HUMAN IMMUNODEFICIENCY VIRUS (HIV) • 1/2

Maternal to child transmission of HIV can be prevented only if maternal HIV status known

ANTENATAL

- Check latest version of care plan and last maternal HIV viral load
- If mother is to have zidovudine IV, ensure prescribed antenatally by obstetric team
- Confirm labour ward has antiretrovirals indicated for baby
- Recommend formula feeding; provide bottles/steriliser if necessary
  - if mother wishes to breastfeed, refer to HIV team
  - **absolutely avoid** mixed feeding with bottle and breast

Maternal blood tests

- Check every mother's HIV results
  - if no result, recommend mother tested urgently (point of care if available)
  - if declined, offer baby testing (urgent HIV antibody)
  - if declined, and especially if from sub-Saharan Africa, refer urgently to lead HIV consultant/consultant-on-call
  - urgent court order may be required to test baby if mother has HIV

Low-risk group

- Maternal viral load <50 copies/mL
- Give baby zidovudine for 4 weeks

High-risk group

- Mother's viral load >50 copies/mL or not known
- Give baby zidovudine, lamivudine and nevirapine
- If maternal resistance and viral load >50 copies/mL, follow individualised plan
- If mother diagnosed postpartum, start baby on triple therapy immediately if aged <72 hr

TREATMENT OF BABY

- Do not delay treatment for blood tests or any other reason
- Start as soon as possible after birth, definitely within 4 hr

Zidovudine 4 week dosing schedule (gestational age at birth)

>34 weeks and feeding	4 mg/kg oral 12-hrly
>34 weeks and not tolerating feeds	1.5 mg/kg IV over 30 min 6-hrly
30–34 weeks and on feeds	2 mg/kg oral/NG 12-hrly for first 2 weeks **Then** 2 mg/kg oral/NG 8-hrly for second 2 weeks
<30 weeks and on feeds	2 mg/kg oral/NG 12-hrly
<34 weeks and not tolerating feeds	1.5 mg/kg IV over 30 min 12-hrly

- Lamivudine 2 mg/kg oral 12-hrly for 4 weeks
- Nevirapine 2 mg/kg oral daily for 1 week, then 4 mg/kg daily for 1 week, then stop
  - if mother on nevirapine >3 days, give baby 4 mg/kg daily for 2 weeks then stop
- If medication cannot be given orally, give zidovudine IV
  - if high-risk, change to zidovudine oral for 4 weeks as soon as medication can be given orally and add lamivudine oral for 4 weeks and nevirapine for 2 weeks
- If maternal viral load >50 copies/mL and antiretroviral resistance, discuss with lead consultant for HIV perinatal care
- Advice available (24 hr) from regional hub [e.g. Birmingham Heartlands Hospital (0121 424 2000), North Manchester (0161 624 0420), London: St Mary's (0207 886 6666) or St George's (0208 725 3262)]

TESTING OF BABY

- HIV viral load (RNA PCR) (2 mL EDTA) at local virology laboratory
- If recommended by HIV specialist for babies of mothers who may have been infected at the end of pregnancy, also send HIV DNA PCR, (1.3 mL EDTA) sent to Public Health England at Colindale with paired sample from mother (complete Reference Test form, available to download from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/344580/S3_HIV_Reference_Test.pdf)
- Day 1 (or ≤48 hr after birth if weekend/bank holiday)

- Do not use cord blood

DISCHARGE AND FOLLOW-UP

- Advise postnatal staff not to recommend breastfeeding
- Contact obstetric team to organise cabergoline for mother to suppress milk
- If mother does breastfeed, monthly HIV viral load testing for mother and baby
- If baby vomits within 30 min of taking medicines, or if medicine is seen in the vomit, give the dose again
- Prescribe first dose zidovudine as stat dose, then prescribe twice daily doses at convenient time of day e.g. 9 am and 9 pm; treatment dose 4 x prophylaxis – ensures no risk of toxicity from 2 close together doses
- Round dose up to nearest easily measurable volume
- Dose does not need to be changed with baby's weight gain
- Ensure mother confident to give antiretrovirals to baby
- Dispense 4 weeks' supply on discharge
- Notify lead consultant for HIV who will notify British Paediatric Surveillance Unit (BPSU)
- Follow-up appointment with lead consultant for HIV at 6 weeks and 3 months
- Ensure all involved have record of perinatal care: mother, paediatrician, obstetrician, infectious diseases consultant

SUBSEQUENT MANAGEMENT

Investigations

HIV viral load at 6 weeks and 3 months

- HIV antibody at 2 yr if laboratory only using combined antibody/antigen test, (or 18 months if earlier generation antibody test used)

PCP prophylaxis

If maternal viral load >1000 copies/mL or unknown, give baby co-trimoxazole:

- baby >2 kg: 120 mg
- baby <2 kg: 900 mg/m^2 or 24 mg/kg
- once daily 3 times/week (Monday, Wednesday, Friday)
- start at 4 weeks
- stop if HIV viral load still negative at 3 months

Immunisations

- Unless high risk of TB and last maternal viral load <50 copies/mL, and exclusively formula-fed, delay BCG vaccination of baby until results of 3 month PCR tests negative
- Recommend all other vaccinations as per routine schedule (including MMR)