HEPATITIS B IMMUNOGLOBULIN (HBIG): NEONATAL

Keywords: hepatitis b immunoglobulin, HBIG, neonatal immunisation, neonate of hep B positive mother, perinatal transmission, neonatal IM injection

AIM

To provide neonatal HBIG to all neonates born to known hepatitis B surface antigen positive mothers, and other neonates at high risk contracting the hepatitis B virus (HBV).

KEY POINTS

1. Hepatitis B vaccine alone, HBIG alone, and hepatitis B vaccine plus HBIG has been shown to reduce perinatal transmission of HBV.¹
2. At KEMH the combination of thiomersal-free monovalent hepatitis B vaccine and a paediatric dose of HBIG is recommended for all neonates born to mothers who are positive for hepatitis B surface antigen (HBsAg).
3. Administration of HBIG is recommended to be administered within 12 hours of birth. The efficacy decreases markedly if given more than 48 hours after birth.²
4. The first dose of HBIG should be given at the same time as the hepatitis B vaccine, however it should be given in the opposite anterolateral thigh of the neonate.²

DOSAGE

The dose of HBIG is 100IU units to be given by intramuscular injection (IM).²

PRIOR TO ADMINISTERING THE IMMUNOGLOBULIN

1. The order of HBIG is written by the doctor on the MR 811 Neonatal Inpatient Medication Chart. The midwife telephones the haematology Blood Bank to request the HBIG; then sends or arranges for a neonatal identification sticker label to be taken to the lab for HBIG to be dispensed.
2. The midwife ensures the MR 216 Consent for Hepatitis B Immunisation form is signed by the mother prior to administering vaccination.
3. Check that the identification name bands on the mother and the neonate correspond with the order on the medication chart and the consent form.

ADMINISTRATION OF THE IMMUNOGLOBULIN

1. Administration of the HBIG is given at the same time as the first dose of thiomersal-free monovalent hepatitis B vaccine; within 12 hours of birth.²
2. The vastus lateralis muscle in the anterolateral thigh is the recommended site for IM vaccination in infants < 12 months of age due to its larger muscle size.
3. It is important that infants do not move during injection of vaccine. Excessive restraint can increase their fear and result in increased muscle tension.
4. See also Clinical Guideline, O&M, Neonatal Care: Hepatitis B vaccine: Neonatal Administration
5. If the mother has a known blood borne virus the limbs must be cleaned with soap and water prior to administration.
6. Administer sucrose or the mother can breastfeed during the administration.
7. Hand hygiene must be performed before and after the procedure as per the Infection Control Policy 2.2 Hand Hygiene.
For intramuscular injection use a 25mm needle.
- Pierce the skin at an angle of 90º to the skin so the needle can be safely inserted to the hub.
- See also Clinical Guideline, O&M, Neonatal Care: Hepatitis B Vaccine: Neonatal Administration
- **Note:** if concurrent administration is not able to be done, vaccination should not be delayed beyond 7 days after birth.

**POSTNATAL EDUCATION**

- Inform the woman of the subsequent schedule for multivalent/combination hepatitis B containing vaccinations.
- Provide information about known side-effects for the neonate after vaccination.

**DOCUMENTATION**

Record HBIG administration on the:
- **MR 410** Neonatal History.
- Baby's Personal health record (purple book).
- **MR 811** Neonatal Inpatient Medication Chart.
- **MR 425.10** Care of the Well Neonate Chart.

**REFERENCES / STANDARDS**


**RESPONSIBILITY**

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