

CLINICAL PROFILE OF ACUTE ALCOHOLIC LIVER DISEASE

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ABSTRACT

Background: the Alcoholic liver disease has a varied spectrum of complications ranging from liver steatosis to severe liver cirrhosis. Liver disorders from alcoholism were reported since ancient times. Chronic and excessive alcohol abuse is the most common known causes of chronic liver disease worldwide. In India also alcoholism is the most common cause of the eclectic range of liver diseases. **Material & Methods:** A total of 100 patients were enrolled for study, who were attending the OPD of general medicine department of Zydus medical college and hospital, Dahod Gujarat. The patients who were diagnosed clinically and also biochemically as acute onset alcoholic liver disease enrolled for study by simple random sampling. **Results:** The most common clinical feature reported among patients of alcoholic liver disease was nausea and vomiting seen in 84% of patients, which was followed by jaundice, which was reported among 83% of cases. The third most common feature was hepatomegaly which was present in 68% of patients, accompanied by signs of liver failure present in 60% of patients which was followed by anorexia present in 56% of patients. Splenomegaly was present in 35% of patients, fever was present in 31% of patients, abdominal pain was present in 26% of cases, and ascites was reported among 17% on patients. **Conclusion:** Alcohol consumption in larger quantities over a longer duration of time leads to high morbidity and even mortalities. Alcoholic liver disease is a social burden which required frequent hospitalization and results to be unwanted out of pocket expenditure, economic loss along hindrance for the health care system.

Keywords: alcoholic liver disease, hepatomegaly, liver cirrhosis.

INTRODUCTION

The World Health Organization reported that there were around 150 million people with alcoholism living worldwide. Alcoholism is act as “dual disease” because it involves and affects both mental and physical components of the body (1). The biological mechanisms involve multiple organs of the human body along with this alcohol had the direct effect on the social environment of the person involving family, stress, mental health, and vocational capabilities. From ancient times there were many kinds of literature which state that use of alcohol

referred as "Somaras" for stimulation of central nervous system and aphrodisiac properties (2).

Since alcohol has the direct effect on the central nervous system, it acts as the behavioral stimulant at lower blood concentration, but with higher blood concentration it acts as CNS depressant. Alcohol affects all systems apart from the central nervous system including cardio-vascular system and gastrointestinal tract and genitourinary system (3). The association of Alcoholism with mortality and

morbidity is very high, which accounts nearly 4% of the deaths worldwide, and 5% of the DALYs lost worldwide attributed to alcohol abuse (4). Alcoholic liver disease has a varied spectrum of complications ranging from liver steatosis to severe liver cirrhosis. Liver disorders from alcoholism were reported since ancient times. Chronic and excessive alcohol abuse is the most common known causes of chronic liver disease worldwide (5). In India also alcoholism is the most common cause of the extensive range of liver diseases (6). The alcoholic liver disease accounts for a clinic-histological spectrum, which includes mild fatty liver to severe, alcoholic hepatitis and severe alcoholic cirrhosis. Fatty liver is not a life-threatening condition, but alcoholic hepatitis and liver cirrhosis are life-threatening and can be fatal (7). Alcoholic liver diseases are diagnosed primarily from clinical history, general physical examination and laboratory investigations.

The possible variables that can alter the path of development of alcoholic liver disease includes the amount, duration and percentage of alcohol content in consumption along with drinking patterns, age, gender, obesity, ethnicity, nutritional deficiency specially protein, pregnancy, iron overload, concomitant infection like viral hepatitis and several genetic factors (8). The present was conducted to assess the clinical profile of patients with the acute alcoholic live disease with its complications.

MATERIALS & METHODS

The present cross-sectional study was conducted at our tertiary care hospital. A total of 100 patients were enrolled for research, which was attending the OPD of general medicine department of Zydus medical college and hospital, Dahod Gujarat. The patients who were diagnosed clinically and biochemically as acute onset alcoholic liver disease enrolled for study by simple random sampling. Clearance from Institutional Ethics Committee was taken before the start of the study and written informed consent for the study purpose was obtained from all the enrolled participants. All the participants were subjected to a pretested proforma and demographic data recorded such as age, gender, weight, height, educational and marital status, smoking, socioeconomic status, drug

allergies, detailed history of alcohol intake habits, along with the thorough clinical examination. Patients who had chronic debilitating diseases such as diabetes mellitus, cardiac disorders, autoimmune diseases, liver infections, cancer patients and lactating or pregnant mothers were excluded from the study. The data were analyzed by using software's MS Excel 2010, Epi Info v7 and SPSS v22.

RESULTS

In the present study total of 100 subjects were enrolled after taking consent from them, the study procedure explained to them. In our study, the age of the patients was range from 20 to 60 years, out of which the maximum number of the study participants were categorized in the age group of 31-40 years (48%). 21% of the study participants were in the age group of 21- 30 years, 19% of the study participants were in the age group of 41-50 years, and lastly, 12% of patients were in the age group of 51-60 years. On the occupation-wise distribution of the patients, it was reported that the maximum number of patients were farmers that were 57%, 25% were employed at private service, 13% were daily wages workers, and 05% were unemployed. In the present study, by gender-wise distribution, it was found that only 02% of study participants were females and 98% were males, this may be because of simple random sampling. (Table 1)

In the present study on the basis of alcohol consumption majority of the patients that was 71% of patients had the current history of alcohol intake more than 60 gm of alcohol in 24 hours. 23% of patients had the history of alcohol intake of 50 - 60 gm of alcohol in 24 hours and 6% of patients had the history of alcohol intake of less than 50 gm of alcohol in 24 hours. In our study by alcohol consumption/abuse majority of the study participants that was 58% had a history of alcohol intake of more than five years of duration. 24% of patients had the history of alcohol consumption for past 3-4 years, 13% of patients had the history of alcohol consumption for prior 2-3 years, and 5% of patients had the history of alcohol consumption for past 1-2 years. (Table 2)

Table 1: Age and gender-wise distribution of study participants.

