



ORIGINAL RESEARCH PAPER

Gastroenterology

STUDY OF CLINCO-ETIOLOGICAL PROFILE AND THE COMPLICATION PATTERN IN PATIENTS WITH CHRONIC LIVER DISEASE AT TERTIARY CARE CENTRE- A RETROSPECTIVE ANALYSIS.

KEY WORDS: Chronic liver disease, abdominal distension, jaundice, gastrointestinal bleeding.

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ABSTRACT

Introduction: Knowledge of etiology, mode of clinical presentation and pattern of development of complications of chronic liver disease will help in designing optimal and cost effective control measures of the disease. The present study was performed to find out etiology, mode of clinical presentation and pattern of development of complications in patients of chronic liver disease.

Material and Methods: The study included 1350 patients of chronic liver disease over a of two years from January 2016 to December 2018; both indoor and outdoor were included. Detailed history, physical examination, clinical examination, abdominal ultrasound examination, and UGI Endoscopy were performed.

Results: In present study, 56% patients belonged to age group of 20 to 40 years, 72.6% patients had history of abdominal distension (ascites), 56.3 % had jaundice and 47.4% had history of gastrointestinal bleeding. As clinical sign of hepatic failure and portal hypertension, loss of body hair and splenomegaly was reported in 40% and 41.5% patients respectively.

Conclusion: As per the present study data, CLD was a common entity in North India with male preponderance and affecting mostly people of middle age group, which required immediate social and medical intervention.

INTRODUCTION

Different study based on Indian data on several clinical aspects of chronic liver disease (CLD) like etiology, natural history, clinical presentation, treatment recommendations and its effect of public health.[1-3] But its trend and burden to different morbidity and mortality have never obtained seriousness as in other developed countries.[3-5] Examining the trend of the disease over a time period becomes an important tool to observe the variation of its different aspect and provide the status of country's public health system.[6-7] Getting the knowledge of exact disease burden of the country assist in cost effective and optimal use of control measures taken by the government of that country and it also provide the disease scenario particularly in low resource country like India.[7] The present study was done to find out etiology, mode of clinical presentation and pattern of development of complications in patients of chronic liver disease.

MATERIAL AND METHODS

1350 patients, both indoor and outdoor patients of Medicine department of GMC Jammu, who presented with sign and symptoms suggestive of chronic liver disease (CLD), were included in the study. A written informed consent from all the patients was obtained before the upper GI Endoscopy. Detailed history of patients along with assessment of risk factors known to be associated with CLD was recorded. A detailed physical examination was done, specifically for finding the manifestations of liver disease. Patients with jaundice, due to increase in serum bilirubin, small liver or a liver of nodular contour due to established cirrhosis, gynaecomastia, testicular atrophy, palmar erythema and spider angioma were included. Features suggestive of liver fibrosis and portal hypertension like ascites, edema, hypersplenism, portal systemic shunting resulting in distended superficial and periumbilical (caput medusa) abdominal veins, were taken into consideration at the time of physical examination. Upper GI endoscopy was done to see oesophageal varices and portal hypertensive gastropathy. Specific manifestation like dupuytren's contracture in chronic alcoholics and Kayser-Fleischer rings in Wilson's disease were also searched for. After detailed clinical examination biochemical and hematological examinations were done to evaluate liver function. Apart from these, hepatitis B surface antigen (HBsAg) was done for chronic hepatitis B infection. Those patients who were not alcoholic, and HBsAg was negative but clinical examination and laboratory tests were favoring CLD, were subjected to other laboratory investigations like anti-HCV (for chronic hepatitis C infection), ANA, AMA, serum ceruloplasmin level, serum ferritin to find out etiology. Patients were also evaluated by abdominal ultrasound examination and

where necessary Doppler flow studies were done.

STATISTICAL ANALYSIS -

All the data were analyzed using IBM SPSS- ver.20 software. Analysis was performed using chi-square test and independent sample student t test. P values <0.05 was considered to be significant.

RESULTS -

In present study, out of 1350 patients, there were 1180 (87.4%) males and 170 (12.6%) females (Table 1). Most of the patients [756 (56%)] belong to age group of 20 to 40 years followed by 405 (30%) who were between the age group of 41-60 years and rest were more than 60 yrs (Table 2). The distribution of different characteristic of patients (history and clinical sign) was shown in the table 3.

TABLE .1- SEX DISTRIBUTION

SEX	NUMBER OF PATIENTS (N)	PERCENTAGE (%)
MALE	1180	87.4
FEMALE	170	12.6
TOTAL	1350	100

TABLE .2-AGE DISTRIBUTION

AGE (IN YRS)	NUMBER OF PATIENTS (N)	PERCENTAGE (%)
20-40	756	56
41-60	405	30
>61	189	14
TOTAL	1350	100

TABLE.3 - DISTRIBUTION OF DIFFERENT CHARACTERISTICS OF PATIENTS.

