

Hepatitis B infection in Eastern Indian families: Need for screening of adult siblings and mothers of adult index cases

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Hepatitis B infection in Eastern Indian families: Need for screening of adult siblings and mothers of adult index cases

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Abstract

India, with its 43 million hepatitis B virus (HBV) carriers and absence of any national immunization programme, adds a substantial number of HBV infections to the HBV carrier pool yearly. The aim of this study was to assess the spread of HBV infection in families with an infected member and to identify the family members with the highest risk of infection in our community. A total of 937 serum samples from 215 HBV-infected cases and 722 members of their households were screened prospectively for markers of HBV by commercial enzyme-linked immunosorbent assay. Among family members, 140 (19.4%) were HBsAg positive and 272 (37.6%) were negative for HBsAg but positive for either anti HBc or anti HBs. There were 145 HBsAg-positive adults among the index cases whose 133 adult siblings, 59 spouses and 59 mothers participated in the study. Interestingly, 28.81% mothers and 28.57% adult siblings of these adult index cases were positive for HBsAg compared with only 8.75% of their spouses ($P < 0.001$). Only 15.2% of the HBsAg-positive women in the childbearing age group were found to be HBeAg positive. Our results suggest that intrafamilial childhood horizontal transmission is important for HBV transmission in our community, and highlight the need for screening of adult siblings and mothers of adult HBsAg carriers in addition to their spouses and children.

Reference

B N Tandon, B. M. Gandhi, Y. K. Joshi Etiological spectrum of viral hepatitis and prevalence of hepatitis A and B virus infection in North India. Bulletin of the World Health Organisation 62(1):67-73,1984