AIMS: FibroTest and ActiTest are noninvasive tests used in determining the level of fibrosis and the degree of necroinflammatory activity in the liver. In our study, we aimed to investigate whether these tests could be alternative to liver biopsy.

MATERIALS AND METHODS: Fifty patients were included in the study. Serum samples were obtained and liver needle biopsy was performed on the same day. Levels of fibrosis in FibroTest and levels of activity in ActiTest, both determined via serum biochemical markers, were compared with levels of fibrosis and activity in histopathological examination. For statistical analyses, Mc Nemar chi square test and Spearman's correlation tests were used.

RESULTS: There was a significant positive correlation between fibrosis in biopsy and the level of fibrosis in FibroTest in patients with hepatitis B virus (HBV) (rho: 0.67, P < 0.0001). However, no significant correlation was determined between the activity in biopsy and the degree of activity in ActiTest (rho: 0.29, P < 0.05). No significant correlation was determined between both fibrosis and activity established in biopsy and the results of FibroTest and ActiTest in the group of patients with hepatitis C virus (HCV) (rho: 0.22, P < 0.05 and rho: 0.15, P < 0.05, respectively).

CONCLUSION: Our results suggest that novel and safer noninvasive biochemical tests are needed as an alternative to histopathology in patients infected with HBV and HCV. Consequently, we believe that liver biopsy maintains its place as a gold standard in determining the histopathological condition of the liver.

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