Anti-pre-S antibody was tested in 38 sera from patients with fulminant hepatitis (positive for HBsAg and/or IgM anti-HBc) using a specific solid phase enzyme linked immunosorbent assay (ELISA). Anti-pre-S activity was detected in 50 percent sera samples positive for HBsAg but negative for IgM anti-HBc. There were 12.5% sera positive for both HBsAg as well as IgM anti-HBc and 75% sera negative for HBsAg but positive for IgM anti-HBc. The prevalence of HBV-specific DNA-polymerase activity was high in all the three groups whereas anti-HBs positivity was low. Anti-pre-S activity was observed both in the presence as well as in the absence of DNA-polymerase activity. High-anti-pre-S level in fulminant hepatitis B patients was assumed to be implicated in the fast clearance of HBsAg from circulation.