Abstract:

One hundred and seventy five subjects with chronic liver diseases which included patients with chronic active hepatitis (90), liver cirrhosis (31) and asymptomatic hepatitis B carriers (54), were included in the study. Hepatitis B virus (HBV) specific DNA-polymerase activity and HBe-markers were tested as markers of HBV-multiplication. In HBsAg positive samples, DNA-P activity was positive in 44.4% of the HBV carriers, 52.9% of the patients with chronic active hepatitis and 81.8% of the patients with liver cirrhosis. The corresponding figures for the presence of HBeAg in these groups were 18.5, 26.5 and 45.5% respectively. Virus multiplication was also observed in 41.1 and 44.4% patients with chronic active hepatitis and liver cirrhosis respectively, in the absence of HBsAg. The results of the present study show that hepatitis B virus is the most important etiological factor of chronic liver diseases in India. Most of our patients of chronic liver diseases seems to have contacted HBV infection as young adults and the mode of transmission is likely to be horizontal rather than vertical. The virus replicating markers correlate well with the severity of the liver injury and decreased with the age. DNA-P activity is a more sensitive marker of viral multiplication than HBeAg. Viral multiplication was also found to occur in the absence of the usual HBV markers. Continued viral multiplication in patients with chronic active hepatitis and liver cirrhosis is implicated in continued liver injury and progressive liver disease.