Parameters	Number Of Patients (N)	Percentage (%)	
1. History	Ascites	980	72.6
	Jaundice	760	56.3
	Gastrointestinal bleeding	640	47.4
	Peripheral Edema	580	42.9
	Encephalopathy	240	17.8
	Fatigue	230	17
2. Clinical Signs	Splenomegaly	560	41.5
	Loss Of Body Hairs	540	40
	Spider Angiomas	430	31.9
	Parotid Enlargement	110	8.1
	Gynaecomastia	96	7.1

TABLE 4.-ETIOLOGY OF CHRONIC LIVER DISEASE AMONG THE PATIENTS

ETIOLOGY	NUMBER OF PATIENTS (N)		TOTAL	PERCENTAGE (%)
	MALE	FEMALE		
ALCOHOLIC LIVER DISEASE	630	4	634	46.9
HEPATITIS B	260	42	302	22.4
HEPATITIS C	94	26	120	8.9
AUTOIMMUNE	34	24	58	4.3
CRYPTOGENIC	160	73	233	17.3
WILSON DISEASE	2	1	3	0.2
TOTAL	1180	170	1350	100

TABLE 5. - FINDING ON UPPER GI ENDOSCOPIC EVALUATION OF PATIENTS.

Upper Gi Endoscopic Findings	Number Of Patients (N)	Percentage (%)
Esophageal Varices	856	63.4
Portal Hypertensive Gastropathy	146	10.8
Duodenal Varix	102	7.6
Gastric Varices	136	10.1
Normal Endoscopy	110	8.1
Total	1350	100

Out of 1350 patients whose upper GI endoscopic evaluation was done, 856 (63.4%) had esophageal varices, 146 (10.8%) had portal hypertension gastropathy also and 110 (8.1%) had normal upper GI endoscopic study (Table 5). Out of 1350 patients of CLD, chronic alcohol ingestion [634 (46.9%)] was the most common etiology followed by chronic hepatitis B infection [302 (22.4%)]. 120 (8.9%) patients had chronic hepatitis C infection, 3 (0.2%) had Wilson's disease and 58(4.3%) had Autoimmune etiology. 233(17.3%) patients were such whose etiology of CLD could not be determined.(Table 4)

DISCUSSION

Our study, a hospital based study where most of the patient are from low socioeconomic status, was an endeavor not only to search the mode of presentation of patients with CLD but also to find out their etiology in our region. Male predominance (87.4%) was observed in present study and most of the patients (56%) were of middle age group, which is similar to the study done by Pal et al at Kolkata where 79% of patients were male and 54% of patients belonged to age group 31 to 50 years indicating that CLD is more common in male suggesting high risk of exposure to causative factors.[8] Mode of presentation of patients with chronic liver disease was an important consideration taken in our study. Pal et al has reported ascites in 52% of patients followed by jaundice in 40% and GI bleeding in 24%, which is almost similar to the findings of present study.

[8] The etiology of chronic liver disease was an arena where much difference was noted in our study from those of Western Countries. In a large multicenter study done by Stroffolini et al searching for the etiology of chronic hepatitis in Italy studied 6210 patients consecutively admitted to 79 hospitals throughout Italy. They found chronic hepatitis C (62.6%) as most common etiological factor, chronic hepatitis B in 9.2% and history of Parameters alcohol abuse was present in 19.2% of cases, but only 5.2% cases were without viral infection and had only alcohol abuse.[9] Almost similar etiological profile was seen in present study. Velosa et al from Portugal in a study of 988 patients of CLD, found viral etiology in 82%, metabolic in 2%, biliary in 2%, alcoholic in 11%, autoimmune in 1.5%, and idiopathic in 2%. Among viral group, hepatitis B virus infection in 65%, hepatitis C in 26% and hepatitis D was found in 8%.[10] Khokhar from Islamabad in a study of 518 patients of CLD, biopsy proven chronic hepatitis was present in 354 patients. Out of these 86% had hepatitis C, 10.7% hepatitis B, 3.1% had both B and C.[11] Similarly a study of 44 patients by Acharya et al at AIIMS, New Delhi found 50% of patients had chronic Hepatitis B, associated hepatitis D with hepatitis B in 21%, hepatitis C in 15%, non-A, non-B other than Hepatitis C virus in 13%. 2% patients had autoimmune hepatitis B [12].The present study data showed that

alcohol is the most common culprit for CLD in North India. Further studies will be needed to establish what cause is; high susceptibility of study population to alcohol, high risk behaviour of the population, or both for getting advanced CLD due to alcohol in Central India. Upper GI endoscopic evaluation study done by Pal J et al found 78% had esophageal varices and 13% had portal hypertensive gastropathy.[8] Dangwal TR et al found 13 out of 29 children with CLD subjected to upper GI endoscopy had esophageal and/ or gastric varices[13].Almost similar findings were found in the present study.

CONCLUSION-

CLD is a common entity in North India with male preponderance and affecting mostly people of middle age group. People usually present with advanced stages with frank symptoms of CLD like ascites, jaundice and history of gastrointestinal bleeding present in most of them. Alcohol was most common cause of Chronic liver disease.

CONFLICT OF INTEREST-NIL

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