

ABSTRACT FORM FOR ISG

CHANDIGARH, OCT. 26-28, 1987

XXVIII Annual Conference of Indian Society of Gastroenterology (ISG)
in Association with Society of Gastrointestinal Endoscopy of India (SGEI)
and Indian Association of Study of Liver (INSAL)

Title: (CAPITAL LETTERS) PREVALENCE OF ANTI-IDIOTYPES
AGAINST ANTI-HBs IN DIFFERENT GROUPS OF PATIENTS
WITH HEPATITIS B.

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Abstract The continuous replication of hepatitis B virus (HBV) during HBV infection depends mainly on host immune response. Recently, the presence of anti-idiotypic antibodies directed against anti-HBs was reported to play an important role in HBV-replication. However, a detailed study demonstrating the prevalence of these anti-idiotypes in different HBV infections is not yet available. The present investigation was planned with an aim of evaluating the presence of IgG and IgM anti-idiotypic antibodies in the sera from different HBV infections, and thus establish a relation between the presence of anti-idiotypes and HBV-replication. The anti-idiotypes (IgG and IgM types) against anti-HBs were tested in sera samples from different patients groups by a simple and sensitive ELISA technique. Both types of anti-idiotypes were detectable concurrently in HBsAg positive sera from HBV-infected patients and asymptomatic HBV-carriers. Anti-idiotypic activity was absent in HBsAg-negative sera from healthy persons and patients with non-A, non-B hepatitis and viral hepatitis-A. The anti-idiotypes positive sera were free of rheumatoid factor and HBsAg/IgM complexes activity but positive for anti-HBs in 20% cases, HBeAg in 30% cases and HBV-associated DNA-polymerase in 60% cases. The presence of anti-idiotypes against anti-HBs was presumed to permit a more active multiplication of hepatitis B virus.