

# Predictors of hepatic steatosis in HBeAg-negative chronic hepatitis B patients and their diagnostic values in hepatic fibrosis

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**Abstract :**

**Objective:** To investigate predictors of hepatic steatosis in HBeAg-negative chronic hepatitis B (CHB) patients and their diagnostic values in hepatic inflammation and fibrosis. **Methods:** A total of 106 HBeAg-negative CHB patients with clinically and pathologically proven steatosis and 98 patients without steatosis were recruited into this study. The levels of fasting blood glucose (FBG), fasting insulin (FINS), triglyceride (TG), cholesterol (CHOL), alanine aminotransferase (ALT), aspartate aminotransferase (AST), albumin (Alb), globulin (Glb), HBV DNA, body mass index (BMI), homeostatic model assessment of insulin resistance (HOMA-IR) and pathological changes of the liver in inflammation, fibrosis and fatty deposition were examined in all patients. **Results:** The levels of BMI, HOMA-IR, FBG, insulin, TG, and CHOL were significantly higher in patients with steatosis than those without steatosis (all  $P<0.05$ ). But ALT, AST and HBV DNA levels were significantly lower in patients with steatosis (all  $P<0.05$ ). Logistic regression analysis showed that only FINS was a significant predictor for hepatic steatosis ( $P<0.05$ ); FINS and Glb were significant predictors for hepatic inflammation (all  $P<0.05$ ); BMI and TC were significant predictors for hepatic fibrosis (all  $P<0.05$ ). **Conclusions:** Hepatic steatosis, a common disease in HBeAg-negative CHB patients, was positively associated with BMI, FBG, FINS, TG, TC, GGT, ALP and HOMA-IR. In these patients, the prevalence of hepatic inflammation and fibrosis was also increased.

**Key Word :**

HBeAg negative, chronic hepatitis B, nonalcoholic fatty liver disease, liver biopsy

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