

HCC

#P32 - FIB-4 in predicting hepatocellular carcinoma during viral hepatitis: A novel indication for an old tool

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Background & Aims

Hepatocellular carcinoma (HCC) is a severe outcome during liver disease with limited treatment options when diagnosed lately. It is the leading cause of death in patients with chronic hepatitis, particularly secondary to chronic viral hepatitis. Screening scores are continuously being developed to optimize early diagnosis. The aim of this study was to investigate the correlation between FIB-4 score and HCC risk during treated chronic viral hepatitis in Tunisian patients.

Methods

We conducted a single-center retrospective study analyzing data from patients with chronic viral hepatitis B and C. Patients with co-infection BD, D, VIH or associated nonalcoholic steatohepatitis were excluded. FIB-4 score was calculated for each patient at presentation.

Results

In total, 88 consecutive patients were enrolled: 42 with chronic hepatitis B and 46 with chronic hepatitis C. The mean age at diagnosis was 51.5 ± 12 years with a sex-ratio M/F of 1.31. At baseline, 37.2% of patients had already developed cirrhosis. Virological response was achieved in 92% of the population. HCC occurred in 16% (N=14) of patients after a mean follow-up period of 79. The stage of HCC was classified as 'A', 'B', 'C' and 'D' according to BCLC classification in 28.5%, 25%, 43% and 0.7% respectively. Univariate analysis identified: older age ($p=0.02$), low platelet count ($p<0.0001$), cirrhosis ($p<0.0001$), high bilirubin level ($p=0.028$) and high Fib-4 ($p=0.01$) as factors associated with the occurrence of HCC. When analyzing the receiver operating characteristic (ROC) curve, AUC of FIB-4 score in predicting HCC was 0.845 (95% CI: 0.730–0.960, $p<0.0001$). The corresponding FIB-4 cut-offs for 90% sensitivities was 1.67, while the cut-offs for 90% specificities was 3.8.

Conclusions

In our study, high FIB-4 score was associated with increased HCC risk in patients with viral hepatitis. FIB-4 index is based on routinely clinical and biological data and showed highly predictive performances in predicting HCC allowing better stratification.