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Comparative Analysis of Clinical Signs in Patients with Covid-19 Who Suffer Chronic Viral Hepatitis C

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Abstract

The global pandemic of the new coronavirus infection (COVID-19), which began in December 2019 in Uhan (China), has spread worldwide. On 11 March 2020, the World Health Organization announced the outbreak of the SARS CoV-2 pandemic due to the constant number of cases outside China. [1]. Rapid and decisive measures are being taken in our country to effectively combat the coronavirus pandemic, which is spreading rapidly around the world. Particular attention is paid to such important aspects as preventing the spread of coronavirus infection, effective treatment of patients with the disease, and conducting laboratory tests. Patients with chronic liver diseases required increased attention of doctors during the epidemic, since against the background of an exacerbation of their diseases, not only the risk of contracting a viral infection of COVID - 19 increased, but also its aggravation. (Mekhtiev.S.N and co-author. 2020). Severe liver damage during the severe course of COVID – 19 is diagnosed with a severe course of the disease. Patients with COVID - 19, confirmed by serious liver damage, experience an increase in high biochemical indicators. At the height of the disease, thrombocytopenia is observed. An increase in serum aminotransferase, creatinkinase and lactatdegydrogenase activity is detected. [10]. Literature has shown that patients with severe covid – 19 manifestations are at higher ALT levels, lower platelet and albumin numbers, and higher risk of death. Data analysis shows that the frequency of cases of impaired liver function increases in proportion to the severity of COVID-19 flow. Apparently, an increase in alt, hypoalbuminemia and thrombocytopenia are unfavorable factors in the prognosis of the disease. Analysis of the clinical picture of COVID-19 has shown that SARSCoV-2 has significant effects for SJK (chronic liver diseases). Patients with viral etiology are more susceptible to liver damage, which is likely due to increased replication of hepatitis V and C viruses during SARSCoV-2 infection. The presence of an Associated side disease (diabetes, cardiovascular diseases) tends to develop a severe form of COVID-19 in patients. [2]. Today, there is no clear data on whether patients with chronic hepatitis C have a higher risk of contracting COVID-19 compared to other diseases. At the same time, serious complications, if it is not possible to prevent COVID-19 infection, then the disease develops rapidly in them. [5]. Even if hepatitis C has been successfully treated in particular, it increases the chances of severe covid-19 passing. Therefore, against the background of the COVID-19 pandemic, the problems of patients with chronic viral hepatitis C are unresolved and require study. In epidemic conditions, it is very important to effectively monitor patients with this pathology and continue to treat them health, as well as to carry out scientific research to reduce the problem in the health system and reduce the disease [2].

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Keywords: *COVID-19, chronic viral hepatitis C, Kettle index, body mass, pain*

1. Introduction

Relevance of research work. Patients with chronic liver disease demanded the attention of physicians during the epidemic, as against the background of their exacerbation of the disease increased not only the risk of infection with COVID-19 virus, but also its severity [1,2,3,4,5]. Analysis of the clinical presentation of COVID-19 showed that SARSCoV-2 had a significant effect on CHLD (chronic liver

disease). Patients with viral etiology are more prone to liver damage, which is probably associated with increased replication of hepatitis B and C viruses during SARSCoV-2 infection[6,7,8,9]. To date, there are no clear data on the risk of COVID-19 in patients with chronic hepatitis C compared to other diseases.. Шу билан бирга, жиддий асоратлар, агар COVID -19 инфекциясини олдини олиш имкони бўлмаса, уларда хасталик тез ривожланиб боради [10,11,12,13,14]. Hepatitis C in particular increases the likelihood of severe transmission of COVID-19, even if successfully treated. Therefore, the problems of patients with chronic viral hepatitis C against the background of the COVID-19 pandemic are unresolved and require study. However, the number of studies that allow us to confirm this idea is extremely small, and the data in them are not reliable[15,16,17,18]. Based on this, the aim of our study was to evaluate the comparative analysis of clinical signs in patients with chronic viral hepatitis C who underwent COVID-19.

2. Materials And Methods

The study included the results of clinical, laboratory and instrumental studies of 157 patients diagnosed with chronic viral hepatitis C with or without COVID-19. 87 (55%) of the patients were chronically infected with hepatitis C and did not have COVID-19 infection. Of these, 55 (63%) patients were of average age 20-59 years (36.2 ± 3.2) and 32 (37%) were 60-76 (65.2 ± 4.2) patients. Group 2 of the study included 70 (45%) patients with COVID-19 infection with chronic viral hepatitis C, of whom 45 (64%) were 20–59 years of age (38.2 ± 4.4) and 25 (36) %) 60-76 (65, 3 ± 4.2) patients. The research was approved by the members of the committee established at the Bukhara Medical Institute. Criteria for inclusion in the study: patients aged 20-75 years with chronic viral hepatitis C who had and did not have COVID-19; persons who have given written consent to clinical and instrumental examinations. The results of the examination were evaluated using a clinical reference card (questionnaire). In the process of diagnosing patients, anamnestic data were collected, laboratory and ultrasound examinations were used. Diagnosed on the basis of COVID-19 PCHR test. All patients involved in the study underwent ultrasound elastometry "Fibroscan" (Echosens, Paris). During the study, the practice was compared with 18 healthy individuals (ages 20–65). The data obtained were statistically processed using the Styudent's t-criterion, and the difference in results with R <0.05 was recognized as reliable.

