Hepatitis C Screening in pregnancy Guideline

University Hospitals of Leicester NHS Trust

Trust ref:C42/2014

1. Introduction and Who Guideline applies to

This guideline is intended for the use of all Medical, Midwifery, Nursing, General Practitioners and Laboratory staff involved in the care of pregnant women in both Primary and Secondary care settings when a woman is at risk of Hepatitis C infection.

Background:

Hepatitis C virus (HCV) infection in children is becoming an increasing challenge to health professionals. Hepatitis C virus infection in infancy largely depends on vertical transmission. The transfer of hepatitis C virus from mother to child is almost invariably restricted to children whose mother is viremic, and the rate of transmission seems to be influenced by maternal virus load. Neonatal transfer has been reported in 5% of pregnancies, but can be as high as 25% if the mother is also HIV positive. Mother to baby transmission of HCV may be increased if the mother is also infected with HIV or HBV. The likelihood of transmission from breast milk is very small and therefore breastfeeding is not contraindicated.

Screening for Hepatitis C is not routinely recommended in pregnancy in England. However there are certain circumstances described below where testing should be initiated for pregnant women:

- Known Intra-venous drug user
- Diagnosed Hepatitis B infection
- Diagnosed HIV infection
- Raised ALT in pregnancy
- If the partner is identified as Hepatitis C Positive

Related Documents:

- Hepatitis B and Syphilis Screening in Pregnancy UHL Obstetric Guideline
- Booking Bloods and Urine Test UHL Obstetric Guideline

Contents

2. Guideline Standards and Procedures

2.1 Testing for Hepatitis C to women at risk of infection

- Explain risk of Hep C infection to the woman and offer testing.
- If accepted testing should be initiated by sending a black and white bottle with a virology form to UHL Lab.
- The woman's choice should be documented in the maternity notes.
- If the woman declines testing ensure this is documented in the maternity notes.
- Make a plan for giving the results to the woman.

2.2 Negative results

- Negative results are sent from the laboratory to the requestor
- A plan should be made for the woman to receive her results from a Health professional and this should be documented in the maternity notes.

2.3 Positive results

- Specialist midwife receives an e-mail result from Laboratory.
- Result confirmed on iLab.
- Appointment arranged for woman to attend to receive her results.
- Woman seen in combined clinic by specialist midwives, ID Consultant and Obstetricians, result explained and on-going care arranged. Including completion of Intrapartum care plan.
- Further appointment planned for 34 weeks to repeat HCV RNA PCR as this will determine plan for birth (see appendix 1)

2.4 Assessing risk of transmission to the infant

Vertical transmission is almost always confined to women who have detectable HCV RNA. Both intrauterine and perinatal transmissions are important routes of vertical infection. The mode of delivery does not affect risk of transmission, with similar rates of infection in infants delivered by caesarean section or vaginally, unless the mother is co-infected with HIV when delivery by caesarean section may have a protective effect. Although HCV RNA may be detected in breast milk and colostrum, breast feeding does not appear to increase the rate of HCV transmission unless the mother is also HIV positive. Current recommendation is that women with HCV without co-infection can be advised to breast feed.

2.5 Intrapartum care plan

- Please refer to the intrapartum care plan appendix 3
- Following repeat HCV RNA PCR at 34 weeks the result is reviewed as per Appendix 1.
- If the virus is detectable refer woman back to BBI clinic for discussion about interventions in labour such as FBS/FSE.

2.6 Establish timing and diagnosis of HCV transmission

The diagnosis of perinatal transmission is confused by passive transfer of maternal antibody up to 13 months and occasionally 18 months, meaning that anti-HCV testing is of limited value in infancy.
Infants are considered infected if HCV RNA is positive on two or more occasions. In most, HCV RNA only reaches detectable levels after several weeks. A practical recommendation is to delay testing until at least 8 weeks, which could coincide with routine childhood immunisation.

