Worcestershire Acute Hospitals NHS Trust

Screening for Hepatitis B and Multidisciplinary care of pregnant women known to be Hepatitis B Positive

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Key Amendments

Date	Amendments	Approved by

Introduction

Note: This pathway has been reviewed in line with service specification no. 15 NHS Infectious Diseases Pregnancy Screening Programme.

Hepatitis B (HBV) is an infectious disease of the liver caused by the Hepatitis B virus, resulting in both acute and chronic infection.

Transmission is through sexual contact, contaminated blood (e.g. needle sharing) or by vertical transmission i.e. mother to baby.

All pregnant women should be offered screening for Hepatitis B in each pregnancy regardless of their immunisation history. This offer acceptance/decline for this screening will be documented in the pregnancy hand held notes and on the maternity information system (NSC leaflet 'Screening Tests for You and Your Baby' should be given at the point of offer).

Any women who decline screening will be followed up by the Screening Coordinator.

The aim of antenatal screening is to reduce the perinatal transmission of infection. If the infection is transmitted there is a 90% risk of the child developing chronic infection which may result in liver cirrhosis or liver cancer later in life.

The risk of perinatal infection from asymptomatic mothers is high and greatest for mothers who are both Hepatitis B surface antigen (HBsAg) positive and Hepatitis e antigen positive (HBeAg).

Along with immunoglobulin use and vaccination at birth, oral antivirals offered to the mother in the 3rd trimester are established key interventions to reduce vertical transmission.

This guideline should be used in conjunction with Policy for Babies of Hepatitis B mothers

Confidentiality

- Health professionals owe a duty of care to all their clients and therefore results of all blood borne viruses should be revealed only on a need to know basis. Information regarding a result should not be documented in hand held notes unless consent has been obtained from the women. Overuse of biohazard stickers should be avoided.
- Positive Hepatitis B result should be documented on alert sheet at front of hospital records and in the community midwives record system as early as possible, and note whether any of the women's family are aware of the diagnosis.

- It is important that sufficient information is recorded in the hand held notes to ensure appropriate care if women are admitted unexpectedly or in emergency when hospital case records may not be available initially.

- Information about how the client wishes to be contacted should be recorded, should this become necessary i.e. phone call to mobile or home landline or by letter.

Notification of HBV positive results and role of the Screening Team

- All HBV positive results should be conveyed to the Antenatal Screening Coordinator Via E-mail/phone.
- The Screening Midwife will contact the women directly offering a face to face consultation (within 10 working days) to discuss results and obtain a confirmatory sample if requested by the laboratory.

- A next available appointment will be made with the lead Obstetric Consultant to plan the ongoing pregnancy.

- Upon receipt of a positive result the screening team will refer directly to the Hepatology Team via e-mail. An appointment will be arranged directly by the team. If high risk or a new diagnosis this appointment should be within 6 weeks from the date of confirmation. Women booking later than 24 weeks pregnant should be referred immediately for clinical evaluation.

- The women will be made aware that an appointment with the Hepatology Team will be sent via post. She should also be given the leaflet 'Hepatitis B how to protect your baby'. This will be given either by the screening or Hepatology Team.

- The screening midwife will notify the Hospital Obstetric Consultant, Consultant Paediatric Lead, Child Health Hepatitis B Failsafe Coordinator (see pathway) CMW and G.P via e-mail or phone.

Role of Hepatology Team

- A full assessment of the patient's Hepatitis B status will be undertaken with complete serology, HBV DNA levels and liver function tests and U&Es along with the stage of any underlying liver disease. Monitoring of these results will determine if maternal oral antiviral therapy is required. This decision will be made by the Hepatology team.

LFT'S will be monitored in each Trimester

To liaise with Obstetric services as to whether the baby will require just Hep B vaccinations or Vaccination plus HBIG. (See attachments within pathway)

Assessment for relevant contact tracing will take place.

Role of Obstetrician

- To inform the women of the implications of the positive result and discuss the risk of mother to child transmission.
- To make a plan of care for the pregnancy

- Complete an Antenatal Paediatric referral

Fetal Anomaly screening

There has been no association between HBV and fetal anomalies. No additional surveillance should be offered unless indicated at a later date.

Prenatal diagnosis by chorionic villus sampling or amniocentesis

There is no data regarding procedures such as amniocentesis or CVS and the risk of vertical transmission. The indication and risk of abnormality must be balanced against the potential increase in transmission risk and woman should be appropriately counselled.

