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Study to Know the Percentage of Culture Negative Neutrocytic Ascites in Patients Having Chronic Liver Disease

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ABSTRACT

Objective: The aim of our study is to determine the frequency of CNNA in patients with chronic liver disease in a tertiary care hospital.

Study Design: A descriptive cross sectional study

Place and Duration: The study was performed in the Gastroenterology and Hepatology department of Nishter Hospital Multan for the period of one year from May 2016 to May 2017.

Materials and Methods: The following criteria were not taken in the last month for the absence of intraabdominal infection (4) in ascetic fluid culture negative (3) for more than 250 / mm3 (2) for the diagnosis of CNNA (1) neutrophil count (5) no. There is clinical evidence of pancreatitis. Because of increased mortality, CNNA is recommended to be treated with antibiotics as soon as possible.

Results: In most cases the cause of cirrhosis was hepatitis C followed by hepatitis B. The vast majority of patients were in the Child-Pugh C-Class stage and sampling was done using a probabilistic sequential sampling technique. A total of two hundred patients, 120 male and 80 female, were included in the study. 118 (59%) patients had negative neutrocytic ascites culture. There was no significant difference in age, gender and duration of CLD in CNNA prevalence.

Conclusion: It was concluded that 59% (118% to 200%) of patients with chronic liver disease and acidosis in the tertiary care hospital had negative neutrophilic acid in the culture.

Keywords: Chronic Liver Disease, Culture-Negative Neutrocytic Ascites, portal hypertension.

INTRODUCTION

Chronic liver disease progresses to liver cirrhosis, characterized by fibrosis, injury and nodule formation. SBP is at high risk for many complications and is a major complication in cirróticos.1 patients with cirrhosis1 patients who have a disminuida.2 cirrhosis in patients with EPC and hepatopulmonary, coagulopathy, PAS, hepatocellular carcinoma etc., including major complications, ascites portosystemic encephalopathy, hepatorenal syndrome. Among the main complications of cirrhosis are hypertension, abnormal functions or synthetic ambas.3, which is connected to the portal, with acid hepatic encephalopathy, most commonly seen and caused by hemorrhage esofágicas.4 most commonly develop in cirrhosis patients, porto encephalopathy and varicose veins are a complication of acidosis. These patients are increasingly susceptible to infections due mainly to weak defense mechanisms. The most common and serious complication was SBP, followed by UTI, lower respiratory tract infections, The debate in the

clinical prognosis and prognosis of CNNA continues in patients with cirrhosis. culture and sensitivity should begin momentarily without waiting for the SPB to investigate a low threshold for treatment, but the clinical impression should be the routine test for all cirrhotic patients and the ascitic fluid for sensitivity testing should be based on untoward use of antibiotics due to spontaneous bacterial peritonitis, E. coli and Klebsiella are the most common organism reported to be related to PBS and to be treated against. However, these organisms should be appropriately adapted to treatment after the culture and sensitivity report. PAS was defined in 1970, since then the mortality rate associated with SBP has dropped from 80% to 30%. This is basically due to early diagnosis and emergency treatment. PAS is an ascitic fluid infection in the absence of visceral perforation and in the absence of an intraabdominal inflammatory defect such as abscess, acute pancreatitis or cholecystitis. It is important to have an isolated germ in the C / S test if it is positive in patients with SBP. However, polymicrobial infections in the C / S test will increase secondary peritonitis doubt. CNNA is another type of acid fluid infection that is negative for the C / S test, but the rest of the diagnostic criteria is the same as SBP and other causes of neutrocytic acids (pancreatitis, peritonitis, tuberculosis) should be excluded. and peritoneal carcinomatosis).

