Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

WOMEN'S HEALTH AND PAEDIATRICS
MATERNITY UNIT

GUIDELINES FOR THE MANAGEMENT OF WOMEN WITH HEPATITIS B, HEPATITIS C OR HIV ON THE LABOUR WARD

Amendments			
Date	Page(s)	Comments	Approved by
June 2021	4	Urgent update to medication for high viral load in labour in line with BHIVA guidance 2020 3rd interim update	Women's Health Guidelines Group
March 2018	Whole Document Review	No changes	Women's Health Guidelines Group
June 2021	Table addition P4	Updated in line with national guidance	Rapid ratification process. Whole document currently under review

Compiled by: Speciality Lead Obstetrics

In Consultation with: Obstetric Consultant Group

Ratified by: Women's Health Guideline Group

Date Ratified: **November 2014**

Date Issued: **November 2014**

Next Review Date: **March 2021**

Target Audience: All Staff working in maternity services

Impact Assessment Carried Out By: Women's Health Guideline group

Comments on this document to: Obstetric Speciality Lead

ASHFORD & ST. PETER'S HOSPITAL NHS FOUNDATION TRUST
WOMEN'S HEALTH AND PAEDIATRICS
MATERNITY UNIT

GUIDELINES FOR THE MANAGEMENT OF WOMEN WITH HEPATITIS B, HEPATITIS C OR HIV ON THE LABOUR WARD

See also
Infection Control
Notification of Infectious Diseases
Neonatal Hepatitis B Immunisation
Hepatitis C Positive Mothers – Neonatal Management
HIV and management of babies born to HIV positive mothers
Care of Women in Labour
Labour Ward Communication and Roles of Key Personnel
Caesarean Section Care

Contents

1.0 INTRODUCTION AND PURPOSE

The purpose of this guideline is to demonstrate the few substantial differences that exist in the management of labour in women with these blood borne viral infections.

2.0 DUTIES/RESPONSIBILITIES

Staff should protect themselves from transmission of blood borne viruses at all times. Remember there are women with these viruses who have not been tested; this is especially true for hepatitis C as it is not part of routine antenatal screening and selective testing does not identify all cases. Gloves should be worn when there is any risk of contact with bodily fluids, and staff should cover cuts/grazes on hands with a waterproof dressing. Protective eye shields are available on the labour ward.

Infection control procedures should not reveal a woman's HIV or hepatitis status to members of the public. Discretion and confidentiality must be maintained. For example

HIV status should not be prominent on the front of notes or specimen containers (however risks of infection stickers are required). Names and illnesses should be discussed only within the team directly involved in the care.

The number of carers on labour ward should be kept to the minimum. As far as possible there should be continuity of midwifery care post-delivery and effective communication with other specialists.

There is no contraindication to any form of analgesia in labour. If the woman requires an anaesthetic (epidural, spinal or GA), the anaesthetist must be informed of her hepatitis/HIV status.

There is no need to separate mother and baby after delivery.

The mother should be kept fully informed throughout.

Remember that unbooked women who have entered the U.K. from high risk areas may be particularly at risk of these viral infections.

Hepatitis B
Staff should be up-to-date with their hepatitis B vaccinations and know their response to the vaccine.

When the woman is admitted to labour ward the midwife should ascertain from the notes whether there is a low or high risk of viral transmission. If the results of the antenatal serology are not in the woman's hand-held notes the midwife should check the results on the computer.

If low risk:
- No extra precautions by labour ward staff
- Normal labour management
- Breast feeding is not contraindicated
- Neonatal immunisation:
  - First dose of hepatitis B vaccine (0.5ml) i.m. to be given by the paediatric SHO before the baby leaves the labour ward.
  - Hepatitis B vaccine is a stock drug and is stored in the labour ward fridge
  - Baby does **not** need hepatitis B immunoglobulin
  - More detailed information is available in the neonatal protocol file kept on the neonatal unit.

