Original Research Article

A study on clinico social factors associated with cirrhosis of liver at a tertiary care hospital

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Abstract

Background: This peculiar transformation of the liver was identified by the first anatomic pathologist, Gianbattista Morgagni in his 500 autopsies published in 1761 but the name of "cirrhosis" (cirr is orange color in Greek) was given by Laennec in 1826 because of the yellowish-tan color of the cirrhotic liver. **Methodology:** Pre tested semi structured questionnaire was prepared to gather all relevant information. After diagnosis of liver cirrhosis in the department of Medicine, the respective patient was interviewed to know the socio demographic profile **Results:** Among 50 patients, 56% of patients were in the age group of 41 – 60 years, 32% of patients were in the age group of 61 – 80 years. Among 50 patients, 72% were males and 28% were females **Conclusion:** The most common sign was presence of icterus followed by tattoo marks, scratch marks, spider naevi and gynaecomstia

Key Words: cirrhosis, socio demographic, icterus

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Email: ramspsm@gmail.com
Received Date: 23/11/2017 Revised Date: 19/12/2017 Accepted Date: 10/01/2018
DOI: https://doi.org/10.26611/1011515

Access this article online	
Quick Response Code:	Website: www.medpulse.in
	Accessed Date: 12 January 2017

INTRODUCTION

Cirrhosis is a pathologically defined entity that is associated with a spectrum of characteristic clinical manifestations. This peculiar transformation of the liver was identified by the first anatomic pathologist, Gianbattista Morgagni in his 500 autopsies published in 1761 but the name of "cirrhosis" (cirr is orange color in Greek) was given by Laennec in 1826 because of the yellowish-tan color of the cirrhotic liver.[1] Even though the term “cirrhosis” was used only in 1761, there have been many mentions in world history about the same condition. The first use of alcohol dates to Neolithic period circa, around 100,000 BC with the discovery of mud jugs which were used for drinking a special brew on joyous occasions and around the chief camp fires.[2] Consumption of wine has been dated to ancient Egyptian culture as depicted in their pictographs to as early as 4000 BC. They also depicted the association between amount of alcohol drank and the distension of abdomen. As it was quite common among the higher priests, and considered as a condition associated with wrath of the gods for gluttony and greed.[3] Certain ancient Egyptian scrolls mention the aspiration of clear or straw colored fluid from the abdomen when punctured using needles, before the embalmment process. This is the earliest mention of ascitic fluid collection.[4] The sentiment towards moderation in drinking was documented in a Chinese imperial edict in 12th century BC. The clinical course of patients with advanced cirrhosis is often complicated by a number of important sequel that are independent of the etiology of the underlying liver disease. These include portal hypertension and its consequences (e.g., gastroesophagealvarices and splenomegaly), ascites, hepatic encephalopathy, spontaneous bacterial peritonitis, hepatorenal syndrome, and hepatocellular carcinoma.[5] Normal pressure in the portal vein is low (5 to 10 mmHg) because vascular resistance in the hepatic sinusoids is minimal. Portal hypertension (>10 mmHg) most

How to cite this article: Ramesh K, Basavraj S, Kotresh. A study on clinico social factors associated with cirrhosis of liver at a tertiary care hospital. *MedPulse International Journal of Community Medicine* January 2018; 5(1): 19-21. https://www.medpulse.in/

commonly results from increased resistance to portal blood flow. When cirrhosis is complicated by portal hypertension, the increased resistance is usually sinusoidal. Cirrhosis is the most common cause of portal hypertension.[6]

Clinically significant portal hypertension is present in >60% of patients with cirrhosis. Clinical Features: The major clinical manifestations of portal hypertension include hemorrhage from gastroesophagealvarices, splenomegaly with hypersplenism, ascites, and acute and chronic hepatic encephalopathy.

