Prevalence of Hepatitis B in Pregnant Females

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Hepatitis B during pregnancy is an important cause of morbidity and mortality. A study was conducted on 1000 pregnant females at Sir Ganga Ram Hospital to find out the prevalence of Hepatitis B in pregnant females. 18 (1.8%) were found to be hepatitis B surface antigen positive thus showing a high prevalence rate for this disease in the study population.
Key words: Hepatitis B, Pregnancy.

Hapatitis during pregnancy is a common medical disorder and is most frequently the result of Viral hepatitis[1]. Incidence of Viral hepatitis is quite high in developing countries like Pakistan[2]. Hepatitis B is a major cause of acute hepatitis as well as its serious sequelae namely chronic hepatitis, fulminant hepatitis and hapato-cellular carcinoma[3]. If the mother is a carrier of hepatitis B virus she can transmit the virus to her new born[5]. The infective neonate can become a chronic carrier or can develop hepatic cirrhosis or carcinoma in later life[4]. By identifying the mothers who are carriers of hepatitis B their infants can be protected by immuno-prophylaxis using hepatitis B vaccine and immunoglobulins. This study was conducted to determine the prevalence of hepatitis B in pregnant females.

Patients and methods

This study was conducted in Department of Obstetrics and Gynaecology of Fatima Jinnah Medical College/ Sir Ganga Ram Hospital Lahore from June 2004- June 2005. One thousand pregnant females presenting to labour ward either through OPD or casualty department were included in the study. Patients who were already diagnosed as carriers of hepatitis B or those who came in very serious condition were not included in the study. Detailed proforma which included patients identification, detailed history, examination and relevant investigations were filled. 5cc of venous blood was withdrawn and sent to laboratory for testing of hepatitis HBs Ag, which was done by ELISA method. The antenatal cards of all females diagnosed as surface antigen positive were marked with a red marker to identify them at the time of delivery. Infants born to mothers with positive antigenemia were given active and passive immunization at birth. Mothers were advised to come for follow up with their babies to complete the vaccination.

Results:

Out of one thousand pregnant females 18 were found to be positive for HBs Ag thus giving a prevalence rate of 1.8%. Detailed history of these 18 females revealed that 5 of them had clinical jaundice in early pregnancy, 5 had history of contact in the past 1-year, 3 gave history of blood transfusion at private clinics and 2 gave history of surgical procedure in the recent past. In 3 women no significant history was found.

Discussion:

This study showed a 1.8% prevalence rate of HBV in pregnant females of the study population, which is quite high. Although nowadays hepatitis C in pregnancy is emerging as a major health problem, this study shows that hepatitis B still remains a major cause of Obstetric morbidity and mortality. If timely immuno prophylaxis is not given to neonates of these mothers, they are at risk of developing chronic carrier state. Similar study conducted at Agha Khan Hospital Karachi showed a prevalence rate of 2.3%[6]. This difference in the prevalence rate could be due to difference in the demographic characteristics of study populations.

Conclusion:

Despite the introduction of active immunization programme[2] hepatitis B still remains a major health problem. In order to prevent the spread of hepatitis B all pregnant females should be screened and neonates born to surface antigen positive mothers should be actively and passively immunized.

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