Seroepidemiology of hepatitis A virus infection among school children in Delhi and north Indian patients with chronic liver disease: implications for HAV vaccination.

Abstract:

BACKGROUND: Universal vaccination against hepatitis A virus (HAV) has been recommended for children because of the changing epidemiological pattern of HAV. Vaccination has also been advised for patients with chronic liver disease as HAV superinfection in these patients can result in severe or even fatal disease. In India, the indications for HAV vaccination are not clear due to contradictory seroepidemiological data in children and lack of data on HAV seroprevalence in patients with chronic liver disease. METHODS: Sera were collected from children studying in two government-run schools and from patients with chronic liver disease attending the Liver Clinic at the All India Institute of Medical Sciences (AIIMS). The sera were tested for anti-HAV antibodies. The incidence of HAV-induced acute hepatitis and acute liver failure at AIIMS over the last 10 years was also assessed. RESULTS: A total of 93.2% (1328/1424) of the school children between 4-18 years of age who were included in the study had anti-HAV antibody in their sera. Eighty percent of the children had antibodies against HAV in their sera by the age of 5 years, whereas all the children above 16 years were positive for anti-HAV antibody. A total of 256 patients with chronic liver disease (94 with cirrhosis of the liver, 160 with chronic hepatitis) were tested for the presence of anti-HAV antibody. Of them, 97.6% (248/254) had anti-HAV antibody in their sera. The annual frequency of HAV-induced acute viral hepatitis and acute liver failure at AIIMS during the last 10 years did not show any change. CONCLUSION: Mass vaccination against HAV is not required in north India because of the presence of protective antibodies against HAV in the majority of the population. Copyright 2003 Blackwell Publishing Asia Pty Ltd