

ABSTRACT

BACKGROUND & AIMS:

The extent of HBV infection to infants of HBV/HIV-coinfected pregnant women in sub-Saharan Africa is unknown. The aim of this study was to assess prevalence of HBV infection among antiretroviral-naïve, HIV-infected pregnant women in Malawi and examine HBV transmission to their infants.

METHODS:

Plasma from 2048 HIV-infected, Malawian women and their infants were tested for markers of HBV infection. Study participants were provided standard-of-care health services, which included administration of pentavalent vaccine to infants at 6, 10, and 14 weeks of age.

RESULTS:

One-hundred and three women (5%) were HBsAg-positive; 70 of these HBsAg-positive women were also HBV-DNA-positive. Sixteen women (0.8%) were HBV-DNA-positive but HBsAg-negative. Five of 51 infants (9.8%) born to HBsAg-positive and/or HBV-DNA-positive women were HBV-DNA-positive by 48 weeks of age. HBV DNA concentrations of two infants of mothers who received extended lamivudine-containing anti-HIV prophylaxis were $<4 \log_{10}$ IU/ml compared to $\approx 8 \log_{10}$ IU/ml in three infants of mothers who did not.

CONCLUSIONS:

HBV DNA was detected in nearly 10% of infants born to HBV/HIV-coinfected women. Antenatal testing for HIV and HBV, if instituted, can facilitate implementation of prophylactic measures against infant infection by both viruses.