retractor and vectis from locked green cupboard in medication room (Picture 1) (R3).
Prior to and During Eye Examination

4. Administer eye drops at least 30 minutes before ophthalmologist arrives as per procedure manual 
   *Administration of Eye Drops to the Neonate* (R4).
   a. Cyclopentolate 0.5% and phenylephrine **OR**
   b. Cyclomydrl Ophthalmic solution (Signed Consent required) (Form can be located in shelves at the
      Doctors Office).

5. Administer oral sucrose (see Drug protocol folder)(S).

6. Wrap infant securely in a blanket (with arms at sides) and administer oxygen as required (R6).

7. Position the infant in a comfortable anatomical position. The infant needs to be held securely (R6 & 7).

8. Assess the infant throughout the procedure (R8):
   - Cyanosis
   - Apnoea and/or bradycardia.

   Ask the Ophthalmologist to cease the examination if the infant is unstable as above.

Post Eye Examination
9. Settle infant appropriately after the examination.
10. Monitor infant for potential reaction/s (R9):
    • Cyanosis
    • Apnoea and/or bradycardia
11. The Ophthalmologist records the results of the examination on the *Neonatal Eye Examination Record* form (SEI060.464). Further review or appointments are also indicated on this form (R10).
12. Send used retractors and vectis to CSSD for cleaning and sterilizing after the procedure (R11).

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References

