

## PREVALENCE OF ANTI-PRE-S ANTIBODIES IN PATIENTS WITH DIFFERENT HBV INFECTIONS.

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The role of pre-S proteins and their antibodies during hepatitis B virus (HBV) infection is still poorly understood. The presence of anti-pre-S antibodies at various stages of acute viral hepatitis B is already reported. However, a detailed study demonstrating the prevalence of anti-pre-S antibodies in different types of HBV infections is not available. The present investigation describes a sensitive and specific ELISA system developed to detect anti-pre-S antibodies during different HBV infections. Using this technique, anti-pre-S antibodies were evaluated in sera samples from healthy control (95), HBV-carriers (105), HBV-vaccine recipients (12), acute viral hepatitis (AVH) (38), subacute hepatic failure (SAHF) (10), chronic active hepatitis (CAH) (10), and fulminant hepatic failure (FHF) (18). The results obtained showed a total absence of anti-pre-S antibodies in serum samples from healthy control and HBV-carriers. Anti-pre-S antibodies were detected in 2.7 per cent cases of AVH and 10 per cent cases of CAH. In SAHF none of the sera was positive. However, anti-pre-S was recorded in high proportion of sera (33.3 %) from FH. Similarly, out of 12 vaccine recipients, anti-pre-S was detected in 75 per cent cases after 2nd dose of vaccine and 100 per cent cases after 3rd dose of vaccine. This study concludes that anti-pre-S antibodies are implicated in the clearance of HBV-particles from circulation without causing tissue damage.