

GSTFT Clinical Practice Guideline

Immunizations in the Paediatric Sickle Cell Clinic

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Immunizations in the Paediatric Sickle Cell Clinic

General Principles

- Informed consent must be taken from the parent/carer.
- Immunizations should be deferred if the child is unwell with a febrile illness.
- All immunizations are prescribed in the Once Only section of the drug chart, documented in the notes, on EPR, and in under-5s, in the Child Health Record.
- The clinic letter should inform the GP (cc Health Visitor).

- See summary sheet for timing of immunizations and serology
- The Immunizations which we expect to give in clinic are Prevenar (when it has not been given by the GP with the primary immunizations – see below), Pneumonvax, and Hepatitis B. However, we recommend other vaccines eg Influenza, which are given by the GP and this advice must be communicated to the families and GPs.
- For follow-up pneumonvax in children attending Philip Isaacs for monthly blood transfusions the vaccination should be given whilst a day case, i.e. not in out-patients to avoid confusion.
- There are very few exceptions to the recommendations below eg patients post-bone marrow transplant / those with bleeding disorders – please discuss

Anti-Pneumococcal Immunization

- Young children <18/12 cannot mount a good immune response to polysaccharide antigens such as Pneumonvax. By combining a polysaccharide antigen with a conjugate, as in Prevenar, an effective response can be obtained in infants. Therefore, the current advice is that Prevenar is given with the primary immunizations (see below) to provide protection in the youngest age group, and Pneumonvax is given from the age of 2 years and thereafter.

Prevenar (7-valent conjugate vaccine)

- Ideally given by GP with primary immunizations at 2, 4 months with further dose in 13th months by GP.
- If not given by 7 months → 2 doses of 0.5ml im, at least 1 month apart plus 3rd dose at 12-16 months in clinic.
- If not given by 12-23 months → 2 doses of 0.5ml im, at least 1 month apart in clinic.

Pneumovax (23-valent polysaccharide vaccine, PPV)

- Dose: 0.5ml im
- Give at 2 years of age and 5-yearly thereafter. Ensure the immunization is documented on EPR, on the front of the notes and in the Child Health Record carried by the parent(s). Repeat immunization < 3 years can cause severe reactions.
- New patients – ask about immunizations received. If history unclear, check anti-pneumococcal antibodies and immunize if indicated.
- If a patient is due to undergo splenectomy, ensure that the Pneumovax is up to date.

Hepatitis B - Children born at STH

- If the mother was HepBsAg+, neonatal immunization will have been given.
- Offer immunization to all patients starting at 1 year; 3 doses of 0.5ml Engerix-B im
→ 1st and 2nd doses 1 month apart, 3rd dose 6 months after the 1st
- Check anti-HBsAbs at 2 years of age.
→ If <100mIU/ml give 4th dose and retest 1 month later.
→ If <10mIU/ml consider - infection/immunosuppressed?
- Check anti-HBsAbs annually and boost when <100mIU/ml or every 5 years (whichever is sooner) and recheck antibodies again after 4 weeks.
- If inadequate response (anti-HBsAbs >100mIU/ml are considered protective)
→ repeat full course and recheck

Hepatitis B - Patients new to STH

- Check HBsAg, anti-HBsAb and anti-HBcAb (& Hep C antibodies) at first visit:
 - If not immune (anti-HBsAbs >100mIU/ml are considered protective)Immunise - 1st and 2nd doses 1 month apart, 3rd dose 6 months after the 1st
Dose of Engerix-B 0-12 years 0.5ml im, >12 years dose 1.0ml im.
 - If evidence of previous infection → send further sample to virology for confirmation and refer to the liver unit.

Hepatitis B - Patients Receiving Regular Blood Transfusions

- Patients receiving blood products should be immunised against Hepatitis B.
- Check anti-HBsAb, anti-HbcAb and HBsAg (and Hepatitis C antibodies) if previously transfused.
 - If not immune (anti-HBsAbs >100mIU/ml are considered protective)Immunise - 1st and 2nd doses 1 month apart, 3rd dose 6 months after the 1st
Dose of Engerix-B 0-12 years 0.5ml im, >12 years dose 1.0ml im

Check anti-HBsAb 1 month after 3rd dose

- If <100mIU/ml give 4th (booster) dose and retest 1 month later.
- If <10mIU/ml consider - infection/immunosuppressed?

- Check anti-HBsAb annually and boost when <100mIU/ml or every 5 years (whichever is sooner)
- Patients with significant hepatopathy should also receive Hepatitis A vaccine.
- Patients with Hepatitis B or C should be referred to the liver unit.
- These patients should have their immunizations given on Philip Isaacs Ward only.

Influenza

- Six months of age and above, advise the family and ask GP to give annually every autumn.

Hepatitis A

- Recommended for travel to Caribbean or Africa →ask GP to arrange with other travel immunizations.
- Recommended for patients with significant hepatopathy (arrange in clinic)
- Dose 0.5ml im plus booster dose 6-12 months later. If booster not given after recommended interval, may be delayed 3 years after 1st injection

Meningitis A&C

- Recommended for travel to Africa, Pakistan, Nepal, Bhutan, Brazil and parts of Saudi Arabia when not on pilgrimage. Advise family and ask GP to arrange.

Meningitis ACWY

- Recommended for travel to Hajj or Umrah. Advise family and ask GP to arrange.

New patients

- Check what routine immunizations they have received - as a rule:-

By 6 months should have received 3 doses DTP, Hib, Polio and Meningitis C

By 15 months MMR
By school entry 4th DT and Polio and Meningitis C
Between 10 and 14 years BCG
Before leaving school 5th Polio and DT

These would normally be given by the GP/at school – please ask the GP to arrange

- In addition, check if they have received any of the following -

Pneumococcal – Prevenar and/or Pneumovax
Influenza
Hepatitis B
Hepatitis A

With the exception of Influenza vaccine (ask the GP to arrange) organise the others in clinic.

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