

COMPARATIVE STUDY OF CONVENTIONAL SCORING SYSTEMS (CTP & MELD) WITH VON WILLEBRAND FACTOR IN PREDICTING PROGNOSIS IN CIRRHOSIS OF LIVER

Aditya V Kulkarni and L Venkatkrishnan

Antrang Hospital of Gastroenterology and Hepatology, India

Aim: The aim of this study is to compare VWF to CTP and MELD scores to determine short term morbidity and mortality.

Methods: A prospective observational study enrolling 50 patients with cirrhosis of liver who were categorized according to CTP and MELD scores. VWF levels were detected. The levels of VWF were compared with the CTP and MELD scores in 50 cirrhotic patients. All patients were on 3month follow up to determine the complications.

Results: In comparison with CTP A, B, C, VWF was elevated in 3.4%, 34.5% and 62.1% respectively ($X^2=10.89$, $p<0.01$). In MELD score, 78.2% had high VWF levels ($X^2=7.17$, $p<0.01$). The mean value of overall complications in patients with high VWF was 1.48 ± 1.32 ($t= 2.19$, $p<0.05$), as compared to CTP and MELD scores which had a mean value of 0.8 ± 1.14 and 0.77 ± 1.05 respectively. In comparison of VWF levels with individual complications and mortality, spontaneous bacterial peritonitis(SBP) was seen in 27.6% in high VWF group compared to 4.8% in low VWF group ($X^2=4.299$, $p<0.05$). Hepatorenal syndrome(HRS)was present in 51.7% patients with high VWF group in comparison with 23.8% in low VWF group ($X^2=3.95$, $p<0.01$). Correlation of VWF levels was also done with the grade of varices. 4,23,20,3 patients had grade 0,1,2,3varices respectively, among which 6.9%,37.9%,48.3%and6.9% were in high VWF group ($X^2=2.35$, $p=0.502$). 9 patients had bleeding of which five patients had high VWF levels.

Conclusions: VWF was a better predictor of overall three months mortality. As for individual complications, VWF is better in predicting complications related to bacterial translocation (SBP, HRS) VWF levels did not correlate with grade of esophageal varices and fail to predict the risk of bleeding over three months in the study.

BIOGRAPHY

Aditya V Kulkarni is a Gastroenterologist, presently working as consultant in Antrang Hospital of Gastroenterology and Hepatology, Kolhapur. He has finished his Gastroenterology training in PSG Hospitals, Coimbatore, India. During his academic carrier he has worked on Von Willebrand Factor and its impact on liver disease. He also has presented posters in United European Gastroenterology week 2016 in Vienna and in International Liver Congress 2017, Amsterdam. He has publications in reputed journals like *Endoscopy and Annals of Hepatobiliary and Pancreatic surgery*. During His academic years he has also received awards for best poster and best oral presentation in state conferences.

aditya.vkulkarni14684@gmail.com