METHODOLOGY

This study was conducted for a period of three months at a tertiary care hospital. The study subjects included patients diagnosed to have cirrhosis of liver attending tertiary care hospital. The sample size was 50. The study subjects were selected based on non-probability purposive sampling technique. Pre tested semi structured questionnaire was prepared to gather all relevant information. After diagnosis of liver cirrhosis in the department of Medicine, the respective patient was interviewed to know the socio demographic profile

Inclusion criteria

- Patient with cirrhosis of liver

Exclusion criteria

- Seriously ill
- Not willing to participate in the study

RESULTS

The study included 50 subjects and among them 64% was with alcoholic cirrhosis and 36% were with non alcoholic cirrhosis Among 50 patients, 56% of patients were in the age group of 41–60 years, 32% of patients were in the age group of 61 – 80 years Among 50 patients, 72% were males and 28% were females The most common presentation was fatigue followed by abdominal distension, Icterus, nausea/vomiting and chest pain The most common sign was presence of icterus followed by tattoo marks, scratch marks, spider naevi and gynaecomstia.

Table 1: Clinico social factors of Liver cirrhosis

Study subjects	Frequency	Percentage
With alcoholic cirrhosis	32	64%
With non alcoholic cirrhosis	18	36%
Age group	**Frequency**	**Percentage**
Less than 40 years	06	12%
41 – 60 years	28	56%
61 – 80 years	16	32%
Gender	**Frequency**	**Percentage**
Male	36	72%
Female	14	28%
Symptoms	**Frequency**	**Percentage**
Fatigue	40	80%
Abdominal pain	27	54%
Icterus	36	72%
Abdominal distension	38	76%
Nausea/vomiting	24	48%
Chest pain	21	42%
Cough	14	28%
Hematemisis	04	08%
Breathlessness	02	04%
Signs	**Frequency**	**Percentage**
Gynaecomastia	02	04%
Glossitis	04	08%
Scratch marks	06	12%
Parotid swelling	02	04%
Tattoo marks	18	36%
Icterus	46	92%
Clubbing	09	18%
Spider naevi	06	12%

DISCUSSION

Cirrhosis is a chronic disease of the liver in which diffuse destruction and regeneration of hepatic parenchymal cells has occurred, in which diffuse increase in connective tissue has resulted in disorganization of the lobular architecture. The triad of parenchymal necrosis, regeneration and scarring is always present regardless of individual clinical manifestations[7] In developing countries viral hepatitis is the leading cause of cirrhosis and in the developed countries ALD, HCV and NASH are the most significant causes of cirrhosis.[8] In many developed countries the death rates from liver cirrhosis have been declining in the recent years with some exceptions.[9] Worldwide death rates from alcohol related liver cirrhosis has been decreasing but an increase has been observed in a few Eastern European countries and England.[10] In the United States (USA) there has been an increase in the proportion of patients with HCV compared to ALD in the recent years.[11] Studies on patients characteristics at diagnosis show that the mean age is around 60 years and majority of the patients are males with the male/female ratio ranging from 1.3-4 The highest mortality from liver cirrhosis is in the age group 60-70 years. There has been a reduction in hospitalization and mortality from liver diseases in Sweden from 1969-2001, which has been shown to be associated with reduced sales of spirits. Figures on the incidence of liver cirrhosis have been largely lacking in many countries such as Sweden, as well as Finland among the Nordic countries. The most predominant cause of cirrhosis of liver in this study was alcoholism with 64 % of the study population being alcoholics. The 36 % of the population without alcoholic cirrhosis had etiology of chronic hepatitis patients and other unknown causes of cirrhosis in comparison to the Wong. F. ET [12] al study which had 68.5 % alcoholics and 17.1 % cases of chronic hepatitis The most common mode of presentation was fatigue with jaundice, abdominal distension and abdominal pain. In this study 80 % of the patients gave complaints of fatigue and 72 % with complaints of abdominal distension. Only 42% of the patients had complaints of chest pain of which most were retrosternal, burning type of pain and had previous episodes of the same for which they were treated as acute gastritis. Incidence of hematemesis and breathlessness were quite low as comparable to other studies. Clinically all the patients moderate to severe ascites, of which 62% had tense ascites and in the rest shifting dullness could be elicited. Icterus was seen in 92 % of the cases. Signs of liver cell failure were noticed only in 12 % of the cases of which correlation with structural or functional cardiac function was not significant.

CONCLUSION

The most common mode of presentation was fatigue with jaundice, abdominal distension and abdominal pain.

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Source of Support: None Declared
Conflict of Interest: None Declared