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Clinical profile of COVID-19 in alcoholic and non alcoholic patients: A cross sectional study

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Abstract
Background: The current outbreak of the nove corona virus started in People's Republic of china. In general population many myths about the alcohol intake and COVID-19 infection are there, that warranted us to do study on the alcoholic and non-alcoholic patients with COVID-19 infection to compare clinical features in both group of patient.
Aims and Objective: To study clinical features and outcome in alcoholic and non-alcoholic patients infected with COVID-19 infection.
Methodology: Present study is a cross sectional study carried out in KVG medical college, sullia, Karnataka in the period of one month. Detailed history of alcohol intake in past, clinical features at the time of presentation has been recorded. Available laboratory reports and chest X-ray of all patient studied in detail.
Results: Total 30 patients were included in study.
Conclusion: So based on present study we can say "drinking of alcohol neither prevent or nor cure the COVID-19 infection. Alcoholic patients had slightly more severe symptoms as compared to non-alcoholic patient with COVID-19 infection.

Keywords: COVID-19, alcoholic patients, non-alcoholic patients

Introduction
The current outbreak of the novel coronavirus SARS-CoV-2 started in Hubei Province of the People's Republic of China, has spread to many other countries. On 30th January 2020, the WHO Emergency Committee declared a global health emergency. SARS-CoV-2 virus primarily affects the respiratory system, although other organ systems are also involved. Lower respiratory tract infection related symptoms including fever, dry cough and dyspnea were reported in the initial case series from Wuhan, China [1]. In addition, headache, dizziness, generalized weakness, vomiting and diarrhoea were observed [2].
There are very few studies available on correlation of severity of of COVID-19 infection in alcoholic and nonalcoholic patient, some studies have shown that no substantial difference was observed in the habits of drinking between severe and non-severe COVID-19 patients [3]. In General population many myths about the alcohol intake and COVID-19 infection are there, that warranted us to do study on the alcoholic and nonalcoholic patients with COVID-19 infection to compare clinical features in both group of patient.

AIMS and Objective
To study clinical features and outcome in alcoholic and nonalcoholic patients infected with COVID-19 infection.

Methodology
Present study is a cross sectional study carried out in KVG medical college, sullia, Karnataka in the period of one month. Detailed history of alcohol intake in past, clinical features at the time of presentation has been recorded. Available laboratory reports and chest X-ray of all patient studied in detail.
Inclusion criteria
All patients positive for COVID-19 infection above 18 year of age were included in study.

Results
Total 30 patients were included in study.

Table 1: Patients Details

	Alcoholic	Non Alcoholic
Male 24 (80%)	12 (80%)	12(80%)
Female 6 (20%)	3 (20%)	3 (20%)

Table 2: Clinical features

	Alcoholic: of 15 patients	Nonalcoholic: of 15 patients
Fever	13 (86%)	12 (80%)
Running nose	10 (66%)	9 (60%)
Headache	13 (86%)	12 (80%)
Cough	9 (60%))	5 (33%))
Dyspnea	3 (20%)	1 (6%)
Tiredness	6 (40%)	3 (20%)
Vomiting	3 (20%)	1 (6%)
Loose stool	4 (26%)	1. (6%)

Table 3: Lab parameters

	Alcoholic	Non alcoholic
Hemoglobin < 10gm%	2 (13%)	1 (6%)
Total White blood cell count >11k	3(20%)	2(13%)
Platelet count < 1.5lakh/cumm	1(6%)	5(33%)
Serum ferritin > 500	12(80%)	11(73%)
C-reactive protein > 6	4 (26%)	5(33%)

Among 30 patients 24 were male, 6 were female (table 1). 50 % patients were alcoholic while remaining 50 % were nonalcoholic. Clinical features of fever, running nose and headache was almost common in both group of patients, however dyspnea was observed in 3 alcoholic and 1

nonalcoholic patient, 6(40%) alcoholic and 3(20%) non-alcoholic patient had extreme tiredness, vomiting was observed in 3 (20%) alcoholic and 1 non-alcoholic patient, 6 (40%) alcoholic and 1 (6%) non-alcoholic patient had loose stool (table 2).

In lab parameters there was no much difference in hemoglobin, total white blood cell count, Serum ferritin, C-reactive protein in both group of patients, however platelet count was less in alcoholic group of patients as compared to non-alcoholic patients (table 3). Mean time from onset of clinical symptoms to relief was 9-10 day in alcoholic patient while 6-7 days in non-alcoholic patient.

Discussion

Alcohol intake suppresses immunity in multiple ways, the impact of alcohol abuse on risk and severity of infection has been demonstrated particularly well for infections of the respiratory tract, specially bacterial pneumonia's, tuberculosis and it observed that alcoholic patients are more prone for both bacterial and viral infection [4]. Furthermore alcohol interferes with the nutritional process by affecting digestion, storage, utilization and excretion of nutrients, that will affect the supply of essential nutrients and affects both energy supply and body structure maintenance [5].

In present study clinical features like cough and dyspnea was observed more in alcoholic patient as compared to non-alcoholic patient may be because of impaired immune response to COVID-19 infection. Alcohol is known to cause intestinal inflammation, motility disorders, malabsorption and digestive problems such as anorexia, nausea and abdominal pain [6]. In the present study we found that clinical symptoms like vomiting, loose stool observed more in alcoholic patients as compared to non-alcoholic patient and alcoholic patient had more tiredness during the course of hospital as compare to non-alcoholic patient.

So based on present study we can say "drinking of alcohol neither prevent or nor cure the COVID-19 infection. Alcoholic patients had slightly more severe symptoms as compared to non-alcoholic patient with COVID-19 infection.

References

1. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y *et al*. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet,2020:395:497-506. [PMC free article] [PubMed] [Google Scholar]
2. Shi H, Han X, Jiang N, Cao Y, Alwalid O, Gu J *et al*. Radiological findings from 81 patients with COVID-19 pneumonia in Wuhan, China: a descriptive study. Lancet Infect Dis,2020:20:425-434. [PMC free article] [PubMed] [Google Scholar]
3. Feng Y, Ling Y, Bai T. COVID-19 with Different Severity: A Multi-center Study of Clinical Features. American Journal of Respiratory and Critical Care Medicine, 2020. doi: 10.1164/rccm.202002-0445OC. [PMC free article] [PubMed] [Cross Ref] [Google Scholar]
4. Schmidt W, De Lint J. Causes of death of alcoholics. Q J Stud Alcohol,1972:33(1):171-185. [PubMed] [Google Scholar]
5. Lieber CS. The influence of alcohol on nutritional status. Nutrition Reviews,1988:46(7):241-254.
6. Beazell JM, IVY AC. The influence of alcohol on the digestive tract. Quarterly Journal of Studies on Alcohol,1940:1:45-73.
7. Satish Kumar BP, Prolay Paul, Sayantan Ghosh, Ravindra BN, Arpan Dutta Roy. General awareness and safety measures to combat covid-19. International Journal of Research in Pharmacy and Pharmaceutical Sciences,2020:5(6):15-17.