MEDICAL CHANNEL

Original Article

THE FREQUENCY OF DIFFERENT DISEASE PATTERNS OF HEPATITIS B VIRUS IN INCIDENTALLY DETECTED ASYMPTOMATIC HEALTHY HBSAG POSITIVE PATIENTS

1. JAVED AHMED PHULPOTO
2. SYED IFTIKHAR ALI SHAH
3. ZULFIQAR BHATTI

1. *Assistant Professor of Medicine,* Ghulam Mohd Mahar Medical College (GMC) & Hospital Sukkur
2. *Assistant Professor of Medicine,* Ghulam Mohd Mahar Medical College (GMC) & Hospital Sukkur
3. *Consultant Surgeon,* Ghulam Mohd Mahar Medical College Hospital Sukkur

Correspondence
DR. JAVED AHMED PHULPOTO
Assistant Professor of Medicine,
Ghulam Mohd Mahar Medical College (GMC) & Hospital Sukkur
CELL NO 0333-7123334, 0300 - 9312150
E-MAIL. jphulpoto@yahoo.com

ABSTRACT

Objective
To determine the frequency of different disease patterns of Hepatitis B virus in incidentally detected asymptomatic healthy HbsAg-positive patients, attending Liver clinic of Ghulam Mohammad Mahar Medical College, Sukkur.
Study Design: Prospective observational study
Place of Study: Liver clinic, Ghulam Mohammad Mahar Medical College, Sukkur.
Duration of Study: From January 2009 to June 2010
Methodology: One hundred twenty two incidentally detected asymptomatic healthy HBsAg-positive subjects (IDAHS), in whom HBsAg positivity persisted for >6 months, were studied for liver biochemistry, HBeAg, anti HBe and HBV DNA levels. Liver biopsy was done in 58 subjects and scored for histological activity index (HAI) and fibrosis using modified Knodell score.
Results: Twenty six (21%) subjects were HBeAg positive. The remaining 96 (79%) were positive for anti HBe, with HBV DNA level of >105 copies/mL in 30 (31.2%). Transaminase elevation was more frequent in HBeAg-positive subjects (69%; $p<0.05$) and in HBV DNA-positive (93%) than in non-replicative (27%) infection. Seroconverted (anti HBe-positive) individuals were a decade older than HBeAg-positive ones and most (93.7%) of them were >20 years of age. Thirty of 58 (51.3%) had HAI >3, more frequently in those with raised ALT (68.4%; $p<0.05$) than with normal ALT (20%), but there was no difference in relation to HBeAg status.
Conclusions: Seroconversion to anti HBe was noted in individuals aged 20 years or more. Ongoing liver disease was noted in approximately half of IDAHS, suggesting that a considerable proportion of IDAHS have active infection. In HBeAg-negative subjects, transaminase estimation may be sufficient in planning therapy.

Key Words: IDAHS, Carrier, Chronic infection, Liver clinic

INTRODUCTION

Chronic infection with hepatitis B virus (HBV) causes a spectrum of diseases ranging from asymptomatic infective state to cirrhosis and hepatocellular carcinoma. The asymptomatic state has highly variable characteristics.
Hepatitis B virus (HBV) infection has a dynamic natural history. HBeAg-negative state, a favorable phase in the natural history, can reconvertto HBeAg-positive state in a lifetime in 20%-30% of cases due to one or more reactivations, leading to progressive liver disease.Although onpresentation incidentally-detected asymptomaticHBsAg-positive subjects (IDAHS) appear healthy, varying proportions have evidence of liver disease on investigation.,. In studies from the West, HBeAg positivity has been noted in 4%-41% in IDAHS,,,with ALT elevation in two-thirds and HAI >3 in one fourthof subjects. Although in studies from India HBeAg positivity was similar (9%-45%),, three fourthshad raised ALT and 70% had abnormal liver histology (HAI >3). Anti HBe positivity in IDAHS in studies from the West has been 58%- 96%,, with infrequent (2%-20%) hepatic damage. Among anti