

**BSTRACTO** Common reasons for hospitalizations among the patients who were admitted to the medical wards were taken in this study and analyzed. We found that chronic liver disease with its complications was found in 51 patients out of 200 i.e., 5% This signifies that chronic alcoholism leading to chronic liver disease is the major cause of mortality in the chronic alcoholism leading to

# 25.5%. This signifies that chronic alcoholism leading to chronic liver disease is the major cause of mortality in the chronic alcoholic patients.

# **KEYWORDS**:

# **INTRODUCTION:**

The harmful use of alcohol is one of the world's leading health risks. It is a causal factor in more than 60 major types of diseases and injuries and results in approximately 2.5 million deaths each year. The total number of deaths attributable to alcohol consumption was estimated to be 2.25 million in 2004 (WHO, 2009a). This accounts for more deaths than caused by HIV/AIDS <sup>4</sup> or tuberculosis <sup>5</sup>. Thus, 4% of all deaths worldwide are attributable to alcohol. The harmful use of alcohol is especially fatal for younger age groups and alcohol is the world's leading risk factor for death among males aged 15–59<sup>1</sup>. The important serious complications of chronic alcoholism are alcoholic liver disease <sup>3</sup> and its complications, acute alcoholic intoxication <sup>6</sup>, alcoholic withdrawal syndrome <sup>7</sup>, cerebro vascular accidents <sup>8</sup>, coronary artery diseases <sup>13</sup>, acid peptic disease, duodenal ulcer, acute pain abdomen secondary to acute or chronic pancreatitis <sup>9</sup> and alcoholic peripheral neuropathy <sup>10</sup>. In some patients alcoholism indirectly related to hospital admission like drunk and drive cause RTA, chronic alcoholism with social problems leading to suicidal attempts. Some patients with chronic alcoholism were admitted with problems no way related to the alcoholism like infections, thyroid problems, severe anemia due to chronic bleeding hemorrhoids and Type 2 DM and its complications. Among the complications of chronic alcoholism mortality from cirrhosis of liver is the major cause. Quantity and duration of the alcohol intake are the most important risk factors involved in the development of the chronic liver disease<sup>2</sup>.

# MATERIALS AND METHODS:

200 patients admitted to the SVRRGGH, TIRUPATHI with chronic alcoholism more than ten years duration for a period of six months from July 2015 to December 2015 were enrolled in the study.

# **INCLUSION CRITERIA:**

Alcoholic duration more than ten years at least ten times per week or at least 4 Times per day.

Patients who fulfill the CAGE criteria <sup>12</sup> who won't give proper history.

# **EXCLUSION CRITERIA:**

1. Patients with HIV<sup>18</sup>, Hepatitis B &C, are excluded.

2. Alcoholic duration less than ten years.

3. Female patients.

All the patients were informed and taken consent to publish their data. Data was extended in the Microsoft excel and analyzed.

# **RESULTS:**

Total 200 patients who were admitted to the medical wards of SVR-RGGH, TIRUPATHI with chronic alcoholism more than ten times a week or more than four times a day were analyzed. Mean age of the patient was 48 years and minimum age Was 32 years and maximum age was 78 years. Average alcoholic duration of the patient was 22.5 years. Among the 200 patients admitted 84 patients were found that

#### **TABLE 1: Presentations of alcoholics.**

S. NO.	PRESENTATION - DIAGNOSIS	N	%
1.	Cirrhosis of liver & complications	51	25.5
2.	Cerebro vascular accidents	21	10.5
3.	Type 2 Diabetes Mellitus & complications	18	9
4.	Infections	18	9
5.	Suicidal attempts	15	7.5
6.	Alcohol withdrawal syndrome	14	7
7.	Chronic kidney disease	12	6
8.	Alcoholic intoxication	12	6
9.	Acid peptic disease	9	4.5
10.	Acute pancreatitis	8	4
11.	COPD	6	3
12.	Duodenal ulcer	6	3
13.	Hypertension @epistaxis	4	2
14.	Severe anemia @bleeding hemorrhoids	3	1.5
15.	Others		

#### Others include snake bite, thyroid abnormalities, vertigo,COPD <sup>15</sup>: Chronic Obstructive pulmonary Disease

They fulfilled the CAGE criteria <sup>12</sup> /alcohol dependence criteria. In this study exact quantity of the alcohol was not mentioned due to improper history and only frequency was mentioned.

#### Table 2: Alcoholic duration of the patients.

Duration (years)	10 to 20	20 to 30	>30
N	54	84	62
96	27	42	31

Total 200 patients admitted were analyzed among them one quarter i.e., 25.5% of the patients presented with alcoholic liver disease<sup>3</sup> with complications. Most of the patients presented with decompensated chronic liver disease presenting as abdominal distention, pedal edema and hypoprotenemia <sup>14</sup>. 60% of the cirrhotic patients fulfill the CAGE criteria <sup>12</sup> with alcohol dependence. Repeated hospitalizations were also observed in these patients with high frequency. After alcoholic liver disease cerebro vascular accidents <sup>8</sup> were found to be the next one i.e., 21 patients out of 200(10.5%). Direct relationship between chronic alcoholism CVA was completely not established yet.

