Severity of hepatic inflammation and fibrosis in patients with chronic HBV infection with normal liver function test correlated with viral load and HBeAg status


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Background and Aims: The asymptomatic chronic hepatitis B virus (HBV) carriers are not absolutely equal healthy carriers. Most of carriers exist pathologic lesion and sometimes develop chronic B hepatitis, liver cirrhosis, even hepatocellular carcinoma. The aims of the present work are to determine the histological findings and investigate the influences of serum HBV DNA load and HBeAg status on the changes of liver histopathology in patients infected chronically with HBV who have normal liver function test (LFT), and to explore the pathogenesis involved.

Methods: A percutaneous liver biopsy was performed in 86 chronic HBV-infected patients with normal LFT, and the changes of liver were evaluated histopathologically. The biopsied liver tissue was processed for histological examination, including dyed by haematoxylin-eosin (HE) staining for study of pathologic grading (G) and staging (S) of hepatic liver inflammation and fibrosis. HBV makers were detected by ELISA. Serum HBVDNA levels were measured by PCR method.

Results: The mild hepatic-inflammation and fibrosis were the most common histological findings. Of 86 patients, 41 cases with G1S0, 36 cases G1S1, 9 cases G2S1. No significant differences were found in the findings of pathologic grading and staging of hepatic inflammation and fibrosis between male and female patients (p >0.05). The rate of those with HBVDNA positive showed significant different from those with HBVDNA negative carriers (p <0.01). Compared with the patients who have low HBV virus load (HBV viral load <1.0×10^7 copies/ml) and/or HBeAg negative status, those who have high viral load (HBV viral load >1.0×10^7 copies/ml) and/or HBeAg positive status have significant severe hepatic inflammation and fibrosis, all with the p values less than 0.01.

Conclusions: The mild hepatic-inflammation and fibrosis were the most common histological findings in chronic HBV-infected patients with normal LFT. The severity of hepatic inflammation and fibrosis in these chronic HBV-infected patients correlated with viral load and HBeAg status.

HBV and HCV infection play an important role in the progression to liver cirrhosis and hepatocellular carcinoma in alcoholics

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Background and Aims: To investigate the prevalence of HBV and HCV and clinical significance of HBV and HCV infection in the patients with alcoholic liver disease (ALD) and to evaluate the interaction between chronic HBV and HCV infection and heavy alcohol drinking on the development of LC and HCC.

Methods: 326 patients with ALD including 125 with CH, 175 with LC, and 26 with HCC were enrolled in the study. HBV-marker and anti-HCV were tested by ELISA. Serum HBVDNA and HCVRNA were detected by PCR/RT-PCR.

Results: Total prevalence rate of HBV and HCV infection in 326 patients was 65.3% (213/326). Of 326 patients, the rate of viral infection was 39.2%, 78.9% and 100%, respectively, in patients with CH, LC and HCC, in which the rate of viral infection with LC and HCC predominated vs CH group (p <0.01). Positive rate of superinfection with HBV and HCV in patients with HC was significantly higher than in patients with CH and LC (p <0.01). The rate of superinfection in patients with LC predominated vs with CH (p <0.01). 113 of 326 patients were negative for HBV- and HCV-marker (group A). Of 213 patients with viral infection, 119 cases (55.9%) were positive for HBV-marker (group B), 56 cases (26.3%) positive for HCV-marker (group C), 35 cases (16.4%) positive for both HBV- and HCV-marker (group D). The age was oldest in the cases of group B among the 4 groups. There was no significant difference in the amount of daily alcohol intake. Previous operation, tattooing and transfusion were more frequent in groups C and D. The proportions of the patients with HCC in groups C and D were significantly higher than in groups B and A (16.1%, 28.6%, 5.9%, and 0.0%, respectively).

Conclusions: HBV and HCV infections are frequent in patients with ALD in Kunming. HBV and HCV may play a significant role in the progression to LC and HCC in alcoholics.