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COVID - 19 IN PATIENTS WITH CARDIOVASCULAR DISEASES

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Abstract
In patients of the older age group, with additional e.g. those with hypertension, diabetes and cardiovascular system disorders, it was noted that they were more prone to the development of an acute form of the disease and the risk of death. Most patients diagnosed with confirmed COVID-19 usually have symptoms such as fever, dry cough, dyspnoe, weakness and myalgia. Less common symptoms in coronavirus diseases include headache, dizziness, nausea, abdominal pain, vomiting, and diarrhea. Patients with COVID-19 usually have respiratory symptoms such as dry cough and sore throat, which are accompanied by headaches, fever and myalgia.

Keywords: COVID-19, cardiovascular diseases, clinical course, cough, arythmia, complications, treatment.

Introduction

In December 2019, a community-infected acute etiology acute SARS outbreak was reported in Wuhan, the provincial capital of Hubei in central China. The causative agent, which turned out to be a new coronavirus, was previously not detected in human papulia and received the name SARS-CoV-2. On 11 March 2020, the WHO declared the new coronavirus infection epidemic a pandemic [1-3]. In the case of 21.01.2023, 673.280.115 million people were infected, drying out the pillow of about 673.280.115 million people. In our republic, however, 250,360 people were infected, leading to 1,637 deaths. This pathology is more severe than in adults, with a mortality rate of 10-20%. It is the highest risk of death from COVID-19 in 60 years and adults [4].

COVID-19 is a dangerous disease that can occur in the form of an acute mild respiratory viral infection, as well as in severe form, the characteristic complication of which is viral pneumonia, as a result of which is complicated by the risk of death from acute respiratory dystrss syndrome or respiratory failure [5-6]. Severe forms of the disease can develop more in older people and in patients with certain diseases, asthma, diabetes and heart disease [7].

However, clinical practice shows that in patients with cardiovascular diseases, COVID-19 is characterized by the preservation of cardiovascular complications or the occurrence of new forms, not only in the acute period, but also at the stage of convalescence[8]. This situation necessitates the need for long-term follow-up and comprehensive rehabilitation of these patients [9-10].

Since the emergence of COVID-19, many scientific studies devoted to its clinical course, pathogenesis and complications have been conducted on a global scale. In particular, in patients with cardiovascular disease, the rejection characteristics of COVID-19 infection are of particular interest in clinical medicine [11].

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Materials and Methods

This study is a single-center retrospective cohort study, which we selected from all patients with confirmed COVID-19 infection who were admitted to the regional infectious diseases hospital in qarshi from March 21 to December 31, 2020. Clinical data was obtained from electronic medical cards, including demographic data, medical history, signs and symptoms, and laboratory data at the time of admission. Typical blood analyses were: leukocyte count (WBC), lymphocyte count (LYM), mononuclear count (MONO), neutrophil count (NEU), platelet blood samples. Parameters of blood biochemistry: aspartataminotransferase (ast), alaninaminotransferase (Alt), glucose (GLU), mochevina, creatinine, and C-reactive protein (SRO) were measured using the MINDRAY BS – 30 (China) automatic biochemical analyzer.

On the basis of the methodological instruction "on approval of Temporary Recommendations (tax 8) for the treatment of patients with Covid - 19 coronavirus infection", approved by the order of the Ministry of health of the Republic of Uzbekistan No. 82 of April 21, 2021, were allocated to groups.

Results

During the study, patients with COVID-19 were classified according to the occurrence of the clinical signs being observed. Clinical signs included cough, sputum separation, shortness of breath, sore throat, blood mixed sputum, anorexia, diarrhea, nausea, vomiting, abdominal pain, headache, fatigue, dizziness, loss of taste, loss of smell, myalgia, confusion, irritation, conjunctivitis, tear. The cough can be seen observed in a total of 92 patients when the focus is on clinical signs that arise due to coronavirus infection. Of these, 33 were reported in patients with a severe form of the disease, while the remaining 59 were reported in patients with a severe form of the disease. Sputum discharge is among the symptoms most observed during the course of the disease. Sputum separation was observed in 49% of those with a moderate severe form of the disease, and in 57.7% of those with a severe form. A total of 65 (54.2%) patients reported this symptom. Shortness of breath was found in 25 (59.2%) patients with the middle severe form of the disease, and in 41 (57.7 %) of those with the severe form.

When classifying patients according to the occurrence of clinical signs, coughing was reported in 33 people with the middle severe form of COVID-19, in 59 people with the severe form, in a total of 112 people. Among other symptoms, in the percentage account, a cough sign was observed in 67.3% of people with a medium-severe form of the disease. Among patients with a severe form of COVID-19, however, the incidence of this symptom was significantly higher, with 83.1% reported in the patient. Among the 120 patients examined in total, 112 people (93.3%) were found to have a cough sign.

The second symptom observed in COVID-19 was sputum separation, with sputum separation occurring in 24 out of 49 patients with the middle severe form of the disease. This corresponds to about 49%. In its severe form, 41 out of 71 patients have been found to have this symptom, accounting for 57.7% of total patients. A total of 65 people (54.2%) were found to have sputum separation out of the 120 patients being examined.

One of the main clinical signs encountered in patients under examination is shortness of breath. 25 out of a total of 49 patients with the middle severe form of COVID-19 complained of shortness of breath. In the percentage account, 51% of patients observed this symptom. Shortness of breath was

reported in 41 out of 71 patients (57.7%) who experienced a severe form of the disease. In total, 54.2% of patients were found to have shortness of breath. The next symptom was sore throat, which was observed in 66 people in total, namely 55% of patients.

Coronavirus infection can affect the blood clotting system, which leads to a change in the coagulogram.

In the course of the study, the results of the coagulogram in patients with a medium-severe form of coronavirus infection were obtained as they were when analyzed. In the prothrombin time (PTT) control group, the average was 11.3±0.47 SEC, the average was 14.84±1.95 SEC in patients with the middle severe form of the disease, and the average PTT was 16.03±2.3 sec among those with severe form of coronavirus infection. In the structural structure, chronic decompensation processes occupy the next places; in particular, 60.9% of patients have chronic heart failure and 40.1% have different manifestations of cardiac arrhythmias (arrhythmias). Direct and indirect (hypoxic, cytokine) damage to the myocardium caused by the SARS-CoV-2 virus increases the risk of acute heart failure several times against the background of these pathologies.The lowest was in the proportion of ischemic heart disease in 21.9% of patients.

The results obtained indicate that AG and Sue occupy a leading position in the structure of cardiovascular comorbidity in patients with COVID-19. This ensures that in the process of treating patients of this contingent, not only anti-viral and anti-inflammatory therapy, but also cardioprotective and antihypertensive treatment measures are prematurely and purposefully directed.

Conclusion

As can be seen from the results of our study, the results obtained are expected to reveal the features and complications of clinical relapse of covid-19 coronavirus infection in patients with cardiovascular diseases. It is scientifically substantiated that the biochemical and immunological indicators characteristic of heart damage in patients change, as well as their relationship with the severity of the disease. The results obtained are expected to allow the development of practical recommendations aimed at early diagnosis, effective treatment and Prevention of complications of COVID-19 infection in patients with cardiovascular diseases.

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