

NEONATAL MANAGEMENT FOR EXISTING MATERNAL CONDITIONS

4 MATERNAL HEPATITIS C

Date Issued: August 2011
Date Revised:
Review Date: August 2014
Authorised by: NCCU
Review Team: NCCU

4 Maternal Hepatitis C
Neonatal Postnatal
Clinical Guidelines
King Edward Memorial Hospital
Perth Western Australia

This guideline should be used in conjunction with its respective [Clinical Guideline Section B 1.4.9 Hepatitis C in pregnancy](#).

See Neonatal Clinical Guidelines for additional information regarding [Management of the neonate with Maternal Hepatitis C](#).

KEY POINTS

- Factors that increase risk for perinatal transmission of HCV include:
 - maternal detection of HCV RNA by the PCR test^{1,2}
 - peripheral blood mononuclear cell infection¹ e.g. HIV co-infection²
 - prolonged rupture of membranes for more than 6 hours¹
 - obstetric procedures or intrapartum exposure to maternal blood infected by HCV e.g. vaginal or perineal lacerations¹
 - females are twice as likely to be infected as males².
- Approximately 5% of chronic HCV positive pregnant women will transmit the virus to the infant.³ In most cases vertical transmission is confined to women with detectable HCV RNA.²
- Maternal co-infection with HCV and HIV (in women untreated with HIV antiviral agents) is associated with increased risk of perinatal transmission.¹
- Breastfeeding is recommended provided the nipples are not damaged or bleeding. Milk should be expressed and discard until nipples are healed.⁴
- The neonate should be bathed to remove maternal body secretions prior to administering intramuscular injections.⁴
- HCV infection acquired from perinatal transmission progresses to chronic HCV in 80% of cases, with very few children clearing it spontaneously.¹
- Diagnosis of perinatal transmission is made on anti-HCV antibody testing, and/or by detecting HCV RNA on peripheral blood by performing a PCR test.^{1,5}
- Cord blood testing of HCV is not recommended as it can yield false-positive or false-negative results.⁵
- It is recommended that a child at risk of perinatal transmission exposure to HCV should be tested for HCV antibodies at 18 months of age. Testing prior to this time is limited due to passive transfer of maternal antibodies.^{1,3,5}
- Should diagnosis of vertical transmission of HCV be necessary prior to 18 months of age (e.g. parental request) then testing of infant serum HCV RNA can be obtained when the infant is between than 2 and 6 months of age.⁶ A sample is collected on two occasions at least 3 - 4 months apart to confirm diagnosis.^{2,5}
- Hepatitis B virus (HBV) vaccination is recommended within 12 hours of birth as these neonates are at higher risk of infection, and if a child is infected with HCV they may be more prone to severe infection if they contract HBV.³

12. The paediatrician shall generate a letter to the GP with the recommended follow-up regimen for neonates of HCV infected mothers

REFERENCES

1. Indolfi G, Resti M. Perinatal Transmission of Hepatitis C Virus Infection. **Journal of Medical Virology**. 2009;81:836-4.
2. Davison SM, Mieli-Vergani G, Sira J, et al. Perinatal hepatitis C virus infection: diagnosis and management. **Archives of Disease in Childhood**. 2006;91(781-785).
3. Canadian Paediatric Society. Position Statement. Vertical transmission of the hepatitis C virus: Current knowledge and issues. **Paediatric Child Health**. 2008;13(6):529-34.
4. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. C-Gen 4 Hepatitis C. **RANZCOG College statement**. 2009.
5. Valladares G, Sjogren MH, Chacaltana A. The management of HCV-infected pregnant women. **Annals of Hepatology**. 2010;9(Suppl.):S92-7.
6. Jain S, Goharkhay N, Saade G, et al. Hepatitis C in Pregnancy. **American Journal of Perinatology**. 2007;24:251-6.