3. Results and Discussion

The results of our research show that the age distribution of patients diagnosed with chronic viral hepatitis C who have or have not had COVID-19 is shown in Table 1. Patients who underwent COVID-19 were more likely to be of different ages when analyzed by age, especially in the elderly (60-74 years - 35 (50%), including 47% women, 53% men); - 42.5% of women and 31.9% of men over the age of 60).

Table 1 Age-related prevalence of patients with and without chronic hepatitis C COVID-19 n (%)

Patients age	Womens Abs (%)		Mens Abs (%)	
	Infected with COVID-19 n = 32	Not infected with COVID-19 n = 40	Infected with COVID-19 n = 38	Not infected with COVID-19 n = 47
Up to 39 years of age	5 (15.6%)	6 (15%)	6 (15.8%)	7 (14.9%)
40-49 age	6 (18.8%)	7 (17.5%)	7 (18.4%)	10 (21.3%)
50-59 age	9 (28.1%)	10 (25%)	12 (31. 5%)	15 (31.9%)
60-74 age	12 (37.5%)	17 (42.5%)	20 (34.3%)	15 (31.9%)
Total	32	40	38	47

Analysis of demographic and anthropometric parameters of patients showed that COVID-19 was more severe in patients diagnosed with chronic viral hepatitis C (Table 2).

(Table 2) Comparative analysis of demographic and anthropometric indicators in primary and control group patients

Indicator	**NG (N = 18)**	**Chronic hepatitis C Covid-19 is infected n = 70**	**Chronic hepatitis C Covid-19 is not infected with Covid-19 n = 87**
age	32,3 ± 4,2	43,1±1,2	40,2±2,4
body weight, kg	60,0±2,12	70,0±4,2	80,0±2,3
Height, cm	165±5,2	161 ±2,2	165 ±2,3
TMI, kg / m2 (25-30)	20,0±1,26	22,1±4,2	26,1±2,8

TMI, kg / m2 (30-34.9)	22,0±0,2	31,5±1,5	30,2±1,2
TMI, kg / m2 (35-39.9)	23,0±0,6	36,3±2,2	35,2±1,5
TMI, kg / m2(40 <)	25,0±0,2	38,2±2,3	37,2±1,0

Obesity group III (TMI 40 and above) included in the study group increased body weight (38.2 ± 2.3) in patients diagnosed with chronic viral hepatitis C who underwent COVID-19, and in patients diagnosed with chronic viral hepatitis C who did not undergo COVID-19. 37.2 ± 1.0 was observed and was reported to be more severe in patients with high body mass. Obesity II (Kettle index 35 - 39.9) Increased body weight (36.3 ± 2.2) in patients diagnosed with chronic viral hepatitis C with COVID-19, in patients diagnosed with chronic viral hepatitis C without COVID-19 35 , 2 ± 1.5.

The following results were noted when we compared the clinical signs of the next-stage analysis study groups. The results are presented in Table 3.

Table 3 Comparative assessment of the frequency of clinical manifestations in patients with and without chronic hepatitis C COVID-19

Characters	**Chronic hepatitis C Covid-19 is not infected with Covid-19 n = 87**	**Chronic hepatitis C Covid-19 is infected n = 70**
Discomfort under the right rib, feeling of heaviness	65 (74%)	60 (85%)
rapid fatigue, general weakness	68 (78%)	59 (86%)
Decreased appetite	52 (60%)	49 (70%)
Nausea	48 (55%)	45 (65%)
Vomiting	48 (55%)	45 (65%)
Sensation of bitter taste in the mouth	35 (40%)	34 (48%)
Constipation	35 (40%)	31 (45%)
Flatulence	35 (40%)	35 (50%)
Itching of the skin	31 (35%)	30 (43%)

Patients with COVID-19 infection with chronic hepatitis C were more likely to have gastrointestinal symptoms than those without COVID-19 infection. That is, general weakness was observed in 86% of patients, symptoms of nausea and vomiting were observed in 65% of patients, and pain under the right rib was observed in 85% of patients. In patients with chronic hepatitis C who did not have COVID-19 infection, general weakness was reported in 78% of patients, symptoms of nausea and vomiting in 55% of patients, and pain under the right rib in 74% of patients.

4. Conclusion

Thus, based on the studies, it can be concluded that the disease was more severe in patients with chronic viral hepatitis C who underwent COVID-19. When attention was paid to the age of the patients, it was more common in patients older than 60 years. The analysis of clinical signs also showed that COVID-19 had higher and more severe symptoms in patients with chronic viral hepatitis C.

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