# ORIGINAL RESEARCH

# A Study of Clinical Profile of Liver Cirrhosis in Tertiary Care Hospital

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## **ABSTRACT**

**Introduction**: Cirrhosis is a slowly progressing disease in which healthy liver tissue is replaced with scar tissue, eventually preventing the liver from functioning properly. Present study was done to see the clinical profile of liver cirrhosis patients.

Material and Method: Clinical Profile of 80 Patients of Liver Cirrhosis in SRMS IMS Bareilly was studied. Inclusion criteria was one clinical sign of hepatocellular failure, one of portal hypertension along with at least three ultrasonographic findings suggestive of liver cirrhosis.

**Results**: In our study cirrhosis was predominantly seen in males with M/F ratio of 4.3:1. Main presenting features were Distension of abdomen 65%, Jaundice 43% followed by Melena 25%. Commonest Signs were Pedal oedema 65%, Jaundice 62% and Ascitis 60%. Aetiological factors post Hepatitis B was the commonest 46.3% followed by chronic Alcohol consumption 31.3% and Hepatitis C was 22.4%. On investigations Anaemia was found in 82%, Thrombocytopenia in 73.8%, Hypoalbunemia 92.8% and Serum Bilirubin more than 3mg/dl in 79.5 %.

**Conclusion:** Disease is seen in all age group and prevalence increases in 6<sup>th</sup> decade of life (35%) and minimum in less than 20 years (2.5%). Sex ratio of male to female was 4.3:1. Distension of abdomen was the main presenting feature (65%) followed by jaundice (43.7%). Bleeding diasthesis in form of hematetasis and malena was seen in 7 (8.6%) and 20 cases (25%). Presenting features was mainly bilateral pedal edema followed by jaundice (62%) and ascitis 60 cases (75%). Alcoholism was the main cause of cirrhosis and seen in 31.3% of cases.

**Keywords:** Liver Cirrhosis, Clinical profile, Hepatitis B.

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#### INTRODUCTION

Cirrhosis is a final pathway for a wide variety of cirrhosis liver disorders. It is a pathological entity defined as diffuse hepatic fibrosis with replacement of normal liver architecture by nodules. It is one of the leading cause of mortality in United States and it particularly afflicts persons in more productive years of life. Rate of progression of chronic liver to cirrhosis is variable and may vary from weeks to decades. Early intervention and preventive measures is the only solution to salvage the hepatic parenchyma from fibrotic changes which is irreversible. Main complications of cirrhosis are Gastrointestinal haemorrhage, hepatic failure, hepatic encephalopathy, bacterial peritonitis, hepatorenal syndrome and hepatocellular carcinoma.

Present study was aimed to study clinical profile of cirrhosis patients with etiological basis admitted in Medicine deptt of SRMS IMS Bareilly.

# MATERIAL AND METHOD

Present study included 80 patients admitted in deptt of medicine from OPD and Emergency.

Inclusion was done according to clinical, biochemical and sonographical features suggestive of liver cirrhosis. Uncooperative patients who were not willing to share about their disease and patients below 14 year of age were excluded from the study.

All patients were subjected to detailed clinical history in order to ascertain aetiological diagnosis, history of alcohol intake, amount and duration also taken. A thorough clinical examination was done in every patients and signs of liver cell failure and portal hypertension were evaluated in detail. All admitted patients were subjected to TLC, DLC, Hb, Platelet count, Complete blood picture, Urine routine microscopy, Liver function tests, Electrolytes, PT, APTT, Ascitis fluid examination, Renal function test, Ultrasonography, UGI Endoscopy, Blood sugar levels, viral markers for Hepatitis B, C and HIV were done in all patients. Blood cultures, Ascitic Fluid Culture, ECG, 2D ECHO was done in indicated patients.

# **RESULTS**

Out of 80 patients 65 were males and 15 females with ratio

of 4.3:1. 70% patients were above 40 years of age, maximum in the 6<sup>th</sup> decade of life (table 1).

Distension of Abdomen was the main presenting feature 65%, Jaundice 43% followed by melena 25% (fig 1).

In presenting signs Pedal edema was in 65%, Jaundice 62% and Ascitis 60% of cases (fig 2).

In Aetiological correlation of cirrhosis Post Hepatitis B was 46.3%, post alcoholic 31.3% and Hepatitis C in 22.4%, chronic alcoholic consumption was defined more than 160gm/dl ethyl alcohol for daily 10-15 years (fig 3).

In biochemical investigation Anaemia was found in 82% cases and severe Anaemia less than 6gm /dl in 8.8% (table 2). Serum Bilirubin was raised in all 100% patients (fig 4). Serum Albumin was less than 3gm/dl in 92.5% cases. Prothrombin time was minimum 13 sec and maximum 29.5 sec with mean of 20.07 sec. In Ultra sonographic findings in all 80 patients showed coarse echotexture and irregular margins in 100%, splenomegaly in 78.7%, dilated portal veins in 63.7% and ascitis in 85% of patients.

# DISCUSSION

In the present study of 80 patients post hepatitis B cirrhosis was the most common followed by chronic alcoholic comsumption and then hepatitis C, S.K. Sarin reported that etiology of cirrhosis in his study was commonest which is 2<sup>nd</sup> in our study, propably the hepatitis B prevalence may be more in Rohilkhand region.5 In the study abdomen distension 65%, Jaundice 43% and melena 25% as discussed in the literature.In clinical signs pedal edema 65%, Jaundice 62% and Ascitis 60%. A.U.Kakehasi also noted in his study that symptoms were found in decompensated state and most due to hepatic dysfunction and portal hypertension.<sup>6</sup>

Brechot et al showed that total numbers of hepatitis patients including hepatitis B and C as causative factor of cirrhosis

Range of Age	No. of cases	Percent	
≤ 20	2	2.5	
21 – 30	6	7.5	
31 – 40	13	16.3	
41 – 50	18	22.5	
51 – 60	28	35.0	
> 60	13	16.3	
Total	80	100.0	
Table-1: Showing range of age and percentage			

Range of Haemoglobin	Number	Percent	
<= 6.	7	8.8	
6.1 - 8.0	16	20.0	
8.1 - 10.	43	53.8	
10.1 - 12.0	12	15.0	
12.1+	2	2.5	
Total	80	100.0	
Table-2: Range of HB			

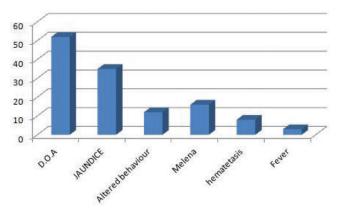


Figure-1: Showing the percentage of presenting features

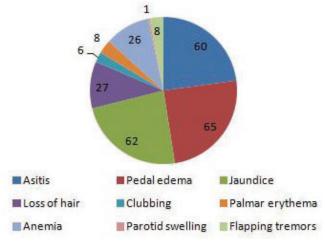


Figure-2: Showing the presenting Signs

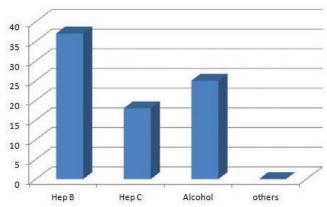


Figure-3: Showing relation between Hep B, Alcohol and Hep C

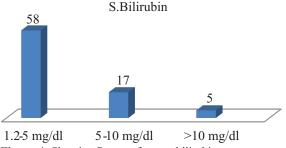


Figure-4: Showing Range of serum bilirubin

were 75% as compared to 68% in our study.7

On investigations anemia was found in 82.5% cases, hypoalbuminia that is serum albumin less than 3gm% in 92.5% cases, the mean prothrombin time was 20.07 sec in our study which is on higher side and a important parameter of liver cell failure, the similar findings have been noted in the literature.

### **CONCLUSION**

Diseases seen in all age groups and incidence increases as advancing age (age varies from 19 to 76 years with mean 48.9).Males(81.3%)predominates the series mainly.

Clinical manifestation are mainly distension of abdomen, ascitic, jaundice, palmar erythema and malena. Pedal edema is present due to hypoalbuminemia which was due to cirrhosis and portal hypertension. The most common symptoms was distension of abdomen and jaundice. The most common signs were pedal edema, ascitis and jaundice. The most common etiology in our study was hepatitis B followed by alcoholics and hepatitis C.Liver dysfuntion was noted as anemia, hypoalbumineamia, altered prothrombin time, hyperbilirubinaemia.

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