

Safety and Efficacy of Hepatitis A Vaccine in Children with Chronic Liver Disease.

Abstract

AIM: To study the safety and efficacy of hepatitis A vaccine (HAV) in children with chronic liver disease of various etiologies.

METHODS: Eleven children with chronic liver disease and thirteen age- and sex-matched controls negative for HAV antibodies were vaccinated against hepatitis A after they gave their informed consent. Children with uncontrolled coagulopathy or signs of hepatic decompensation were excluded. The vaccine (Havrix: 720 ELISA units in 0.5 mL, from GlaxoSmithKline Biologicals) was given intramuscularly in the deltoid in 2 doses 6 mo apart. Children were tested for HAV antibodies one and six months after the 1st dose and one month after the 2nd dose. Total serum bilirubin, alanine aminotransferase (ALT), and aspartate aminotransferase (AST) were determined immediately before and after one month of the 1st dose of the vaccine.

RESULTS: Only 7 out of the 11 patients were positive for HAV antibodies after the 1st dose of the vaccine, as compared to 100% of the controls. One month after the 2nd dose, all patients tested were positive for HAV antibodies. No deterioration in liver functions of patients was noted after vaccination. No adverse events, immediate or late, were reported by the mothers after each dose of the vaccine.

CONCLUSION: Hepatitis A vaccine is both safe and effective in this small studied group of children with chronic liver disease. Given the high seroconversion rate, post-vaccination testing for HAV antibodies is not needed