ASSESSMENT OF CLINICAL PROFILE OF PATIENTS WITH ALCOHOLIC LIVER DISEASE
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Abstract
Background: Alcohol consumption affects both mental and physical function of the body and hence called as “dual disease” because it has mentioned in etiology of morbidity in both the components of the body. According to the reports of World Health Organization there were more than 150 million people worldwide has indulged with alcoholism.

Material & Methods: The present prospective study was conducted at department of general medicine of our tertiary care hospital. 50 Patients who were diagnosed as acute onset alcoholic liver disease were enrolled from outdoor and from ward by simple random sampling.

Results: The most common clinical feature recorded among study participants was of nausea and vomiting seen in 46 (92%) of patients, which was followed by jaundice reported among 43 (86%) of patients. Hepatomegaly was reported among 37 (74%) of patients, which was followed by signs of liver failure reported among 30 (60%) patients, followed by anorexia reported among 29 (58%) of patients. Splenomegaly was reported among 17 (34%) of patients, fever was reported among 13 (26%) of patients, abdominal pain was reported among 12 (24%) of cases and ascites was reported among 8 (16%) study participants.

Conclusion: We concluded from the present study that larger quantities of alcohol consumption for a longer duration of time result in high morbidity and mortalities. Alcoholic liver disease is not only a medical burden but also a social burden which leads to frequent hospitalization and unwanted out of pocket expenditure.

Key words: alcoholic liver disease, liver cirrhosis, hepatomegaly.

Introduction:
Alcohol consumption affects both mental and physical function of the body and hence called as “dual disease” because it has mentioned in etiology of morbidity in both the components of the body. According to the reports of World Health Organization there were more than 150 million people worldwide has indulge with alcoholism (1).

Several studies had reported that alcoholism affect the biological mechanisms which involves in equilibrium of multiple organs of human body along with this it directly have adverse effect on social environment of the person involving family life, mental health and also the vocational capabilities (2).

Alcohol act as central nervous system depressant in higher blood concentration, however in low doses it act as central nervous system behavioral stimulant (3). Alcoholism is reported to be significantly associated with high mortality and morbidity rates, which accounts for more than 4% of the mortality reported worldwide and also for near about 5% of the DALYs lost worldwide (4).

Alcoholic liver disease has reported to have group of diseases disease ranging from mild liver steatosis to severe liver cirrhosis. The most common etiology behind this ranging disease spectrum reported was chronic and excessive alcohol consumption (5). In India also alcoholism is reported for the most prevalent cause of acute and chronic liver diseases (6). Alcoholic liver disease ranges from mild fatty liver, alcoholic hepatitis and alcoholic cirrhosis. Among them alcoholic hepatitis and severe liver cirrhosis are life threatening conditions and sometimes fatal (7). However, many other factors are also associated in the outcome of the alcoholic liver diseases like, amount and duration of alcohol content, nutritional deficiency, iron overload, viral hepatitis and several genetic factors (8). Hence, we conducted present study to assess the clinical profile of alcoholic liver disease.
MATERIALS & METHODS

The present prospective study was conducted at department of general medicine of our tertiary care hospital. The study duration was of six months from July 2018 to December 2018. A sample size of 50 was calculated at 95% confidence interval at 10% acceptable margin of error by epi info software version 7.2. Patients who were diagnosed as acute onset alcoholic liver disease were enrolled from outdoor and from ward by simple random sampling. Clearance from Institutional Ethics Committee was taken before start of study. Written informed consent was taken from each study participant.

The data were collected by detailed history, general physical and clinical examination from each patient after taking the written consent. The hematological investigation was done for routine blood investigation and liver function test. Patients who had chronic diseases such as cardiac diseases, renal diseases, hypertension and cancer were excluded from the study. Data analysis was carried out using SPSS v22. All tests were done at alpha (level significance) of 5%; means a significant association present if p value was less than 0.05.

RESULTS

In the present study we enrolled 50 patients who were aged from 21 to 59 years. The mean age of the enrolled patient with alcoholic liver disease was 36.42 ± 4.78 years. There was no patient in the present study who aged less than 18 years of age. Out of total patients diagnosed with alcoholic liver disease 94% were male and 6% were females. In the present study, majority of the patients were in the age group of 31-40 years (52%) which is followed by 24% of the patients were in the age group of 21-30 years followed by 14% of the patients were in the age group of 41-50 years and 10% of patients were in the age group of 51-60 years. In our study majority of patients were farmers which is followed by employed at private service and daily wages workers. In the present study, according to the of alcohol consumption majority of the patients were consumed alcohol intake more than 60 gm which is followed by patients who were consuming alcohol 50 - 60 gm in 24 hours and lastly patients who had history of alcohol consumption of less than 50 gm in 24 hours.

DISCUSSION

In the present study we enrolled 50 patients who were aged from 21 to 59 years. The mean age of the enrolled patient with alcoholic liver disease was 36.42 ± 4.78 years. There was no patient in the present study who aged less than 18 years of age. Out of total patients diagnosed with alcoholic liver disease 94% were male and 6% were females. In the present...
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In our study majority of patients were farmers which is followed by employed at private service and daily wages workers. In the present study, according to the of alcohol consumption majority of the patients were consumed alcohol intake more than 60 gm which is followed by patients who were consuming alcohol 50-60 gm in 24 hours and lastly patients who had history of alcohol consumption of less than 50 gm in 24 hours. On the basis of consumption, majority of the patients had alcohol consumption of more than five years which is followed by alcohol consumption for past 3-4 years, which is followed by alcohol consumption for past 2-3 years and at last patients who had history of alcohol consumption from past 1-2 years. Similar results were obtained in a study conducted by Pathak et al among patients of alcoholic liver disease and found that male preponderance was highly prevalent and majority of patients were farmers which is followed by employed at private service and daily wages workers (11). Similar results were obtained in a study conducted by Ray et al among patients of alcoholic liver disease and found that majority of the patients had alcohol consumption of more than 80 grams per day and also consumed poor quality of liquor for a mean duration 9 years and more (12).

