Patterns of Hepatitis B Virus Infection in Egyptian Children in The Era of Obligatory Hepatitis B Vaccination.

A b s t r a c t
Background and study aims: Mass compulsory HBV vaccination was applied in Egypt in 1992. The first dose of vaccine is administered at 2 months of age and routine screening of pregnant women for HBsAg is not applied. We aimed to evaluate the pattern of HBV infections after the implementation of HBV vaccination in Egyptian children.
Patients and methods: Fifty-six children with HBV infection presented to the Paediatric Hepatology Unit, Cairo University Children's Hospital, over the period from 1992 to 2006. Their data were reviewed for risk factors, clinical, serological and histopathological profiles. These cases were followed-up for 6.3 ± 3.4 years. The data of those born before 1993 (did not receive HBV vaccine) (group I) was compared to those who received the vaccine (group II).
Results: Sixty percent of HBV infected cases were born before 1993. Comparison of data of both groups revealed: (1) A significant younger age of onset in group II (3.34 ± 3.31 years vs. 9.84 + 2.95 years; p 6 0.01). (2) Vertical transmission was a significant risk factor in group II. (3) Chronic hepatitis developed in almost half of cases in both groups but cirrhosis was diagnosed only in 4 cases (all from group I) (p = 0.04).
Conclusion: Vertically transmitted HBV infection is becoming an important risk factor for acquisition of HBV among children born after the era of mass vaccination in Egypt. Mass screening for HBsAg of pregnant Egyptian women and/or giving a birth dose of HBV vaccine is becoming mandatory with the
increased incidence of vertical transmission.