

Madigan Army Medical Center Referral Guidelines

Hepatitis B in Infants and Children

Diagnosis/Definition

- Any patient should be considered at risk for chronic hepatitis B if they test positive for Hep B surface antigen. Screening should occur in those who have a history of exposure to include: 1) patients born to a mother with Hep B infection 2) household contacts of people with hepatitis B infection 3) residents of institutions for developmentally disabled 4) patients undergoing hemodialysis and 5) patients with disorders that require repeated transfusions of blood products.
- If a child tests positive for the presence of hepatitis B surface antigen for a period of more than 6 months, he/she is chronically infected and in a carrier state.

Initial Diagnosis and Management

- Any patient with signs and symptoms compatible with acute hepatitis should undergo a full hepatitis panel screening for hepatitis A, B, and C. Any patient who was born to a mother with hepatitis B or C, or who has had household contact with hepatitis B or C patients, should be referred to Pediatric Gastroenterology for ongoing evaluation and management.

Indications for Specialty Care Referral

- Any patient diagnosed as above as a carrier for hepatitis B should be referred to the Pediatric Gastroenterology clinic for an intake evaluation on a routine basis.
- Any patient with acute hepatitis B infection and evidence of fulminant hepatic failure should be referred to Pediatric Gastroenterology emergently.
- Minimally or asymptomatic acute infection does not require a Pediatric GI referral. Follow up with Hep B surface antigen should be performed in 6 months.
- Any patient who was born to a mother with hepatitis B or C, or who has had household contact with hepatitis B or C patients, should be referred to Pediatric Gastroenterology for ongoing evaluation and management.

Ongoing Management and Objectives

- Liver function tests should be performed, and the patient should be counseled regarding their infectiousness to others.
- Unvaccinated family members and sexual contacts should be evaluated for hepatitis B infection. If exposure is within the **window of effectiveness** for prophylaxis (reference: American Academy of Pediatrics (AAP), Red Book 2012 Online version is only available for MAMC users via MAMC Medical Library, Electronic Books), they should receive HBIG prophylaxis. They should receive the first dose of hepatitis B vaccine promptly if not previously vaccinated.
- A full Hepatitis panel to include Hep BsAg, Hep BsAB, Hep BcAB should be obtained.
- Immunization of an infant born to a mother with Hepatitis B should be completed during the first 6 months of life. Subsequent doses of vaccine should be given as recommended by the AAP Red Book 2006 (3 dose series at birth, 1-2 months, and 6 months). If this infant is preterm weighs less than 2000 g at birth, the initial vaccine dose should not be counted in the required 3-dose

schedule (a total of 4 doses of hepatitis B vaccine), and the subsequent 3 doses should be given in accordance with the schedule for immunization of preterm infants (see Preterm and Low Birth Weight Infants, p 67 of the 2006 AAP Red Book).

- Infants born to HBsAg-positive women should be tested for Hep BsAb and HBsAg after completion of the immunization series at the 9 month well-child visit (the next well-child visit following the 6 month visit, during which this infant will receive the third Hepatitis B vaccine).
- Infants with anti-HBs concentrations of less than 10 mIU/mL and who are HBsAg negative should receive 3 additional doses of vaccine in a 0-, 1-, and 6-month schedule followed by testing for anti-HBs 1 month after the third dose. Alternatively, 1 to 3 additional doses of vaccine can be administered, followed by testing for anti-HBs 1 month after each dose to determine whether subsequent doses are needed.

Criteria for Return to Primary Care

- Hepatitis B carriers may continue to be followed by primary care providers for all of their needs. They should be seen every 6 months by Pediatric Gastroenterology service and have liver function tests performed monthly by their primary health care providers for the first 6 months.
- Pediatric Infectious Disease Service will identify candidates for liver biopsy and also monitor alphafetoprotein and liver ultrasound results on a routine basis.

References:

- RedBook. 2012 Report of the Committee on Infectious Diseases. Hepatitis B pg 337-356.
- Recommendations for Screening, Monitoring and Referral of Pediatric Chronic Hepatitis B. Pediatrics Vol. 124 No. 5 November 1, 2009 pp. e1007 -e1013.

Last Review for this Guideline: **October 2012**
Referral Guidelines require review every three years.

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