In the present study, the most common clinical feature recorded among study participants was of nausea and vomiting seen in 46 (92%) of patients, which was followed by jaundice reported among 43 (86%) of patients. Hepatomegaly was reported among 37 (74%) of patients, which was followed by signs of liver failure reported among 30 (60%) patients, followed by anorexia reported among 29 (58%) of patients. Splenomegaly was reported among 17 (34%) of patients, fever was reported among 13 (26%) of patients, abdominal pain was reported among 12 (24%) of cases and ascites was reported among 8 (16%) study participants. Similar results were obtained in a study conducted by Mitra et al among patients of alcoholic liver disease and found that ascites was the most common finding followed by hepatic encephalopathy and upper gastrointestinal bleed (13). Similar results were obtained in a study conducted by Mendenhall et al among patients of alcoholic liver disease and found that in majority of patients ascites was the most common finding (14). Similar results were obtained in a study conducted by Khatroth S et al among patients of alcoholic liver disease and found that in majority of patients nausea and vomiting and jaundice, hepatomegaly, loss of appetite or anorexia and palpable splenomegaly are the most common findings. (15).

**CONCLUSION**

We concluded from the present study that larger quantities of alcohol consumption for a longer duration of time result in high morbidity and mortalities. Alcoholic liver disease is not only a medical burden but also a social burden which leads to frequent hospitalization and unwanted out of pocket expenditure.

**REFERENCES**

1. Sudhinaraset M, Wigglesworth C, Takeuchi DT. Social and Cultural Contexts of Alcohol Use: Influences in a Social-Ecological Framework. Alcohol Res [Internet]. 2016;38(1):35–45. Available from: http://www.ncbi.nlm.nih.gov/pubmed/27159810
2. Suthar H, Suthar K, Mewada B. Clinical profile of cases of alcoholic liver disease. Int J Med Sci Public Heal [Internet]. 2013;2(2):394. Available from: http://www.scopemed.org/fulltextpdf.php?mno=31625
3. Frazier TH, Stocker AM, Kershner NA, Marsano LS, McClain CJ. Treatment of alcoholic liver disease. Therap Adv Gastroenterol [Internet]. 2011 Jan;4(1):63–81. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21317995
4. Rehm J, Dawson D, Frick U, Gmel G, Roerecke M, Shield KD, et al. Burden of disease associated with alcohol use disorders in the United States. Alcohol Clin Exp Res [Internet]. 2014 Apr;38(4):1068–77. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24428196
5. Bataller R, Gao B. Liver Fibrosis in Alcoholic Liver Disease. Semin Liver Dis [Internet]. 2015 May 14;35(2):146–56. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25974900
6. Pal P, Ray S. Alcoholic Liver Disease: a Comprehensive Review. Eur Med J. 2016;2(April):85–92.

7. Abd El-Kader SM, El-Den Ashmawy EMS. Non-alcoholic fatty liver disease: The diagnosis and management. World J Hepatol [Internet]. 2015 Apr 28;7(6):846–58. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25937862

8. Singal AK, Bataller R, Ahn J, Kamath PS, Shah VH. ACG Clinical Guideline: Alcoholic Liver Disease. Am J Gastroenterol [Internet]. 2018 Feb 16;113(2):175–94. Available from: http://www.nature.com/doifinder/10.1038/ajg.2017.469

9. Chavan VB, Harshe GG. A Study of Patients of Alcoholic Liver Disease with Special Reference to Different Scoring Systems for Prognostication. Sch J Appl Med Sci Sch J App Med Sci [Internet]. 2016; 4 (5A):1506–9. Available from: www.saspublisher.com

10. Nand N, Malhotra P, Dhoot DK. Clinical Profile of Alcoholic Liver Disease in a Tertiary Care Centre and its Correlation with Type, Amount and Duration of Alcohol Consumption. J Assoc Physicians India [Internet]. 2015 Jun;63(6):14–20. Available from: http://www.ncbi.nlm.nih.gov/pubmed/26710394

11. Pathak O, Paudel R, Panta O, Pant H, Giri B, Adhikari B. Retrospective study of the clinical profile and prognostic indicators in patients of alcoholic liver disease admitted to a tertiary care teaching hospital in Western Nepal. Saudi J Gastroenterol [Internet]. 2009;15(3):171. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19636178

12. Ray S, Khanra D, Sonthalia N, Kundu S, Biswas K, Talukdar A, et al. Clinico-biochemical correlation to histological findings in alcoholic liver disease: a single centre study from eastern India. J Clin Diagn Res [Internet]. 2014 Oct;8(10):MC01-5. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25478382

13. Mitra JK, Mundu PA, Kumar B, Satapathy RK, Sinha R, Kumar M. Profile of Alcoholic Liver Disease in Population of Jharkhand : An Insight into the Realm of Alcoholism from Profligacy to Burden. 2017;4(3):770–3.

14. Mendenhall CL, Anderson S, Weesner RE, Goldberg SJ, Crollic KA. Protein-calorie malnutrition associated with alcoholic hepatitis. Veterans Administration Cooperative Study Group on Alcoholic Hepatitis. Am J Med [Internet]. 1984 Feb;76(2):211–22. Available from: http://www.ncbi.nlm.nih.gov/pubmed/6421159

15. Khatroth S. Study of clinical and biochemical profile of acute alcoholic liver disease in a teaching hospital in Telangana. 2018;5(4):804–8.