Frequency of antenatal checks

These should be dictated by the women's needs and the clinical picture according to medical and obstetric condition of the patient.

Monitoring the pregnancy

- LFTs including transaminases should be measured in each trimester. Baseline values will be useful to distinguish between HBV related liver dysfunction and that from pregnancy induced complications such as gestational hypertension/HELLP syndrome or cholestasis of pregnancy. These are routinely monitored by Hepatology
- There is no report of an increase incidence of preterm labour, SGA or fetal distress in the pregnancies of women with HBV. In the absence of other contributory factors, no specific recommendations can be made for fetal assessment during pregnancy.

Preterm rupture of membranes

(Prolonged) rupture of membranes should be avoided. If there is premature rupture of membranes an assessment should be made of the risk of premature delivery against the risk of transmission of HBV. This discussion should take place between physician, obstetrician, paediatrician and the parents.

Induction of Labour

- HBV infection is not an indication for induction of Labour
- IOL should be for obstetric indications.

Women with spontaneous ruptured membranes after 36+6 should be offered immediate augmentation

Discussion regarding mode of delivery

Hep B positive diagnosis is not an indication delivery by caesarean section. Vaginal delivery is recommended unless other obstetric complications dictate.

Intrapartum management

- There is some evidence of transmission of infection with the procedures that promote mixing of fetal and maternal blood, such as the use of scalp electrodes and fetal blood sampling. These procedures should be avoided.
- External cardiotocography should be used where continuous fetal monitoring is clinically indicated, fetal scalp electrodes should not be used

- Although there is no data regarding the duration of membrane rupture and vertical transmission rates, it would seem sensible to maintain membrane integrity as long as possible to avoid fetal exposure to potentially infected cervical-vaginal secretions. Similarly episiotomy should require careful consideration

- A previous delivery of a child infected perinatal with HBV does not increase the risk of transmission in subsequent pregnancies.

- As in all Labours universal precautions should be observed. There is no need to isolate either mother or infant

Postpartum Management:

- Basic hygiene and the disposal of potentially infected material should be discussed with patient.
- Women with blood borne viruses who are actively bleeding should not share toilet facilities with other women. These patients should therefore be allocated a side room on the post natal ward following delivery.

- **Breastfeeding:**
  Women with HBV infection should be advised that unless there are other contraindications, they should consider breast feeding their infants. The benefits of breast feeding outweigh the theoretical, but unproven risk of HBV transmission to infant.

- Effective future contraception should be discussed as part of obstetric care

- **Care of the Newborn:** Infants may be cared for according to usual hospital protocol while universal precautions are practiced. There is no need for the mother to alter normal child care routines and the use of gloves, masks or extra sterilization is unnecessary. HBV is a blood borne pathogen and is not transmitted by saliva, urine or stool. Similarly no special precautions are necessary for the care of Newborn in the nursery

- **Infant testing:**
  - Cord bloods or bloods for hepatitis should not be taken as screening for Hep B in the neonatal period because of a high false positive rate.

