Fibroscan, a non-invasive method, can effectively predict portal hypertension and high grade oesophageal varices in patients with liver cirrhosis

Deepak Bansal, Varun Mehta and Ajit Sood
Dayanand Medical College and Hospital, India

Liver fibrosis predicts presence of portal hypertension. Fibroscan which is based on transient elastography measures liver stiffness. Our study was conducted to evaluate whether fibroscan can effectively predict the presence of portal hypertension and of esophageal and gastric varices in patients with cirrhosis. We prospectively enrolled 201 patients with established case of cirrhosis between January 2013 and June 2014. Fibroscan was measured for each patient and additionally upper GI endoscopy was done. Results showed that 182 (91.9%) patients had evidence of portal hypertension with mean fibroscan value of 30.01±22.15 kpa and 16 patients had no evidence of portal hypertension on upper GI endoscopy with mean fibroscan value of 18.93±18.26kpa (p value=0.050). The mean fibroscan value of patients (53/102) with high grade oesophageal varices was 40.81±22.88kpa. Subgroup analysis shows that fibroscan can predict high grade oesophageal varices (grade II + III vs. grade I) (p value=0.008). The cut off value of fibroscan for detection of portal hypertension was 29.37kpa, with 94.59% sensitivity. This indicates that fibroscan is a very useful test for detection of portal hypertension. Cut off value of fibroscan, for presence of high grade varices was 38.54kpa with negative predicted value of 81.46% which indicates fibroscan can effectively predict presence or absence of high grade oesophageal varices and thus upper GI endoscopy applied selectively to the patients. Thus, our study shows that fibroscan is a very useful non-invasive test for detection of portal hypertension and predicting high grade oesophageal varices.

Biography

Deepak Bansal has completed his fellowship (DM) in Gastroenterology in 2015 from Dayanand Medical College and Hospital, Ludhiana, India and is presently serving as Assistant Professor in Department of Gastroenterology at Government Medical College and Hospital, Chandigarh, India. He has participated and organized several gastroenterology conferences and has special interest in the field of hepatology.

Notes: