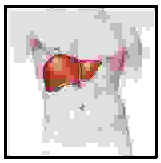

ORIGINAL PROF-630

LIVER CIRRHOSIS;
CLINICAL PRESENTATION

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ABSTRACT

INTRODUCTION: Cirrhosis is defined as necrosis of the liver followed by fibrosis and regeneration. Alcohol and viral hepatitis are two important causes of cirrhosis. Its clinical features are produced by hepatocellular dysfunction, portal hypertension and portosystemic shunting but frequency of some of the clinical features may be related to the underlying etiology. **OBJECTIVE:** This study was conducted to find the frequency of various clinical features in patients of cirrhosis admitted to Nishtar Hospital Multan and to compare it with that reported in the western literature. **MATERIAL & METHODS:** Fifty patients of cirrhosis admitted to the Medical Wards of Nishtar Hospital Multan between Dec 1997 to Oct 1998 were included in the study. Detail history, clinical examination and relevant investigations were recorded in the proforma. **RESULTS:** Distension of abdomen (52%) melena (48%), hematemesis (36%), anorexia (36%) and fever (36%) were the common symptoms. Other symptoms were, decreased sleep(32%), pain abdomen (28%), altered conscious level (28%) and swelling of feet (26%). Jaundice (70%) and anemia (68%) were the most common signs. Other signs found were edema feet (54%), poor nutritional status (38%), loss of hair (38%), pyrexia (36%), spider naevi (30%), leuconychia (26%), gynecomastia (22%), pigmentation (22%), purpura (20%), palmer erythema (14%), testicular atrophy (14%) and clubbing (12%). **CONCLUSIONS:** Frequency of some of the clinical features of cirrhosis like jaundice, pyrexia, spider angiomas, gynecomastia, palmer erythema and dupuytren's contracture is different in our population as compared to that reported in western literature. It could be due to difference in etiology of cirrhosis (alcohol in the west and viral hepatitis in our population).

INTRODUCTION

Hepatic cirrhosis develops as a complication of hepatocellular injury leading to necrosis, followed by

fibrosis and nodular regeneration. The clinical features of cirrhosis result from hepatic cell dysfunction, portal hypertension and portosystemic shunting. Frequency of various clinical features vary greatly in different patients and some of this variation may be related to the underlying etiology e.g, spider naevi, gynecomastia and parotid enlargement are more common in alcoholic cirrhosis associated with prolonged cholestasis while pigmentation is more common in hemochromatosis cirrhosis.

OBJECTIVE OF STUDY

To find out the frequency of clinical features in our patients with cirrhosis and to compare this frequency with that reported in the western literature.

MATERIAL & METHODS

Subjects

Fifty patients suffering from cirrhosis admitted to the Nishtar Hospital Multan in different Medical wards were included in the study.

Clinical assessment

Detailed history was taken regarding the present complaints. Past history was recorded in detail to find out any underlying cause of liver disease like alcohol, drugs, history of pricks, blood transfusions, contacts etc. Thorough clinical examination was carried out with special stress on general physical examination to detect the peripheral signs of chronic liver disease.

In addition to the routine investigations, relevant investigations were done to confirm the diagnosis of cirrhosis if not contraindicated. All the patients were graded according to the Child-Pugh's classification.

RESULTS

A total of 50 patients were analyzed. Forty (80%) were male and 10 (20%) were females. Mean age of the patients was 45 years (age range was 14-70 years). Duration of presenting illness ranged from one day to five years.

Distension of abdomen , melena, hematemesis, anorexia and fever were the most common symptoms occurring in more than 30% patients (Table-I).

Jaundice , anemia, edema feet, poor nutritional status, loss of hair, pyrexia and spider naevi were the most common signs occurring in decreasing frequency (Table-II).

Past history of jaundice (44%), operations (16%), blood transfusion (12%), hospitalization (12%), accidents (10%), needle pricks (8%) and alcohol (4%) were the possible risk factors in some of the a patients.

Anemia was common while leucocytosis and thrombocytopenia were infrequent (Table-III).

Liver function tests were deranged in all the patients (Table-IV).

Thirty one patients had ascites. Diagnostic paracentesis was done in 29 patients, in 2 cases ascites was too small to be aspirated. It was found to be transudative in all the cases. One patient was diagnosed as a case of spontaneous bacterial peritonitis. Malignant cells and Acid fast bacillus (AFB) were not seen in any case.

HbsAg was positive in 28 (56%) patients and anti HCV was positive in 8 (16%) patients.

Upper GI endoscopy was done in all the 24 (48%) patients with hematemesis and / or melena. Esophageal varices ranging from grade I to IV were seen in 22(44%) patients; out of these 2 (4%) had accompanying peptic ulcer and 2 (4%) had congestive gastropathy. Two (4%) patients had only peptic ulcer.

Ultrasonography was done in all 50 cases, which showed changes in the liver parenchyma consistent with cirrhosis. Ascites was seen in 31 (62%) patients. No case of hepatoma was seen. Liver bioposy could not be done in any case because either PT was prolonged or there was massive ascites or otherwise patient's condition was serious and not fit for liver biopsy.

All the patients were graded according to Child-Pugh classification (table V).

DISCUSSION

Cirrhosis of the liver is a common disease in our population. This is due to high prevalence of hepatitis B and C virus infection[1]. Ascites, gastrointestinal

bleeding and encephalopathy were the commonest modes of presentation in this study. This late presentation may be due to the reason that patients with early and compensated cirrhosis are either not diagnosed are dealt with by local doctors. Reason for delayed diagnosis are multifold (a) early disease is asymptomatic (b) early signs like sparse body hair or mild gynecomastia are ignored both by the patient and medical practitioner (c) biochemical tests are often normal (d) liver biopsy is not routinely advised for patients without clear clinico-biochemical evidence of liver disease.

In this study the most frequent sign observed was jaundice present in 68% of patients. This figure is much higher than that reported in patients with alcoholic cirrhosis (20%)[2]. Similarly low grade fever was present in 36% patients of present study. This is also much higher as compared to 9.1% reported by Ubodun et al[3]. Both these could be related to viral etiology of cirrhosis in our population.

Table-I. Symptoms in 50 cirrhotic patients.

Symptoms	Male		Female		Total	
	No of pts	%age	No of pts	% age	No of pts	% age
Distension of abdomen	24	48	2	4	26	52
Melena	20	40	4	8	24	48
Hematemesis	16	32	2	4	18	36
Anorexia	13	26	5	10	18	36
Fever	16	32	2	4	18	36
Decreased sleep	11	22	5	10	16	32
Pain abdomen	9	18	5	10	14	28
Confused/altered conscious level	7	14	7	14	14	28
Swelling of feet	11	22	2	4	13	26
Jaundice	8	16	2	4	10	20
Loss of weight	6	12	3	6	9	18
Fatigue	6	12	3	6	9	18
Malaise	5	10	2	4	7	14
Weakness	5	10	2	4	7	14
Aches and pains	3	6	1	2	4	8
Epistaxis	2	4	-	-	2	4
Fits	1	2	1	2	2	4

Table-II. Frequency of signs of chronic liver disease in 50 cirrhotic patients

Signs	Male		Female		Total	
	No of pts	%age	No of pts	% age	No of pts	% age
Jaundice	25	50	10	20	35	70
Anemia	24	48	10	20	34	68

Table-II. Frequency of signs of chronic liver disease in 50 cirrhotic patients

Signs	Male		Female		Total	
Edema feet	24	48	3	6	27	54
Poor nutritional status	17	34	2	4	19	38
Loss of hair	19	38	-	-	19	38
Pyrexia	16	32	2	4	18	36
Spider naevi	15	30	-	-	15	30
Leuconychia	13	26	-	-	13	26
Gynecomastia	11	22	-	-	11	22
Pigmentation	9	18	2	4	11	22
Purpura	6	12	4	8	10	20
Palmer erythema	7	14	-	-	7	14
Testicular atrophy	7	14	-	-	7	14
Clubbing	6	12	-	-	6	12
Xanthomna/Xanthelasma	-	-	1	2	1	2
Dupuytren"s contracture	2	4	-	-	2	4
Parotid gland enlargement	-	-	-	-	-	-

Table-III. Hematology

	No of patients	%age
Hb%		
Less than 10 gm/dl	39	78%
More than 10 gm/dl	11	22%
TLC		
4000-11000/mm^3	45	90%
More than 11000/mm^3	5	10%
Platelet Counts		
Less than 150000/mm^3	6	12%
More than 150000/mm^3	44	88%

Table-IV. Liver function tests in 50 cirrhotic patients

	No of patients	%age
Serum bilirubin		

Table-IV. Liver function tests in 50 cirrhotic patients

	No of patients	%age
Less than 3 mg%	26	52%
3 - 5 mg%	21	42%
More than 5 mg%	3	6%
Serum ALT		
Less than 40 IU/L	33	66%
41 - 100 IU/L	9	18%
More than 100 IU/L	8	16%
Serum albumin		
Less than 2 gm%	13	26%
2 - 3 gm%	23	46%
More than 3 gm%	14	28%
Prothrombin time		
1 - 2 sec > control	0	0%
3 - 4 sec > control	7	14%
> 4 sec over control	43	86%

Table -V. Child's grading in 50 cirrhotic patients

Child's grade	Male		Female		Total	
	No of pts	%age	No of pts	%age	No of pts	%age
A	-	-	-	-	-	-
B	11	22%	7	14%	18	36%
C	29	58%	3	6%	32	64%

Anemia was very common in this study (68%). This could be due to GI bleeding, hypersplenism and poor nutritional status.

Signs which are less frequent in our study compared with western studies are spider angiomas 30% vs 50%[2], purpura (20% vs 40%) [2,4], palmer erythema (14 % vs 50%), leuconychia (28% vs 82%)[5], Dupuytren's contracture (4% vs upto 66%[4,6], parotid gland enlargement (0% vs 47%[7],) gynecomastia (22% vs upto 30%[2]) and testicular atrophy (12 vs upto 30%[2],). Similar results about some of the above mentioned signs have been reported by other workers from Pakistan as well[8]. Direct effect of alcohol which is the main cause of cirrhosis in the West could explain this difference. Another explanation could be fair complexion of the skin of western population which makes it easy to pick up signs like palmer erythema, spider angiomas and purpura.

Frequency of altered distribution of body hair

(38%), hyperpigmentation (18%) and poor nutritional status (38%) is similar to that reported in the studies from other parts of the world[2,6,9].

CONCLUSION

Majority of the patients of cirrhosis of the liver come to the hospital at a late stage, so ascites and Gl bleeding are the most common modes of presentation. Jaundice and low grade fever are more common while spider angiomas, gynecomastia, palmer erythema, Dupuytren's contracture and parotid gland enlargement are less common in our cirrhotic patients as compared to the patients of cirrhosis in the west. This is perhaps related to the underlying etiology of cirrhosis, which is viral hepatitis in our population and alcohol in the west.

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The great pleasure in life is doing what people say you cannot do.

Walter Bagehot