SUMMARY

This study was conducted to determine the viral etiology of suspected hepatitis among children in Cairo, Egypt. Children admitted to Abbassia Fever Hospital, Cairo, Egypt with jaundice ranging from one to ten years of age were enrolled in this study. Control subjects were either children with fever and no jaundice or apparently healthy brothers or sisters of the enrolled patients of the same age group. Blood was obtained from each subject and a questionnaire was employed to collect demographic data. Also, additional blood specimens were obtained at 2, 4 and 6 months following the acute phase of illness. Sera were tested for HAV antibodies (total and IgM), HBV (antigen and antibodies), HDV antibody and HCV antibody by EIA techniques. Acute non-A, non-B hepatitis was diagnosed in 33.2%(86) patients, hepatitis A in 33.2%(86), hepatitis B in 19.7%(51), hepatitis D in 1.2%(3), dual HAV and HBV infection in 12%(31), HCV in 0.4%(1), CMV in 0.4%(1) and three had HBs antibody. Six (13.6%) of the control subjects had IgM-HAV antibody, 4.5% (2) had HBsAg,and 6.8% (3) had HBs antibody. The follow-up samples demonstrated that HBsAg fluctuated between positive and negative or was detected in the 6 month follow-up sample. All follow-up samples were negative for HCV antibody. Overall, these data demonstrated that infection by hepatitis A was the most common among the other viruses associated with hepatitis in children. However, the actual cause of jaundice among the patients could not be confirmed because a definitive diagnosis was not possible.

RECOMMENDATIONS

1- Health education in schools and home focused on the improvement of sanitation and personal hygene.

2- Health education of the nurses in the health care units NOT to use the same syringe for a number of children and this requires supervision of the nurses in the health care units units to avoid using the same syringe.

3- Vaccinating all children with HBV vaccine on delivery and making it part of the vaccination program.

4- When a vaccine for HAV is developed and available for mass use, it should be given with polio vaccine.

5- Further studies should be considered on HEV or other viral hepatitis agents not yet discovered facilitate the accurate diagnosis the causes of jaundice.

6- National program is needed to study the viral cause of hepatitis in order to follow-up the cases and know the real cause of hepatitis and to further diagnose the odd results and real cause of jaundice.

7- Vaccinate all occupational health workers at risk to hepatitis infection, such as nurses, physicians, health workers, laboratory personnel, etc.