If high risk:
- For vaginal examinations and catheterization wear gloves, plastic apron and eye protection
- Do not use fetal scalp electrode or perform a fetal blood sample. Therefore if the CTG is pathological, or uninterpretable, delivery by caesarean section may be needed.
- Vaginal delivery: wear protective gown, gloves, mask and eye protection
- Caesarean section as above. Double gloves for surgeon and assistant (personal preference for single gloves is acceptable).
- Baby:
  - Immunization (vaccine and immunoglobulin) should have been planned antenatally and will be organised by the paediatricians.
  - Baby **must not** leave labour ward until i.m. hepatitis B immunoglobulin (200 iu) **and** hepatitis B vaccine (0.5ml) have been given by the paediatric SHO.
  - The first vaccination of the course and the immunoglobulin can be given simultaneously to the baby at two different sites.
  - Both hepatitis B immunoglobulin and hepatitis B vaccine are stock drugs and are kept in the labour ward fridge.
  - More detailed information is available in the neonatal protocol file kept on the neonatal unit.
- Usual postnatal management. The woman should be asked to dispose of sanitary towels in her own disposal bag.

- Breast feeding is not contraindicated.
- Soiled linen should be double bagged and sent to the laundry as infected linen.
- Equipment:
    - No special precautions: delivery instruments should be sent to CSSD, resuscitaire should be cleaned and all tubing replaced and the laryngoscope should be washed.

Hepatitis C
There is no vaccine or immunoglobulin available.

Manage as for high risk hepatitis B.

A decision re. mode of delivery will usually have been made antenatally. The vertical transmission rate of hepatitis C when the mother is hepatitis C RNA PCR (polymerase chain reaction) positive is approximately 3% (Resti et al, 1998). Delivery by caesarean section does not reduce the risk of transmission to the fetus. Mothers who are hepatitis C antibody positive but PCR negative are a much smaller risk to their baby.

Breast feeding is not contraindicated

HIV
A woman with known HIV admitted in labour is likely to have a management plan for delivery in her notes. If she is admitted in preterm labour there may not be such a plan; in these cases decisions about labour ward management will be made by the duty registrar in consultation with a consultant.

Without any intervention the maternal-fetal transmission rate is approximately 25%, much of which occurs during pregnancy. It is clear that transmission rates are mainly related to maternal viral load both during pregnancy and at the time of birth (BHIVA 2012). If the viral load is suppressed with medication the risk of maternal fetal transmission during pregnancy, labour and delivery is <1%.

If the woman is near to term mode of delivery will usually have been decided, and documented in the notes. The advice will depend upon a recent viral load and her obstetric history. In general women with low viral loads (< 50 copies/ml) should be advised to have a vaginal delivery unless there is an obstetric indication for caesarean section (BHIVA 2012).

If the woman has a high viral load, (>50 copies/ml) caesarean section with IV Zidovudine cover (see Appendix 1) should be advised.

Untreated HIV positive women, women with a viral load that is unknown or >100,000 HIV RNA copies/ml should be prescribed: -

Untreated HIV positive woman at term (37 weeks gestation)	**Untreated HIV positive woman preterm (<37 weeks gestation)**
Stat dose oral Nevirapine 200mg	Stat dose oral nevirapine 200mg
Oral Zidovudine 300mg/ Lamivudine 150mg BD	Oral Zidovudine 300mg/ Lamivudine 150mg BD
Oral Raltegravir 400mg BD	Oral Raltegravir 400mg BD
IV Zidovudine as per protocol for the duration of the labour (see Appendix 1)	IV Zidovudine as per protocol for the duration of the labour (see Appendix 1)
	If the infant is unlikely to be able to oral medications then consider addition of double dose Tenofovir DF 245mg OD (**490mg to provide double dose**) to further load the infant

Invasive intrapartum procedures and prolonged rupture of membranes may increase the risk of mother to child transmission. Where possible avoid the use of fetal scalp electrodes, fetal blood sampling and early ARM. If pre-labour rupture of membranes occurs at > 34 weeks early augmentation should be advised (BHIVA 2012).

If the woman is allowed to labour, her labour should be managed in the usual way including an active third stage.

Disposal of placenta:

Place in double yellow bag, no additional precautions.