- **Infant immunisation:**
  - Hep B vaccination +/- HBIG is recommended for babies born of Hep B positive Mothers (see Neonatal Vaccination pathway)
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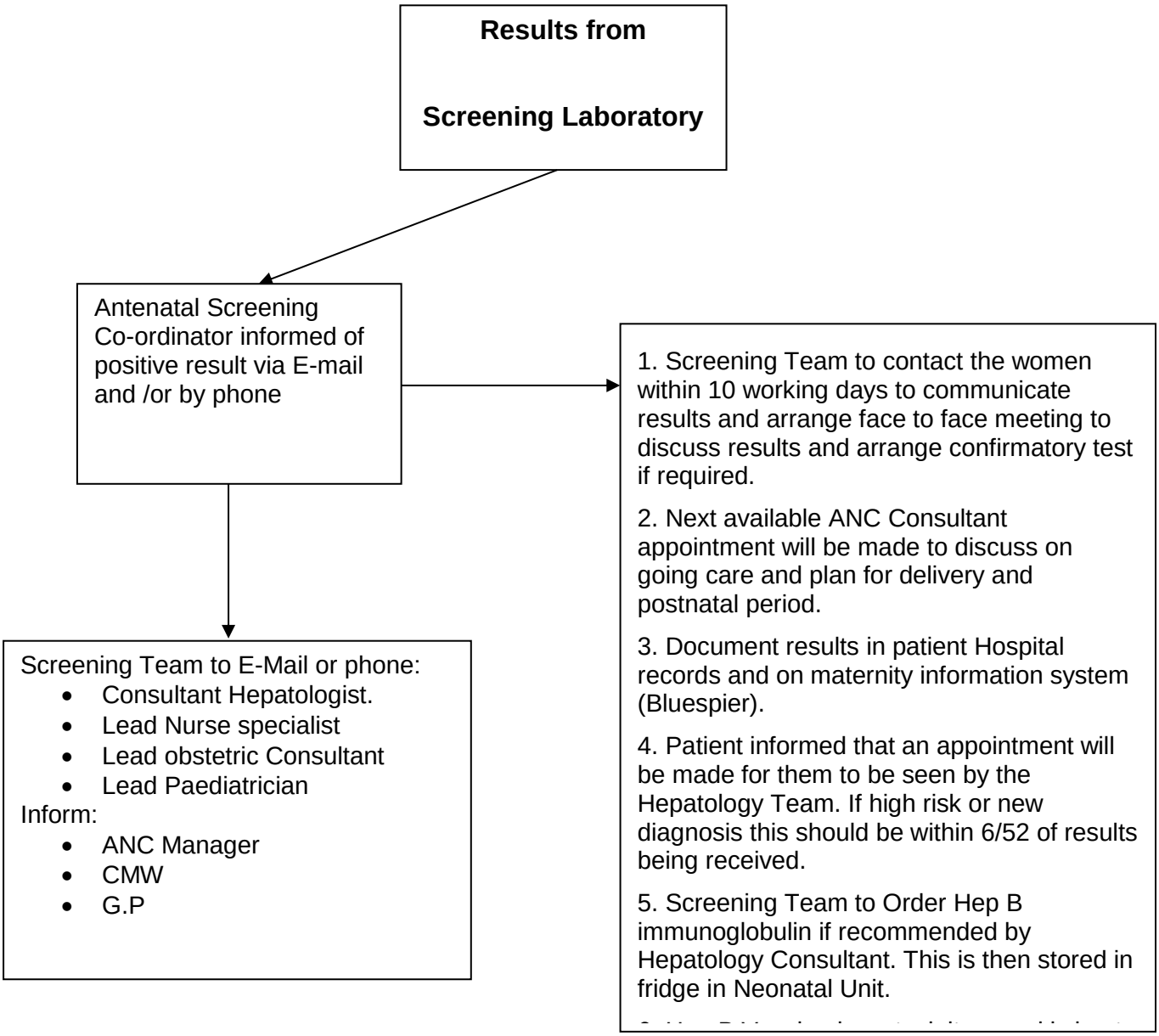
  - Guidence for Neontal HBIG.pdf
  - 20160310 updated Worcs programme.pd
  - Request form for ordering Neonatal HE
  -
  - Screening Coordinator to inform Child Health Hepatitis B failsafe coordinator once baby born and date of 1st vaccination given.
  - Child Health Hep B Coordinator is responsible for the coordination of the 2nd 3rd and 4th vaccinations. These will be given in the Primary care setting.

- **If the baby is likely to require observation in Transitional care unit (TCU)**
  Women with blood borne viruses who are actively bleeding should not share toilet facilities with other women. Where the baby is likely to require transitional care, each case needs to be individually managed. It may be necessary to provide care in a side room. Alternatively, if it is necessary for the baby to be observed within the transitional care unit, a side room should be allocating with toilet facilities for the woman.

APPENDIX 1 – MANAGEMENT PATHWAY FOR HEP B POSITIVE WOMEN.



APPENDIX 2 Pathway for care of women admitted to Delivery suite known to be Hepatitis B positive

- Notify on-call obstetrician and Paediatrician of admission in Labour
- Universal precautions
- Delay A.R.M as long as possible
- Avoid FSE/FBS
- External cardiotocography should be used where continuous fetal monitoring is clinically indicated.
- For all needlestick injuries-contact the microbiologist on call. (Immunoglobulin will then be issued. The decision regarding giving the second dose will depend on the “e” antigen status of the source blood).

APPENDIX 3 - Pathway for management of infants born to Hepatitis positive women

Breastfeeding

- Breastfeeding is not contra-indicated.

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Infant immunisation

- Hep B vaccination is recommended for babies born to Hepatitis B positive mothers
- Stock of Hep B vaccinations stored in NICU fridge
- HbIg to be ordered by Screening Coordinator. In an emergency please refer to embedded Neonatal HbIg request form
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Infant testing

- Do not do cord bloods or bloods for hepatitis screening in the neonatal period (high false positive rate).

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