Early Treatment of Infants With Hep B Tied to High Cure Rate

Researchers analyzed outcomes among infants with hepatitis B who did and did not receive antiviral treatment before age 1.

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Infants who contract hepatitis B virus (HBV) from their mothers are more likely to achieve serumHBV surface antigen (HBsAG) loss, which is considered a functional cure, by 12 months of age if they receive antiviral treatment during their first year of life.

These are the findings of a small study conducted in China. Publishing their findings in the Journal of Hepatology, researchers at the Chinese PLA General Hospital and the Academy of Military Medical Sciences in Beijing conducted a real-world prospective cohort study of 29 infants younger than 12 months old who had HBV, between January 2010 and December 2017.

All infants had received the HBV vaccine and a majority had also received HBV antibodies after delivery to prevent infection, but these immunoprophylaxis attempts were unsuccessful. The infants had detectable hepatitis B serum antigen (HBsAg), a high HBV viral load and persistently elevated ALT liver enzymes. (ALT enzymes are one of two liver enzymes that, when elevated, may signal a liver problem.)

The study authors categorized the infants into two groups. Group I included 18 infants whose parents chose to start them on lamivudine before their first birthday. Group II included 11 infants whose parents started them on interferon after their first birthday and who received no antiviral treatment before then. The characteristics of the infants at the study's outset were similar between the two groups.

None of the infants in Group II experienced spontaneous loss of HBsAg before they were one year old.

In Group I, the proportion of the infants with HBsAg loss was 39% by the third month of treatment, 67% by month six, 78% by month nine and 83% by month 12. By comparison, the proportion of those infants in Group II who had the same outcome was a respective 18%, 27%, 27% and 36% by each of the four time points. At the 12-month mark, the difference in the HBsAg loss rates between the two groups was statistically significant, meaning it is unlikely to have been driven by chance.

The infants experienced no serious adverse health events, regardless of type of treatment.

The study authors concluded that further trials with larger study populations are needed to verify their results.

To read the study abstract, click here.
