Preventive Treatment and Vaccination Rates Improve Somewhat for Infants at Risk for Hep B

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Despite increases in recommended immediate care for babies born to women living with chronic hepatitis B virus (HBV) infection, almost half of at-risk infants slip through the cracks of the health care system and aren’t receiving necessary preventive treatment, according to Centers for Disease Control and Prevention (CDC) research published online in Pediatrics and reported by Medscape.

HBV infection in infants can lead to liver failure or premature death. Children with HBV-positive mothers have a 90 percent chance of developing chronic hepatitis. Proper treatment prevents 85 to 95 percent of such infections. Nonetheless, an estimated one to 10 percent of at-risk children suffer from hepatitis B.

According to CDC guidelines, all children should be vaccinated for hepatitis B before being discharged from the hospital. At-risk children—those born to mothers who test positive for HBV—have more stringent requirements. The guidelines state that at-risk children should be treated with hepatitis B immune globulin (HBIG) and receive vaccination within 12 hours of birth, followed by an additional two to three doses of the vaccine during infancy. Hepatitis B testing after the vaccination completion is also recommended.

Earlier studies showed the harmful effects of failing to follow preventive treatment and immunization procedures. In one study of 426 at-risk children, failing to complete the vaccination regimen was associated with an eightfold increase in the risk of chronic HBV infection. Another study showed an increased risk of hepatitis B among at-risk children who didn’t receive HBIG until later than 12 hours after birth.

For the new CDC study, researchers examined data from the National Perinatal Hepatitis B Prevention Program, covering every U.S. state except Alaska. The researchers found that the percentage of at-risk infants receiving the recommended preventive treatment and vaccinations increased from 40.8 percent in 1994 to 50.5 percent in 2008. Chronic HBV infection among at-risk infants dropped from 2.1 percent in 1999 to 0.8 percent in 2008.

In 2008, 13 percent of infants weren’t tested for HBV after vaccination, a big improvement from the 26 percent not tested in 2004. Common reasons included inability to find the child, the child...
moving out of the country and the family refusing to allow testing.

“Significant gaps remain in identifying pregnant women [with chronic HBV infection] and completing management and assessment of their infants to ensure prevention of perinatal hepatitis B virus transformation,” noted the study authors.