MATERIALS AND METHODS

This descriptive cross sectional study was performed in the Gastroenterology and Hepatology department of Nishter Hospital Multan for the period of one year from May 2016 to May 2017. Patients with ascitic fluid infection and asymptomatic infection were accepted clinically. were included in the study. Data on age, gender, clinical presentation, complications, and laboratory findings of the patient were collected and the Child-Pugh class was calculated. patients had cirrhotic acid, secondary peritonitis / tuberculous peritonitis, or those who received antibiotics within a month or malignancy were excluded from the study, but 200 patients were taken with ascitic fluid instead of PAS or CNNA criteria. The diagnostic extract was made by a disposable 20cc syringe method on the sterile side of the bed and the sample was placed in a tube containing EDTA within 3 hours and analyzed. The sample was then centrifuged for 3 minutes in total for the total and differential counts of total proteins in the laboratory. Gram stain test and ascitic fluid, 10 ml C / S bottles were treated with aerobic and anaerobic culture containing tryptic soybean water and then treated. At the same time, blood was also taken in bottles, aerobic and anaerobic culture for a C / S test before antibiotics started. Statistical analysis was performed using the SPSS program (standard version).

RESULTS

The mean age of the patients was 45.0 ± 25.0. There were 120 (60%) men and 80 (40%) women. The mean duration of the EPC was 8.43 ± 1.37 months. In the predominant part of the patients, 114 (57%) had> 8-month CLD periods. 118 (59%) patients had negative neutrocytic ascites culture. A comparison was made to see the effect of age, sex and duration of HRV. Chi-square test was done. The results are shown in the following tables.

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Table 1: *Age of the Patients n = 200.*

Mean ± SD	Minimum	Maximum
45 ± 25	20	70

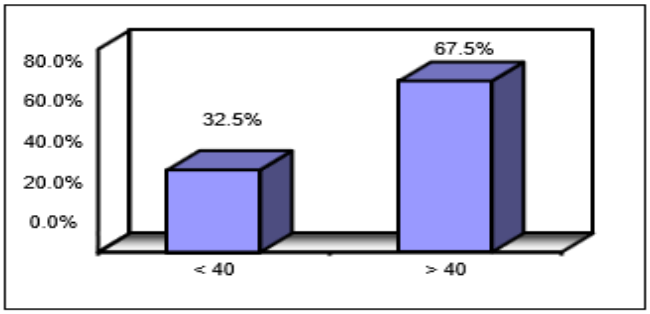

Figure 1: *Age Group (in Years).*

DISCUSSION

Patients with cirrhosis have a higher risk of developing many complications and have a lower expectation of life. One of the major complications of acid cirrhosis is SBP and the prevalence is 6-30%. In our study, 118 (59%) patients had negative neutrocytic acid in culture. In another study, 123 (66.2%) negative cultures and 63 (33.8%) gave positive results among the estimated SBP samples.13 In a local study of patients with CLD, classical SBP 50 (39.06%), 6 (4.68%) and 72 (56.25%) Growth Negative Neutrocyclic Acid (CNNA). In another local study, 22 patients were found to have SBP, 11 were negative culture, and the remaining positive culture.15 Of the fifty patients, 28 (56%) had SBP or type but SBP Classic had only 11 (39.28% There were 16 patients (57.14%) in the CNNA, and one patient (3.57%) had bactericides. In patients with cirrhosis, the pathogenesis of SBP is thought to be the main result of bacterial translocation (CT). In the bacterial translocation, bacteria or their products enter the intestinal lumen and then pass into the mesenteric lymph nodes or the extraintestinal tract, which causes an inflammatory reaction and ultimately an infection. In addition, CT also plays a role in the exacerbation of hemostasis and hyperdynamic disorders status.

Table 3: *Comparison of Culture Negative Neutrocytic Ascites & Age n = 200.*

Age (Years)	Culture-Negative Neutrocytic Ascites		Total	P-Value
	Yes	No		
≤ 40	38 (32.92%)	27 (32.92%)	65 (32.5%)	0.984
> 40	80 (67.80%)	55 (67.07)	135 (67.5%)	
Total	118 (100%)	82 (100%)	200 (100%)	

The recommended mechanisms included in CT in cirrhotic patients are structural and functional changes in mucosal barriers, inadequate local immunoreaction, and intestinal bacterial

overgrowth. Intestinal bacterial overgrowth is considered to be a key factor in CT. There are other factors that cause intestinal motility, sympathoadrenal stimulation, increased NO formation, and oxidative stress. Remember, the microbial activity is usually reduced in the large intestine, but it is reversed in cirrhotic patients.