Variables		No. of cases
Age (years)	21-30 years	21%
	31-40 years	48%
	41-50 years	19%
	51-60 years	12%
Gender	Male	98
	Female	2

Table 2: Distribution of study participants based on the amount and duration of alcohol consumed.

Variables		No. of cases
Quantity consumed (gm/24hr)	<50 gm/24 hr	06%
	50-60 gm/24 hr	23 %
	>60 gm/24 hr	71%
Duration of alcohol consumption (years)	1-2 years	05%
	2-3 years	13%
	3-4 years	24%
	>5 years	58%

In the present study, the most common clinical feature reported among patients of acute liver disease was nausea and vomiting seen in 84% of patients, which was followed by jaundice, which was reported among 83% of cases. The third most common feature was hepatomegaly which was present in 68% of patients, accompanied by signs of liver failure present

in 60% of patients which was followed by anorexia present in 56% of patients. Splenomegaly was present in 35% of patients, fever was present in 31% of patients, abdominal pain was present in 26% of cases, and ascites was reported among 17% on patients. (Table 3)

Table 3: Distribution of study participants based on clinical features.

Clinical features	No. of cases
Nausea and vomiting	84%
Jaundice	83%
Hepatomegaly	68%
Signs of liver failure	60%
Anorexia	56%
Splenomegaly	35%
Fever	31%
Abdominal pain	26%
Ascites	17%

DISCUSSION

In the present study total, 100 patients were enrolled, and their ages were range from 20 to 60 years, out of which the maximum number of the study participants were categorized in the age group of 31-40 years (48%). Similar inclusion criteria reported in a study conducted by Chavan et al. on the alcoholic liver disease where the majority of the patients, that was 34% were in the age group of 30-40 years (9). In the present study, from gender-wise distribution, it was found that only 02% of study participants were females and 98% were males. In contrast to our study Nand et al. also reported male predominance by comprised a total of 201 male patients with alcoholic liver disease with the mean age of 46 ± 9.9 years with the mean weight of 59 ± 6.2 kg (10).

In the present study maximum numbers of patients were farmers that were 57%, 25% were employed at private service, 13% were daily wages workers, and 05% were unemployed. This line of work was contrary to the occupation pattern of the Pathak et al. study, in which majority of patients were army/ex-army 31%, followed by farmers 6% and private sector employee 5% and no documentation in rest of patients (11).

In the present study on account of alcohol consumption/abuse majority of the patients that was 71% of patients had the current history of alcohol intake of more than 60 gm of alcohol in 24 hours. 23% of patients had the history of alcohol intake of 50 - 60 gm of alcohol in 24 hours and 6% of patients had the history of alcohol intake of less than 50 gm of alcohol in 24 hours. However, these results were, in contrast, to study conducted by Ray et al., which reported that the maximum number of the patients (30%) had alcohol consumption of 81-90 grams per day along with the poor quality of country liquor for more than nine years (12).

In the present study, the most common clinical feature reported among patients of acute liver disease was nausea and vomiting seen in 84% of patients, which was followed by jaundice, which was reported among 83% of cases. The third most common feature was hepatomegaly which was present in 68% of patients, subsequently by signs of liver failure present in 60% of patients which was followed by anorexia present in 56% of patients. Splenomegaly was present in 35% of patients, fever was present in 31% of patients, abdominal pain was present in 26% of cases, and ascites was reported among 17% on patients.

In contrast to present study another study conducted by Mitra et al among patient of alcoholic liver disease reported that ascites was the most common finding and present in 53.7% patients, hepatic encephalopathy in 21% cases, upper gastrointestinal bleed in 18%, sub-acute bacterial peritonitis in 4% cases and hepatorenal syndrome in 3% cases (13). Ascites was also the most common finding in a study conducted by Mendenhall et al. among patient of alcoholic liver disease and reported in 60 % of

patients (14). Nearly similar results to present study were also published in scientific research conducted by Khatroth S among participants, which were patients of alcoholic liver disease and reported that nausea and vomiting and jaundice were found in 83.3 % patients which followed by hepatomegaly among 66.6% patients. Other clinical features stated were the loss of appetite or anorexia and palpable splenomegaly. Other signs of liver failure were also reported and present in 58.3% patients (15).

CONCLUSION

We concluded from the present study that alcohol consumption in larger quantities over a longer duration of time leads to high morbidity and even mortalities. Alcoholic liver disease is a social burden which required frequent hospitalization and results to be unwanted out of pocket expenditure, economic loss along encumbrance for the health care system. It is recommended that health education and awareness should be provided to the community by healthcare professionals for alcohol abuse and screening should be done on regular periodic intervals. By these efforts, we can decrease morbidity and mortality of the alcoholic liver disease.

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