

THERAPEUTIC INDEX AND NURSING MANAGEMENT IN PATIENTS WITH MAJOR COMPLICATIONS OF CIRRHOSIS

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Abstract: Digestive pathology, extremely vast and complex, includes many clinical entities, each assuming specific ways to address the diagnosis and the therapeutic plan. Knowing these major issues will allow the nursing process to proceed in an appropriate manner; its sequence must therefore be more logical and finally with real benefits in terms of patient's care. One of the major sections of the digestive pathology is hepatology, liver diseases occupying the first rank regarding the incidence and severity of many of them. Thus, one of the conditions that dominate liver pathology is represented by cirrhosis whose knowledge of its fundamental parameters, through exploration and treatment, makes the laborious care plan of the cirrhotic patient be run in a proper manner.

Cuvinte cheie: ciroza hepatică, complicații, nursing

Rezumat: Patologia digestivă, extrem de vastă și complexă, include numeroase entități clinice, fiecare presupunând modalități specifice de abordare în plan diagnostic și terapeutic. Cunoașterea aprofundată a acestor aspecte majore va permite ca procesul de nursing să se desfășoare într-un mod adecvat, secvențialitatea acestuia trebuind să fie mai logică și în final cu beneficii reale în planul îngrijirii pacientului. Unul dintre capitoarele majore ale patologiei digestive este reprezentat de hepatologie, bolile ficatului ocupând un loc de prim rang prin incidența și severitatea multora dintre ele. Astfel, una dintre afecțiunile care domină patologia hepatică este reprezentată de către ciroză a cărei cunoaștere în parametrii săi fundamentali, explorational și terapeutic, face ca laboriosul plan de îngrijire a bolnavului cirotic, să se poată derula într-un mod adecvat.

INTRODUCTION

Hepatic cirrhosis is a chronic disease of the liver which consists in the destruction or restructuring of the normal architecture of the liver, with the presence of extended fibrosis and large nodules of regeneration. Cirrhosis is a condition with a high incidence, representing the second cause of mortality in gastroenterology after neoplasms.(1)

Liver cirrhosis is considered the final stage of all chronic liver diseases characterized by inflammation and diffuse destruction of liver parenchyma. Cirrhosis is found throughout the world, observing in the last decades, an increasing trend in frequency, although the factors responsible for this increase vary from one country to another.

Epidemiological evidence reveals that the frequency of liver cirrhosis reached a value so high that cirrhosis is a major public health problem. In the developed countries, it is due mainly to alcohol consumption, while in the developing countries, the main cause is viral hepatitis B and C. The association of alcohol consumption with viral infections represents aggravating circumstances. In our country, the double infections plus alcohol consumption are the main aggravating factors.(2)

Symptomatic cases raise issues of special care, although sometimes cirrhosis may be asymptomatic. Liver cirrhosis may be complicated with upper gastrointestinal bleeding, often due to the rupture of esophageal varices, and portal encephalopathy, in both cases it can reach death. Other complications of cirrhosis are spontaneous bacterial peritonitis, hepatorenal and hepatopulmonary syndrome.(3)

Special emphasis should be placed on health education through discussions with the patients about the lifestyle they should adopt diet, drug therapy, dose, duration, mode of administration, in order to avoid complications. By informing the patients about the lifestyle they should adopt, survival can be prolonged and especially, complications can be prevented.(2)

PURPOSE

The aim of this study is to know the etiopathogenesis of liver cirrhosis for evidence of possible complications that can cause serious prognosis in the disease evolution and to apply preventive measures and prompt treatment to improve prognosis.

METHODS

The study group included 127 patients admitted in the Medical Department of the General Hospital C.F. Sibiu between January 2010 - January 2012 Patients were selected based on clinical, laboratory and imaging data. Circumstances etiological study by history, by determining serum markers of viral infection and immunological disorders represented the way to differentiate the etiological forms of cirrhosis.

For each case study, there has been filled out a record of the individual case the way it resulted from the observation sheets. Of the individual case records nominal tables were made with the cases studied, in which all the parameters that were to be studied were included.

Clinical-epidemiological study was conducted on the data recorded in the nominal tables with the studied cases, using the same model for all cases. Data on clinical parameters of

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CLINICAL ASPECTS

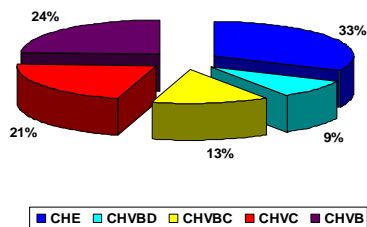
interest were selected and processed statistically. Estimation of parameters was done based on a case by case basis, comparing the data in each case and among the studied groups.

