

PREDICTORS OF SPONTANEOUS BACTERIAL PERITONITIS IN EGYPTIAN PATIENTS WITH CIRRHOTIC ASCITES

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Background: Spontaneous bacterial peritonitis (SBP) is a serious complication of liver cirrhosis and finding a prognostic model to predict it is needed. **Objective:** to test the ability of different laboratory tests and the new Wehmeyer's SBP scoring system to predict it.

Methods: Three hundred patients admitted at the National Liver Institute, University of Menoufiya, Egypt (2015-2016) with liver cirrhosis and ascites were included in our study. SBP was diagnosed if ascetic neutrophils count $\geq 250/\mu\text{L}$ with no sign of secondary peritonitis.

Results: Median age 56 (29 –81 years), 60% men and primary cause of liver disease was hepatitis C, 91.7%. By univariate analysis: age, total bilirubin, AST, creatinine, international normalized ratio, MELD score, total leucocytic count, platelet count and C-reactive protein (CRP) were significant. By multivariate analysis independent predictors were age, platelet count and CRP ($p = 0.004$, 0.013 and < 0.001 , respectively). CRP at a cutoff point ≥ 13.5 mg/L could predict SBP (sensitivity 86.4% and specificity 66.0%). Wehmeyer's SBP scoring system was able to predict it ($p < 0.001$), only 4% of patients with 0 score developed SBP (CRP cutoff is 30 mg/L), while 92.8% with score of 3 or 4 developed it. By using our CRP cutoff value of 13.5 mg/L, no patient with 0 score developed SBP.

Conclusion: Age, CRP and platelet count are independent predictors for SBP and a scoring system including them could easily predict it. SBP diagnosis could be excluded in patients with zero score, using CRP cutoff value of 13.5 mg/L.

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