2.7 Who and how to test

At risk infants may be identified by a wide range of professionals including midwives and obstetricians as well as paediatricians in hospitals and the community. Counselling of the family should begin at the time of antenatal testing and continue at each stage of diagnosis. An algorithm for diagnosis is given below (see Appendix 2).

2.8 Follow up and management of children at risk of HCV infection

1. Neonates: Mother Anti-HCV positive and/or HCV RNA positive
2. At risk children who need blood borne virus screening

Please send a referral to DR S Bandi's Paediatric Infectious Disease Clinic – Second Friday of the month (SBRINF).

Follow up of children with HCV infection

All HCV positive children will be jointly managed by Dr Bandi and the Paediatric Hepatology team at Birmingham Children's Hospital. Children with HCV should be immunised against hepatitis A and B.

3. Education and Training:

None

4. Monitoring Compliance

None identified

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements

5. Supporting References

1. Arch Dis Child. Sep 2006; 91(9): 781–785. Perinatal Hepatitis C virus infection : diagnosis and management S M Davison, G Mieli-Vergani, J Sira, and D A Kelly
2. Journal of Med Virol. 2009 May;81(5):836-43. Perinatal transmission of hepatitis C virus infection. Indolfi G, Resti M.

6. Key Words

Blood born infection, Infectious diseases, Neonatal, Transmission, Virus

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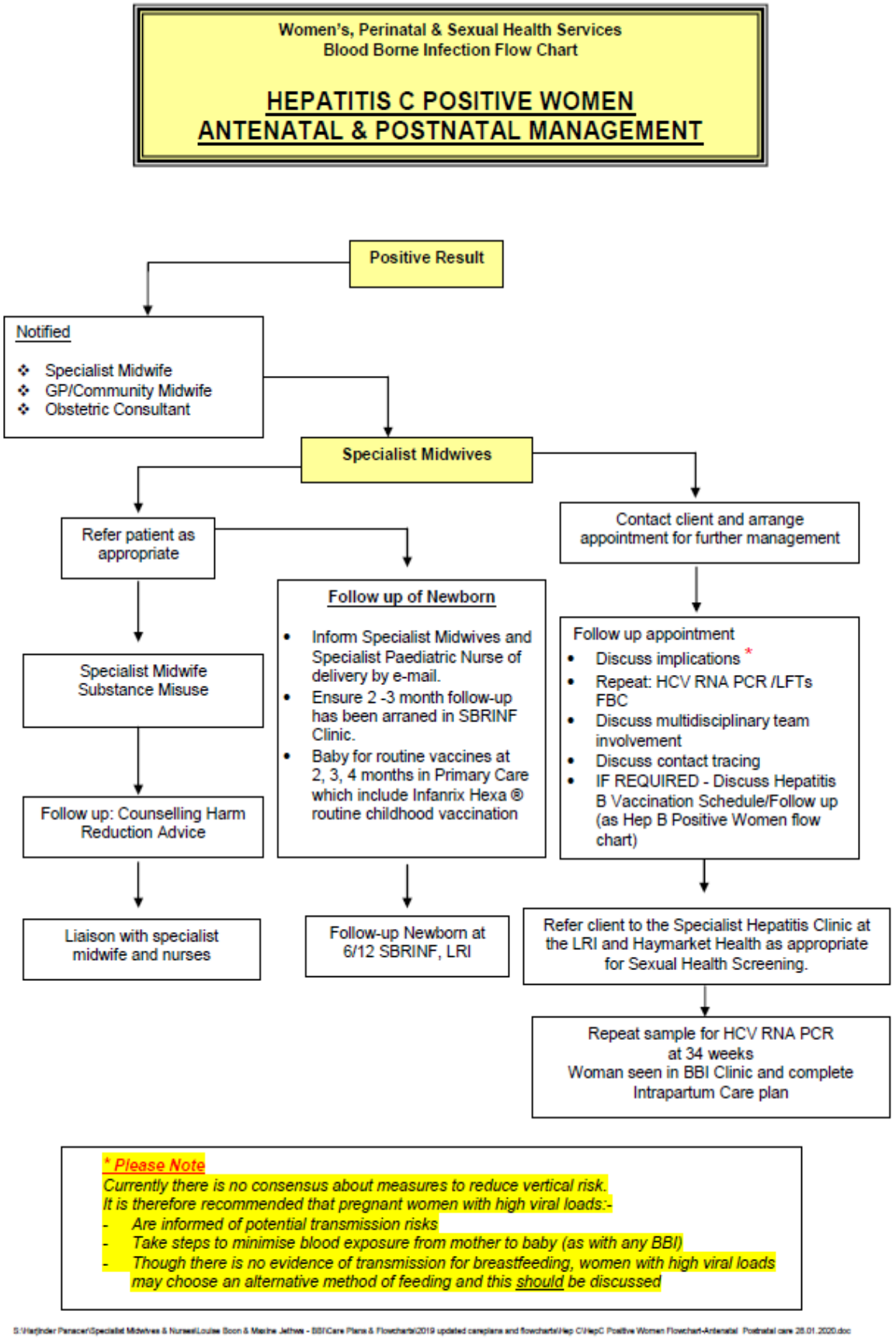
The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS			
Guideline Lead (Name and Title) Sexual Health Group			**Executive Lead** Chief Nurse
Details of Changes made during review:			
Date	**Issue Number**	**Reviewed By**	**Description Of Changes (If Any)**
6.1.15	V1	Sexual Health Group	Location of Sexual Health Services
September 2018	V2	Sexual Health Group	Minor amendment to care plan
January 2020	V2.1	Sexual Health Group	Minor amendment to care plan
August 2021	V3	M Jethwa – Specialist midwife	No changes made to content. Format update only