RESULTS

The study included a total of 127 patients whose statistical distribution by gender revealed that it consisted of 54 patients of female gender (43 %) and 73 males (57 %). In terms of the area of origin, it was found that of the 127 enrolled patients, 57 patients were from urban areas (45 %) and 70 patients were from rural areas (55 %). Distribution of patients by age group showed that one patient (1 %) ranged in the age decade of 21-30 years old, 11 patients (9 %) were within the age decade of 31-40 years old, 35 the patients (27 %) were placed in the decade of age from 41-50 years old, 46 patients (36 %) were placed in the decade of age of 51-60 years old and 34 patients (27 %) and were in the 61-70 years old age decade. Statistical evaluation of the age of the patients revealed an average age of 53.08 years in the studied group with minimum age of 29 years old and maximum age of 68 years old.

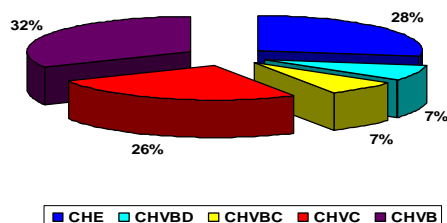
From the point of view of the etiology, 31 patients (24 %) were diagnosed with liver cirrhosis with chronic viral B (CHVB), 27 patients (21 %) were diagnosed with liver cirrhosis with chronic HCV (CHVC), 17 patients have been diagnosed with liver cirrhosis with chronic viral B + C (CHVBC), 11 patients (9 %) had been diagnosed with liver cirrhosis with chronic viral B + D (CHVBD) and 41 patients (33 %) diagnosed with cirrhosis by ethanol etiology (CHE) (figure no. 1).

Figure no. 1. The patients' distribution by etiology of liver cirrhosis



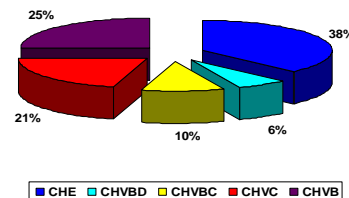
The average age was of 51.80 years in cirrhotic patients with chronic viral B; 52.25 years in patients with cirrhosis with chronic viral hepatitis C; 52.29 years in patients with cirrhosis with chronic viral B + C; 53.81 years in patients with cirrhosis of viral etiology B + D and 55.26 years in patients with liver cirrhosis by ethanol etiology. Upper gastrointestinal hemorrhage was present in the highest percentage of patients with cirrhosis of viral etiology B in 32 % of the total patients with UGH followed in descending order by patients with liver cirrhosis ethanol etiology in 26 % and patients with HCV cirrhosis - 26 % (figure no. 2).

Figure no. 2. The presence of upper gastrointestinal bleeding in the study group according to the etiology of liver cirrhosis



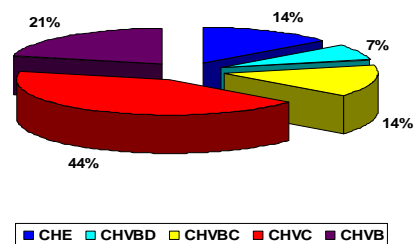
Hepatic encephalopathy was present most frequently in patients with liver cirrhosis of ethanol etiology 38 % of all patients with hepatic encephalopathy followed in descending order by cirrhotic patients with chronic viral B (25 %) by those with cirrhosis hepatic C viral etiology in a percentage of 21 % (figure no. 3),

Figure no. 3. The presence of hepatic encephalopathy in the study group according to the etiology of liver cirrhosis



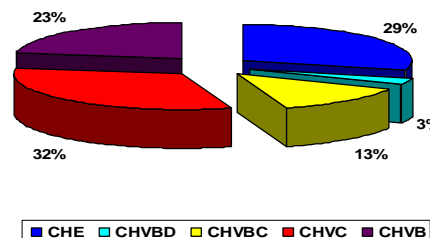
Primitive hepatocellular carcinoma was present in the highest percentage in the cirrhotic patients with chronic HCV representing 44 % of all patients with primitive hepatic carcinoma followed by patients with liver cirrhosis of viral etiology B in 21 % and those with cirrhosis of viral etiology B + C and those with ethanol cirrhosis in equal percentages of 14 % each (figure no. 4).

