TELBIVUDINE PROTECTS INFANTS

Telbivudine is known to reduce serum levels of HBV DNA in patients with chronic HBV infection. The effect of telbivudine on vertical transmission of HBV, especially perinatal transmission, however, remains unknown. Now, Guo-Rong Han and colleagues have published in *Clinical Gastroenterology and Hepatology* that telbivudine markedly reduces perinatal transmission of HBV.

Han and co-workers performed the first open-label, prospective study of pregnant women who were positive for the HBV e antigen and had chronic HBV infection. The 88 women were 20–40 years of age and recruited from a single tertiary hospital in China. The women opted to either receive 600 mg telbivudine daily (n=53) or no antiviral treatment (n=35) in their second or third trimester of pregnancy. All infants were given standard immunoprophylaxis after birth and both the mothers and infants were monitored until 28 weeks after birth.

"Pregnant women with chronic HBV infection given telbivudine during the second or third trimester of pregnancy had significantly reduced rates of HBV transmission to their infants compared with those who received no treatment," explains Han, corresponding author. Furthermore, substantially more mothers who received telbivudine treatment had reduced serum levels of HBV DNA and normalized serum levels of alanine aminotransferase than those who received no treatment.

Of note, treatment with telbivudine caused no adverse effects in either mothers or infants in terms of gestational age, height and weight of the infant or congenital deformities, after a 28-week follow-up. Moreover, none of the infants whose mothers received telbivudine had immunoprophylaxis failure, in contrast to 8.6% of the infants whose mothers received no treatment.

"These findings are important as perinatal transmission is the most common route of infection in Asian countries," says Han. The team now plan to "further investigate the long-term safety of using antiviral therapy during pregnancy for the purpose of treating mothers with chronic HBV infection and preventing HBV transmission to the infant."

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Original article Pan, C. Q. et al. Telbivudine prevents vertical transmission from HBeAg-positive women with chronic hepatitis B. Clin. Gastroenterol. Hepatol. doi:10.1016/j.cgh.2012.01.019