

Predictors of Fifty Days In-Hospital Mortality in Patients with Culture Negative Neutrocytic Ascites

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Background: Culture negative neutrocytic ascites is a variant of spontaneous bacterial peritonitis. But there are conflicting reports regarding the mortality associated with culture negative neutrocytic ascites. Therefore we aim to determine the predictors of mortality associated with culture negative neutrocytic ascites in a larger sample population.

Methods: We analysed 170 patients consecutively admitted to intensive care unit with diagnosis of culture negative neutrocytic ascites. The clinical laboratory parameters, etiology of liver cirrhosis was determined along with the scores like model for end stage liver disease, child turcotte pugh were recorded.

Results: The 50 day in-hospital mortality rate in culture negative neutrocytic ascites was 39.41% (n=67). In univariate analysis, means of parameters like total leucocyte count, urea, bilirubin, alanine aminotransferase, aspartate aminotransferase, international normalized ratio, acute kidney injury, septic shock, hepatic encephalopathy and model for end stage liver disease were significantly different among survived and those who died (P value ≤ 0.05). Cox proportional regression model showed the hazard ratio (HR) of acute kidney injury was 2.212 (95% CI: 1.334-3.667), septic shock (HR = 1.895, 95% CI: 1.081-3.323) and model for end stage liver disease (HR = 1.054, 95% CI: 1.020-1.090). Receiver operating characteristics curve showed aspartate aminotransferase had highest area under the curve 0.761 (95% CI: 0.625-0.785).

Conclusion: Patients with culture negative neutrocytic ascites have a mortality rate comparable to spontaneous bacterial peritonitis. Aspartate aminotransferase, alanine aminotransferase, acute kidney injury, model for end stage liver disease and septic shock are the independent predictors of 50 days in-hospital mortality in culture negative neutrocytic ascites.

Biography:

Dr. Chinmaya Kumar Bal has completed his MD in Internal Medicine. His career interest include gastroenterology and hepatology. He has worked as research assistant at Roger Washington's Clinic, Santa Clara, CA, USA. He was previously engaged as observer in gastroenterology department at Cleveland Clinic, FL, United States and Stanford University School of Medicine, CA. He has done his clinical research training in epidemiology and clinical trial concentration from Harvard Medical School, USA. He has also worked as Junior resident doctor at All India Institute of Medical Science, New Delhi, Safdarjung Hospital, New Delhi, Institute of Liver & Biliary science, New Delhi. He also worked as Emergency Medical Officer at Moolchand Hospital, New Delhi. He has several publications in various peer reviewed national and international journals with high impact factors.