Figure no. 4. The presence of primitive hepatocellular carcinoma in the study group according to the etiology of liver cirrhosis



Spontaneous bacterial peritonitis was present in 32 % of cases, in patients with cirrhosis of viral etiology C, followed by patients with ethanol etiology (29 %) and those with cirrhosis of viral etiology B (23 %) of all patients with spontaneous bacterial peritonitis (figure no. 5).

Figure no. 5. The presence of spontaneous bacterial peritonitis in the study group according to the etiology of liver cirrhosis



Hepatorenal syndrome was present in the highest percentage in patients with liver cirrhosis of ethanol etiology, 30 % of all patients with hypersplenism followed in descending order by cirrhotic patients with chronic viral B in 29 % of cases, by those with viral etiology C (26 %), by those with cirrhosis of

viral etiology B + C (11 %) and by those with cirrhosis of viral etiology B + D in a percentage of 4 %.

Hypersplenism was present in the highest percentage of patients with cirrhosis of viral etiology B, 29 % of all patients with hypersplenism followed in descending order by cirrhotic patients with chronic viral B and C in 23 % each, by the B + C viral etiology in 19 %, by the ethanol etiology of cirrhosis in 19 %, and by those with cirrhosis of viral etiology B + D in a percentage of 6 %.

Hepatopulmonary syndrome was more frequent in cirrhotic patients with chronic HCV in 34 % of all patients with this complication followed in terms of frequency by patients with cirrhosis of viral etiology B and ethanol etiology and it was present in the same percentage of 22 % for each etiology.

Portal vein thrombosis was more common in 33 % of all patients with this complication in the patients with liver cirrhosis of ethanol etiology followed in terms of percentage by cirrhotic patients with chronic viral B and C virus in a percentage of 28 % each. Portal vein thrombosis was absent in patients with liver cirrhosis etiology B + D in our study.

Ruptured umbilical hernia was present in the highest percentage of patients with cirrhosis of viral etiology C, 33 % of all patients with ruptured umbilical hernia, closely followed by patients with liver cirrhosis of ethanol etiology in 27 % and by those with cirrhosis of viral etiology B - 20 %.

In the group of patients with cirrhosis, electrolyte disorders were present in 26 patients, the most common being in cirrhotic patients with chronic viral B and C in 31 % each, of the total of patients with electrolyte disorders. Acid-base disorders were more common in patients with cirrhosis of viral etiology B and cirrhosis of ethanol etiology in 35 % each, of all patients with acid-base disorders

DISCUSSIONS

Considered to be the irreversible end-point of any chronic liver aggression, cirrhosis is a severe, widespread condition, with an increasing and alarming prevalence increasing.(4)

There are two stages in the natural progression of liver cirrhosis: asymptomatic – “compensated liver cirrhosis” and a rapidly progressive phase called “decompensated cirrhosis”, characterized by complications due to portal hypertension and/or hepatocyte dysfunction (ascites, hepatic encephalopathy, hemorrhage variceal gastrointestinal and hepatocellular carcinoma), plus a variety of metabolic consequences, nutritional and infectious complications that negatively affect the prognosis of these patients.(5,6)

Cirrhosis can have a lot of causes. Some people suffer from liver cirrhosis without an obvious cause. Common causes of cirrhosis are drinking alcohol for a long time and infection with hepatitis B or C.(7)

Cirrhosis is a potentially life-threatening condition that occurs when inflammation damages the liver fibrotic tissue. Physical examination and medical history of the patient are first conducted to assess symptoms, to investigate whether liver damage is severe enough to cause signs of cirrhosis and to determine the cause of liver damage.(8)

Once installed the disease, the patient finds out about the disease through random checks or by going to the doctor for certain symptoms. Despite the efforts of doctors, they cannot treat cirrhosis, death occurring as a result of complications. But there is a chance, that of a liver transplant, which can prolong life with some regular check-ups, but for others, there is only the hope to improve symptoms and delay the possible complications. We still hope for new breakthroughs in medicine, in which the liver disease is completely curable.(9)

CONCLUSIONS

- Ø Cirrhosis is a disease with chronic evolution that occurs as a result of virus attacks or ethanol, evolution is encumbered by various complications more or less serious depending on the type of aggression, duration, hygienic compliance, lifestyle and dietary therapy in patients with this condition.
- Ø Cirrhosis of ethanol etiology has the highest frequency in the studied patients.
- Ø In the study, upper gastrointestinal bleeding is the most frequent, especially in liver cirrhosis of viral etiology B.
- Ø Another common major complication is hepatic encephalopathy, the second frequency complication after upper gastrointestinal bleeding, especially in cirrhosis of viral etiology B and C.

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