Breast feeding is **strongly contraindicated**.

The baby will need review by the paediatric registrar immediately after delivery to arrange blood tests and prophylactic Zidovudine treatment:

- Blood to be taken from the baby for FBC (1ml EDTA) and HIV PCR (1ml EDTA). These need to be 2 separate samples. Microbiology must be informed that the sample has been sent to ensure that it is processed that day, both samples should be sent urgently with maternal blood.
- A term baby will require Zidovudine syrup (4mg/kg) every twelve hours (if the baby is preterm alternative regimes will be needed, these must be promptly discussed with a consultant neonatologist). The first dose must be given within six hours of delivery. The syrup contains 10mg/ml of Zidovudine; therefore give 0.4ml/kg (round up to nearest 0.05ml) with a 1ml syringe every twelve hours (this must be prescribed on the baby's drug chart by the paediatrician). Zidovudine syrup is stored in the labour ward drug cupboard.

The mother should be reassured that social contact with her baby carries no risk of HIV transmission. The infant does not routinely need to go to NICU or SCU.

Cleaning procedures as for high risk hepatitis B.

Knowing a person's HIV status does not permit one to pass on this information without consultation with the patient. Where there is any conflict this must be discussed with immediate manager. Measures must be taken to protect confidentiality and prevent accidental disclosure.

3.0 MONITORING OF COMPLIANCE

Measurable Policy Objective	Monitoring/ Audit method	Frequency of monitoring	Responsibility for performing the monitoring	Monitoring reported to which groups/ committees, inc responsibility for reviewing action plans
e.g. All policies will be reviewed by their authors at least annually to ensure that they remain valid and in date	Compliance audit of sample of policies (including Review History)	Annual	Associate Director of Quality	Management Executive

6.0 REFERENCES AND BIBLIOGRAPHY

BASSH (2008). United Kingdom national guideline on the management of viral hepatides A,B & C. London, UK. British Association for Sexual Health and HIV (BASSH) 2008.

BHIVA (2014). Guideline on the management of HIV infection in pregnant women. British HIV Association (BHIVA) 2012 with 2014 update.

Resti et al (1998) Mother to child transmission of hepatitis C virus: prospective study of risk factors and timing of infection in children born to women seronegative for HIV-1. BMJ 1998 Aug 15;317(7156):437-441

7.0 APPENDICES

Appendix 1 – Zidovudine Regime
Appendix 2 – Equality Impact Assessment

Appendix 1

Zidovudine regime:

- Intravenous Zidovudine is available from the labour ward drug cupboard and should be mixed with 5% glucose for infusion.
- Remove 50ml of fluid from a 250ml bag of 5% glucose.
- Add 800mg of Zidovudine (4 x 20ml ampoules each containing 200mg) making an infusion of 800mg in 280ml (1mg Zidovudine is therefore given in 0.35ml of infusion). Ensure that the solutions are adequately mixed before infusion.
- Initial transfusion rate is 2mg/kg for one hour. Therefore infusion rate (ml/hr) is:

  2 x weight (kg) x 0.35.
  Rate = 2 x …..kg x 0.35.
  = …..ml/hr.
- After one hour halve infusion rate to maintenance dose of 1mg/kg/hr.
- Continue maintenance dose of Zidovudine until the baby is delivered and the cord is clamped.
- The Zidovudine infusion should be stopped once the cord is clamped.

Equality Impact Assessment Summary

Name and title:
Policy:

Background • Who was involved in the Equality Impact Assessment
Methodology • A brief account of how the likely effects of the policy was assessed (to include race and ethnic origin, disability, gender, culture, religion or belief, sexual orientation, age) • The data sources and any other information used • The consultation that was carried out (who, why and how?)
Key Findings • Describe the results of the assessment • Identify if there is adverse or a potentially adverse impacts for any equalities groups
Conclusion • Provide a summary of the overall conclusions
Recommendations • State recommended changes to the proposed policy as a result of the impact assessment • Where it has not been possible to amend the policy, provide the detail of any actions that have been identified • Describe the plans for reviewing the assessment