Hepatitis A in pediatric acute liver failure in southern India

Analysis[1] of 1612 subjects in different parts of India demonstrated that almost 50% of children under 5 years of age are at risk for hepatitis A.[1] A recent report showed that the relative contribution of hepatitis A to acute viral hepatitis in children has increased to over 80% in 1994-1997 as compared to 51% in 1978-81.[2] However, a number of studies in school children in northern and southern India have reported evidence of prior infection in up to 98% of 10-year-old children.[3,4]

We retrospectively analyzed data of children between 0 and 15 years, admitted in our pediatric intensive care unit (ICU) between January 2001 and July 2004, with acute liver failure-related diagnoses. The total number of children admitted with such diagnoses was 55 (mean age 5.5 years). Of these, 22 children (40%) were admitted with hepatic encephalopathy. Other diagnoses included acute-on-chronic liver disease (n=12; 22%), acute liver failure (11; 20%), fulminant hepatitis (4; 7%) and neonatal hepatitis (4; 7%). One patient each had Reye's syndrome and drug-induced hepatitis. Pre-existing liver disease was present in 17 of 55 patients.

IgM anti-HAV serology was positive in 13/27 (48%) patients tested; the mean age of patients who tested positive was 7.1 years. Two of the 13 (15%) had pre-existing liver disease. HBsAg was positive in only 1/33 (3%), anti-HCV in 1/10, and anti-HEV in 2/4 tested. Eleven patients died and two were discharged with poor prognosis. Two patients who died had evidence of acute hepatitis A.

This retrospective review showed a high incidence of acute hepatitis A infections of sufficient severity to require ICU admission in children with no pre-existing liver disease.

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