
What the Physician Can Do to Help the Child with Chronic Hepatitis B Virus Infection

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Although children with chronic hepatitis B virus (HBV) infection may follow many different clinical courses, these recommendations will help all of them maintain good health.

1. A yearly physical

Every child with hepatitis B needs a yearly check-up with his/her primary physician to make sure the child is healthy and growing normally.

2. Laboratory studies to monitor liver health

At the first clinical visit, liver enzymes (ALT and AST), INR, a complete blood count, alpha-fetoprotein (AFP) and ultrasound are usually obtained. Thereafter, liver enzymes should be checked yearly in the healthy child with HBV.

3. Screening for hepatocellular carcinoma

There are no definitive guidelines for screening children with HBV for hepatocellular carcinoma. AFP is a tumor marker and is increased in 85% of individuals with hepatocellular carcinoma, often before clinical evidence of cancer is present. It may be elevated at a time when the tumor can be resected completely. We recommend yearly AFP in the child with HBV, and twice yearly testing with hepatic ultrasound in the child with cirrhosis and HBV. It should be noted that even close monitoring of these tests does not guarantee early diagnosis of hepatocellular carcinoma.

4. Hepatitis B testing every 3-5 years

Few children convert from HBsAg to anti-HBs (HBsAb), especially if they acquired the disease in the perinatal period. It is important to occasionally check to see if the patient is still infected.

5. Referral to a pediatric gastroenterologist

Any child with an AST >2 times the upper limit of normal, evidence of hepatic dysfunction, failure to thrive, an elevated AFP, a need for family counseling, or abnormalities on hepatic ultrasound should be referred to a pediatric gastroenterologist for evaluation.

6. Treatment

Although medications are available to treat hepatitis B, they are generally useful only in patients with on-going hepatic injury (active hepatitis). Consultation with a pediatric gastroenterologist will help identify those patients who would benefit from medical therapy.

7. Vaccination of household members

All members of the child's household and caregivers who have close contact with the child should be vaccinated against hepatitis B, even if pregnant.

8. Hepatitis B education

Each child with hepatitis B and his/her parents should receive age-appropriate hepatitis B education. This should include methods for prevention of transmission of the virus and assistance for the child in dealing with his/her positivity throughout the school years and as a teenager. Older children should receive counseling on the use of condoms to prevent viral transmission to their sexual partners.

9. Maintaining personal health

Immunization against hepatitis A is recommended to prevent a second injury to the liver. Ethanol should be avoided. When prescribing other medications, care must be taken to avoid or monitor those with known hepatotoxicity.

For more information regarding the child with hepatitis B, please contact Dr. Sarah Jane Schwarzenberg in the division of Pediatric Gastroenterology, Hepatology and Nutrition, University of Minnesota, Department of Pediatrics, 420 Delaware Street SE, Minneapolis, Minnesota 55455; Telephone (612) 624-1133.