DISTRIBUTION RECORD:		
Date	**Name**	**Dept**
October 2021	**Obstetricians** **Midwives** **Specialist Midwives** **Paediatricians** **Neonatologists** **Children's Nurses**	**Maternity services** **Children's services**

Appendix 1: Hepatitis C +ve women AN/PN management



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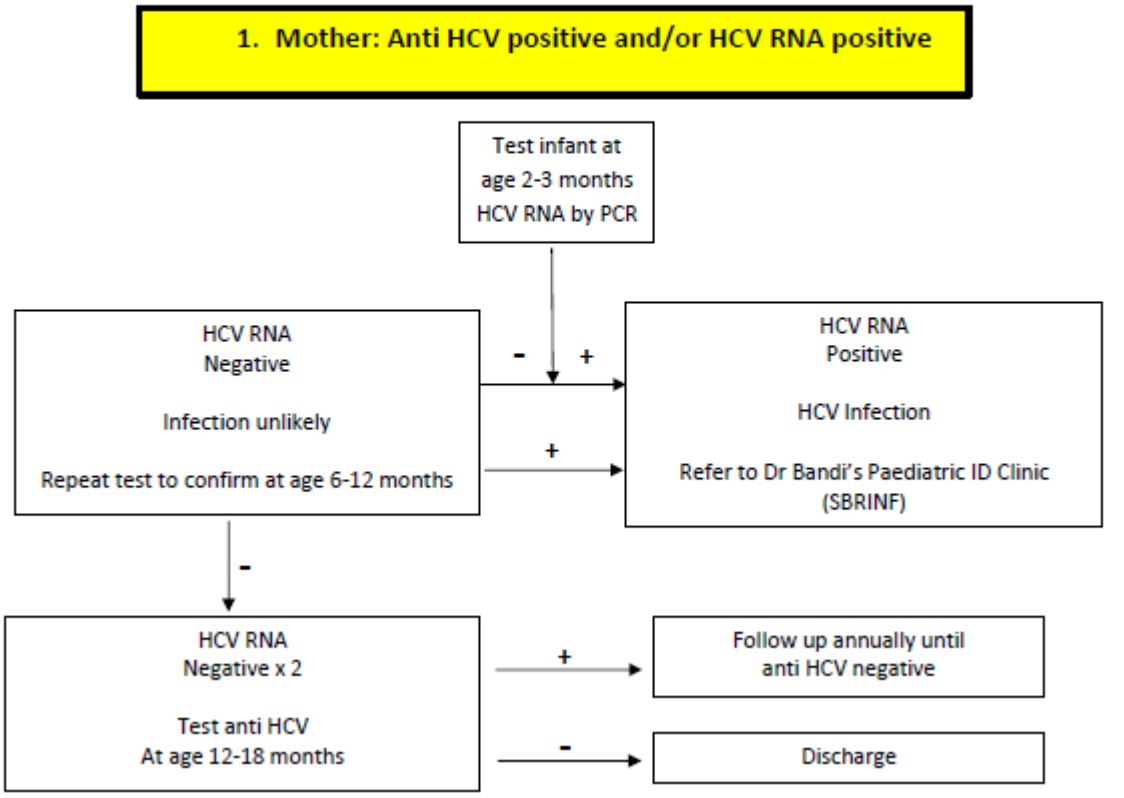
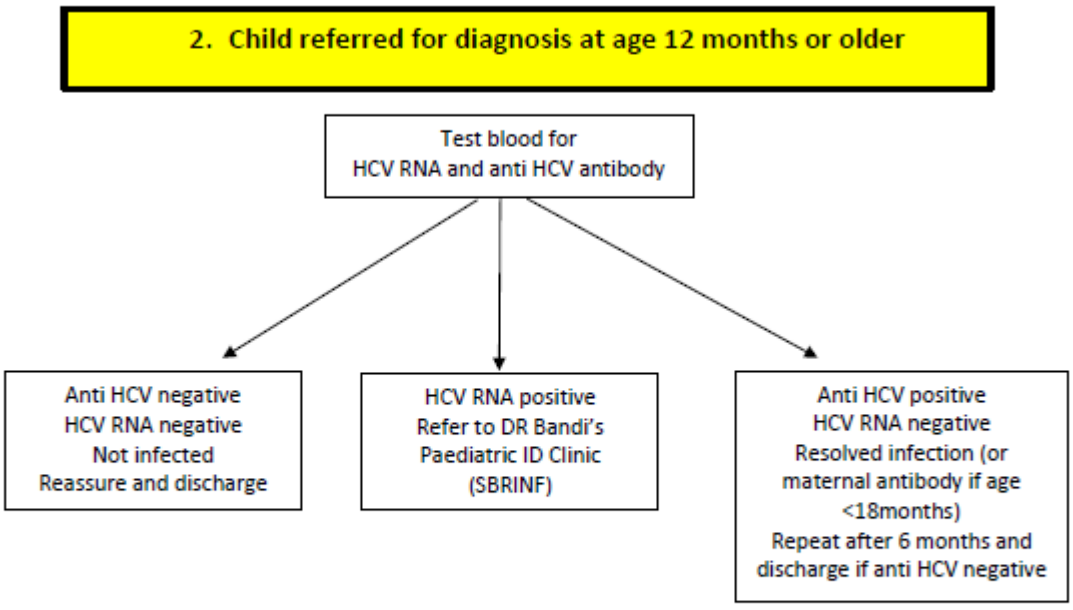
Appendix 2: Mother anti HCV +ve and/or HCV RNA +ve





Appendix 3: Perinatal Hepatitis C care plan (includes antenatal, intrapartum and neonatal care)

Perinatal Blood Borne Infection Care Plan

Hepatitis C

UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST

Directorate of Women's, Perinatal & Sexual Health Services

Patient Addressograph

☐ Leicester Royal Infirmary

☐ Leicester General Hospital

EDD ☐☐/☐☐/☐☐

Gravida _____ Parity _____

Blood Group _____

Previous Blood Transfusion ☐ Yes ☐ No

Co-infection: Hep B/HIV/Syphilis (please circle)

Interpreter Required Y ☐ N ☐

Language Spoken _____

SPECIALIST CARE TEAM

Specialists	Name	Contact Number
Community Midwife		
Specialist Midwives		
General Practitioner		
Obstetrician		
Consultant Paediatrician		
Paediatric Specialist Nurse		
ID Physician		
Pharmacist		

