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SPONTANEOUS BACTERIAL PERITONITIS—A CLINICAL STUDY IN CIRRHOTIC PATIENTS WITH ASCITES

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Introduction: When patients of compensated cirrhosis are followed over a course of 10 years, >50% patients develop ascites. Spontaneous bacterial peritonitis (SBP) is an important complication in the clinical course of the patients with cirrhotic ascites.
Aim: To determine the incidence of SBP in cirrhosis patients with ascites and compare the clinical spectrum of patients with SBP with those without SBP.
Materials and Method: *Study Design:* Single center observational study. *Place of Study:* Department of Medicine and Gastroenterology, Gauhati Medical College Hospital. *Duration:* July 2010 to June 2011. Study population consisted of 200 patients >12 years of age of both sexes with features of cirrhosis.
Result: Of the 200 patients with cirrhosis, ascites was present in 64% of the patients. The SBP was detected in 12.5% cases on the basis of an ascitic fluid neutrophil count >250 cells/mm^3. Ascitic fluid cultures were positive in 43.75% of the patients with SBP, and *Escherichia coli* was the most common organism grown in culture (57.14%). About 4% (3.9%) patients had monomicrobial non-neutrocytic bacterascites. Twenty-six patients (13%) died during hospital stay, of which four patients (15.3%) had SBP. Hepatic encephalopathy, upper gastrointestinal bleed and sepsis were the other common causes of death encountered in the patients.
Conclusion: Spontaneous bacterial peritonitis is fairly common in cirrhotic patients and is associated with a significant morbidity. Hence, diagnostic paracentesis including ascitic fluid cultures should be done in all patients with ascites to determine its presence.

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SECONDARY PROPHYLAXIS OF HEPATIC ENCEPHALOPATHY IN CIRRHOSIS—AN OPEN LABEL, RANDOMIZED CONTROLLED TRIAL OF LACTULOSE, PROBIOTICS AND NO-THERAPY

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Background: Lactulose is effective in secondary prophylaxis of hepatic encephalopathy (HE). Probiotics improves minimal HE (MHE) which predisposes to HE. There is no study on secondary prophylaxis of HE using probiotics.
Aim: To study the effects of lactulose and probiotics for secondary prophylaxis of HE.
Method: Consecutive cirrhotic patients who recovered from HE were randomized to receive lactulose (Group-L, 30 mL/3 times/day), probiotics (Group-P) three capsules/day containing 112.5 billion viable lyophilized bacteria per capsule and no therapy (Group-N). All patients were assessed by psychometry (number connection test [NCT-A, B], figure connection test if illiterate [FCT-A, B], digit symbol test (DST), and block design test [BDT]), critical flicker frequency test (CFF) and arterial ammonia at inclusion, and patients were followed up monthly. Development of overt HE was the primary end-point, according to West-Haven criteria or a follow-up of 12 months.
Result: Of 360 who recovered, 235 (65.2%) met the inclusion criteria (Group-L, $n=80$; Group-P, $n=77$ and Group-N, $n=78$). Thirty-eight patients (16.1%) were lost to follow-up. Seventy-seven patients developed HE (Group-L, $n=18$; Group-P, $n=22$ and Group-N, $n=37$). There was significant difference between Group-L vs Group-N ($P=0.001$) and between Group-P vs Group-N ($P=0.02$) while no difference between Group-L vs Group-P group ($P=0.349$). Readmission rate due to causes other than HE (Group-L:Group-P:Group-N, 19:21:28 $P=.0.134$) and deaths (Group-L:Group-P:Group-N, 13:11:16 $P=0.56$) in three groups were similar. There was a high prevalence of abnormal psychometric test results (NCT-A, 71.5%; NCT-B, 69.2%; DST, 76.9%; and BDT, 85.2%). The CFF was <38 Hz in 118 patients (50.2%). On multivariate analysis, recurrence of overt HE was significantly associated with two or more abnormal psychometric tests and arterial ammonia after the recovery of an episode of HE.
Conclusion: Lactulose and probiotics are effective for secondary prophylaxis of HE in patients with cirrhosis.

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MINIMAL HEPATIC ENCEPHALOPATHY—DIAGNOSIS, PREVALENCE, AND CORRELATION BETWEEN NEUROPSYCHOLOGICAL AND NEUROPHYSIOLOGICAL TEST—A CLINICAL STUDY FROM NORTH-EAST INDIA

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Background: Minimal hepatic encephalopathy (MHE) is defined as mild neurocognitive abnormalities in chronic liver disease (CLD) patients that are not recognizable on standard neurological examination.
Aim: To find the prevalence of MHE in patients with CLD and to find the correlation between neuropsychological test (psychometric hepatic encephalopathy score [PHES]) and