

Prospective Validation of the FibroTest Score in Assessing Liver Fibrosis in Hepatitis C Infection with Genotype 4

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Abstract : Prospective Validation of the FibroTest Score in assessing Liver Fibrosis in Hepatitis C Infection with Genotype 4
FibroTest (FT) is non-invasive score of liver fibrosis that combines the quantitative results of 5 serum biochemical markers (alpha-2-macroglobulin, haptoglobin, apolipoprotein A1, gamma glutamyl transpeptidase (GGT) and bilirubin) and adjusted with the patient's age and sex in a patented algorithm to generate a measure of fibrosis. FT has been validated in patients with chronic hepatitis C (CHC) (Halfon et al., Gastroenterol. Clin Biol.(2008), 32 6suppl 1, 22-39). The validation of fibro test (FT) in genotype IV is not well studied. Our aim was to evaluate the performance of FibroTest in an independent prospective cohort of hepatitis C patients with genotype 4. Subject was 122 patients with CHC. All liver biopsies were scored using METAVIR system. Our fibrosis score(FT) were measured, and the performance of the cut-off score were done using ROC curve. Among patients with advanced fibrosis, the FT was identically matched with the liver biopsy in 18.6%, overestimated the stage of fibrosis in 44.2% and underestimated the stage of fibrosis in 37.7% of cases. Also in patients with no/mild fibrosis, identical matching was detected in 39.2% of cases with overestimation in 48.1% and underestimation in 12.7%. So, the overall results of the test were identical matching, overestimation and underestimation in 32%, 46.7% and 21.3% respectively. Using ROC curve it was found that (FT) at the cut-off point of 0.555 could discriminate early from advanced stages of fibrosis with an area under ROC curve (AUC) of 0.72, sensitivity of 65%, specificity of 69%, PPV of 68%, NPV of 66% and accuracy of 67%. As FibroTest Score overestimates the stage of advanced fibrosis, it should not be considered as a reliable surrogate for liver biopsy in hepatitis C infection with genotype 4.

Keywords : fibrotest, chronic Hepatitis C, genotype 4, liver biopsy

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