Original Test Date ☐☐/☐☐/☐☐ (see filed report in maternity notes)

Date result received ☐☐/☐☐/☐☐

Date of result given ☐☐/☐☐/☐☐ Gestation ☐☐ Weeks

Confirmatory Test Date ☐☐/☐☐/☐☐

Aware of diagnosis prior to pregnancy ☐ Diagnosis given during this pregnancy ☐

My partner is aware of my status ☐ Not aware ☐* _____

Perinatal Blood Borne Infection Care Plan

Hepatitis C
Antepartum Care Plan

*Issues Discussed / Actions	Sign & Date
☐ What is Hepatitis C?	_____
☐ Confirmatory testing, further blood investigations (Hep A&B)	_____
☐ Identification of contacts and testing required/advise partner to attend to see GP	_____
☐ Identify risk factors	_____
☐ Methods of transmission	_____
☐ Postnatal Hepatitis C treatment discussed	_____
☐ Prevention Education (Safe Sex/contraception)	_____
☐ Antenatal Care / Intrapartum Care / Postnatal Care	_____
☐ Paediatric: follow up / blood tests required	_____
☐ Written information offered and provided – leaflet given on: _____	_____

*Comments: _____

_____

_____

*Antenatal Checklist			Sign & Date
GP Informed by letter with consent	☐ Yes ☐ No		_____
Partner testing advised	☐ Yes ☐ No		_____
Other at risk children identified and referred as required	☐ Yes ☐ No		_____
Referral made to Infectious Diseases	☐ Yes ☐ No		_____
Paediatric alert form completed	☐ Yes ☐ No		_____
Hepatitis C RNA PCR levels sent at 34 weeks*	☐ Yes ☐ No	Result	_____

If high infectivity refer to BBI clinic for discussion re: interventions in labour & breast feeding

In certain circumstances i.e. unusual serology/ or if amniocentesis is required seek specialist advice

***Individualised Plan**

_____

_____

_____

Signature: _____ Print Name: _____ Date: _____

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Title: Hepatitis Screening in Pregnancy
V: 3 Approved by: Maternity Service Governance Group: September 2021 Next Review: September 2024
Trust Ref No: C42/2014
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Perinatal Blood Borne Infection Care Plan

Hepatitis C

Intrapartum Care Plan

***Aim for vaginal delivery**

Managed actively as below, unless obstetric indication for caesarean section

*Check if there is an individualised careplan for this woman in relation to invasive procedures.

- Await spontaneous labour unless obstetric indication to intervene
- Active management of the 3rd stage of labour

In the following situations seek expert clinical advice from the Infectious Diseases Team/BBI Team:

- *Co-infection with HIV*
- *High Hepatitis C RNA levels*
- *Prematurity (<34weeks)*
- *Pre-labour rupture of membranes*

***Individualised Plan**

_____

_____

_____

Signature: _____ Print Name: _____ Date: _____

If Pre-labour Rupture of Membranes

1. **Be certain of diagnosis**
2. **Induce / augment immediately using Oxytocin and/or Prostin**
3. **If signs of infection refer to the Sepsis UHL Pathway.**

- Neither cord blood nor placental pathology is routinely required in relation to Hepatitis C.
- Cord blood should not be taken for neonatal PCR testing.
- Bath baby following birth on Delivery Suite

Perinatal Blood Borne Infection Care Plan

Hepatitis C
Neonatal Care Plan

Paediatric Responsibility Following Delivery

Newborn Checklist

- Inform Specialist Midwives of baby's birth (Ext 5990) and E-mail
- Inform Paediatric Specialist Nurse of baby's birth by E-mail
- Discharge summary letter to Consultant Paediatrician (Dr Bandi)
- Baby should be seen between 2 – 3 months (SBRINF Clinic) and tested for HCV RNA by PCR
- Routine vaccines required at 2, 3, 4 months in Primary Care

An algorithm for diagnosis is given below