#### Table. 3: Age distribution of the patients

Age	n	%
30 to 39	25	12.5
40 to 49	92	46
50 to 59	58	29
60 to 69	17	6.5
70 above	8	4

India has the largest number of diabetics in the world with a 3.8% in rural and 11.8% in urban adults. The prevalence of hypertension has been reported to range between 12% and 17% among rural and 20-40% in urban adults <sup>16</sup>. But in our study it was mild higher i.e., 9% because the reason may be the overall alcoholic prevalence is high in the population. In this study peripheral neuropathy with diabetes was also included in this entity only. After type 2 DM infectious diseases were most common. Among the infectious diseases LRTI was more common particularly pulmonary TB was found to be high, 7 patients out of 18 patients were positive with TB bacilli.

Table. 4: Age distribution of the patients with cirrhosis of liver.

Age	n	%
30 to 39	07	13.7
40 to 49	11	21.5
50 to 59	23	45.0
60 to 69	08	15.6
70 above	02	03.9

Table 5: Alcoholic duration of the patients with cirrhosis of liver.

Duration (years)	10 to 20	20 to 30	>30
N	17	28	6
%	33.3	54.9	11.7

After infectious disease suicidal attempts were found in the next place. Among them vadisaku (cleistanthus collinus <sup>11</sup>) poisoning, op and non-op compound poisoning mixed with alcohol were found. Most of the patients were chronic alcoholics had social problems with other family problems and attempted suicide. 7% of the patients i.e. 14 patients were admitted with alcohol withdrawal syndrome. Among them most of the patients were pilgrims came for Tirumala from long distance and won't get alcohol at Tirumala and presented with abnormal movements like tremors, seizures without any structural abnormalities of the brain.

Chronic kidney disease<sup>19</sup> (CKD) among the chronic alcoholics was found in 12 patients out of 200.i.e, 6%. After CKD the acute alcoholic intoxication with metabolic complications and delirium was the next entity, also 6%. Most of the alcoholic intoxication patients were found to be binge drinkers. After alcoholic intoxication acute pain abdomen secondary to acute pancreatitis, acute on chronic pancreatitis, acid peptic disease, duodenal ulcer were common.

Most of the chronic alcoholics have also smoking history. Up to 80% of the patients in our study have the smoking history. With the smoking risk factor the prevalence of COPD <sup>15</sup> is 3% in our study. Severe anemia with chronic bleeding hemorrhoids<sup>17</sup> was found 3 patients out

of 200. Finally other presentations included snake bite, thyroid abnormalities and severe vertigo each in one patient respectively.

#### **DISCUSSION:**

Alcohol abuse is dramatically increasing day by day and alcoholic related disease prevalence is also increasing. The study was completely independent of laboratory investigation and is a randomized controlled study. The patients were randomly selected from the medical wards with more than ten years of chronic alcoholic history. Some local factors also influence this study.

In one study i.e., National Epidemiological Survey on Alcoholic and Related Conditions from US, it was found that 65% US population are drinkers among them 74% were men and 26% were women. In one study done in Canada i.e., "Alcoholic consumption in Canada"/2015 done by public health officer on a teaching hospital was found that 80% people in Canada were drinkers. In India was also 76% according to the Indian Journal Academic Research (IJAR) done in 2014. Among the alcoholics chronic liver disease was found to be common in all the above studies. In our study also found that 25.5% of the patients were chronic liver disease patients with medical complications.

Some local factors also influence the study: most of the chronic alcoholic patients with liver disease were come in end stage. Initially they had visit private hospital; finally they come to SVRRGGH, TIRU-PATHI. 7.5 % of recorded patients with suicidal attempts with vadisaku (cleistanthus collinus <sup>11</sup>) mixed with jaggery because vadisaku (cleistanthus collinus <sup>11</sup>) was found to be high availability around TIR-UPATHI. Alcohol withdrawal syndrome was found high in the pilgrims who were came for Tirumala for long distance were found 14 patients.

In older patients chronic alcoholism leads to cognitive abnormalities and behavioral problems cause much more economic burden on the family. We had taken ten drinks per week as the cut off with more than ten years duration. European and Canadian guidelines clearly states that every day 30 grams of alcohol is good to health that was also proven in some clinical studies, but in our population the people with alcoholic addiction cannot stop with 30 grams of alcohol every day.

The deaths in the chronic alcoholic patients worldwide are due to decompensated liver disease with its complications. In our study also the prevalence of chronic liver disease in the chronic alcoholic takes the first position. Normally only 10 to20% of chronic alcoholics get affected with liver disease<sup>2</sup>, but the cause was not known with remaining not affected. After liver disease the prevalence of CVA was more in our study. This statement was also confirmed in one study published by Nepal Medical college on 2011 may 15 i.e., (P.Adhikari et all was confirmed this).

The prevalence of infections and type 2 diabetes mellitus and its complications were found to be equal in our study .after that decrease in frequency was noted with alcohol withdrawal syndrome; chronic kidney disease<sup>19</sup>, acute pain abdomen conditions, COPD<sup>15</sup> and severe anemia with chronic bleeding hemorrhoids<sup>17</sup> were next in frequency.

# LIMITATIONS:

- 1. Non Investigation study.
- 2. Female patients were not included.
- 3. Exact quantity of alcohol was not mentioned.
- 4. Other specialty ward admissions were not included.

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