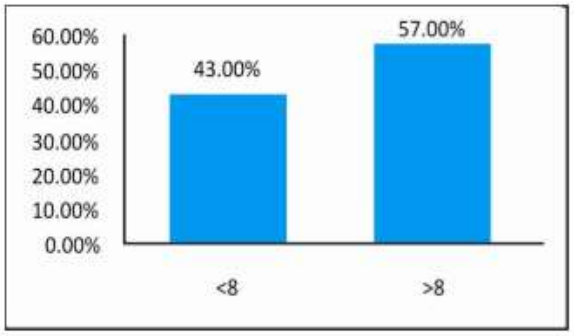

Figure 2: *Duration of CLD (in Months).*

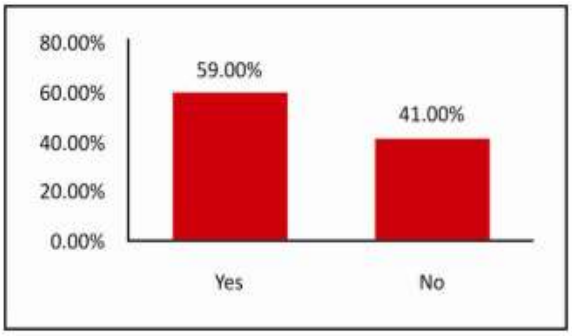

Figure 3: *Culture Negative Neutrocytic Ascites.*

PAS clinical presentation is highly recommended in patients with ascites, even in patients with PBE, asymptomatic hepatic encephalopathy or renal insufficiency may be altered, highly variable weight bearing fever, abdominal and GI motility, all other cirrhotic presentation suggests that all cirrhotic patients with acute allergic rhinitis have decreased significantly.

Table 4: *Comparison of Culture Negative Neutrocytic Ascites & Gender distribution n = 200.*

Duration of CLD (in Months)	Culture-Negative Neutrocytic Ascites		Total	P-Value
	Yes	No		
Male	70 (59.32%)	50 (60.97%)	120 (60%)	0.721
Female	48 (40.68%)	32 (39.02)	80 (40%)	
Total	118 (100%)	82 (100%)	200 (100%)	

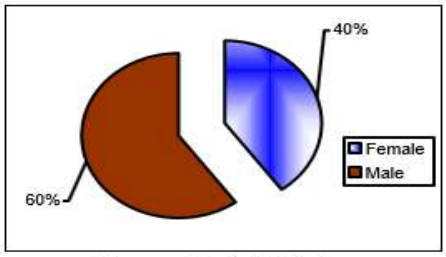

Figure 4: *Gender Distribution.*

A similar frequency, including PAS (22%), is related to the severity of PAS prevalence in liver disease, but Amarapurkar DN and al.33,34 are considered to be higher in severe liver diseases than information is available. The prevalence of PAS was 63.9% (Child-Pugh C) of 34.92% reported by Jain et al. All patients with PAS of the 63 patients had C-18 of 70 patients, 21 patients with PAS or type and about 77% of the patients with Class C Child-Pugh patients had knowledge by the et al.18-19 AS Uncompensated liver disease was a trigger factor such as SBP it can lead to death. It should be noted that these physicians should have a high threshold of suspicion and a low threshold for PBE diagnosis.

Table 5: *Culture-Negative Neutrocytic Ascites and Duration of CLD (in Months) n = 200.*

Duration of CLD (in Months)	Culture-Negative Neutrocytic Ascites		Total	P-Value
	Yes	No		
< 8	47 (39.83%)	39 (47.56%)	86 (43%)	0.873
> 8	71 (60.17%)	43 (52.44)	114 (57%)	
Total	118 (100%)	82 (100%)	200 (100%)	

CONCLUSION

In our study, it was concluded that the majority of CAD patients going to a third-line hospital were negative neutrophilic acid cultures, so that patients meeting spontaneous bacterial peritonitis criteria should be treated experimentally without waiting for the culture report. and sensitivity. Cefotaxime is still the drug of choice for treating SBP.

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