

MODERN THERAPY OF ANXIETY-DEPRESSIVE DISORDERS IN PATIENTS WITH CARDIOVASCULAR DISEASES AFTER COVID-19

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Abstract. *The new coronavirus, named SARS-CoV-2, has spread rapidly in the human population. Although the main manifestation of the disease is the defeat of the respiratory system, cardiovascular complications also often develop. Adverse cardiovascular complications such as myocarditis, acute myocardial infarction and heart failure have been reported in patients with COVID-19. It should also be noted that patients with chronic cardiovascular diseases have a worse prognosis for the course and outcome of the disease. Currently, there are no established methods for the diagnosis and treatment of damage to the cardiovascular system. This review considers some aspects of the pathophysiology, diagnosis and treatment of anxiety and depressive disorders in patients with diseases of the cardiovascular system who have undergone COVID-19.*

Keywords: *COVID-19, cardiovascular system, anxiety, depression.*

A novel coronavirus of zoonotic origin emerged in China at the end of December 2019 and quickly spread around the world. The infection, named Coronavirus Disease 2019 (COVID-19), is caused by a virus officially named SARS-CoV-2 by the World Health Organization. The virus is an enveloped RNA-beta coronavirus with phylogenetic similarities to another known coronavirus, SARS-CoV, which caused the SARS outbreak in 2003. Although the epidemiological and clinical characteristics of COVID-19 have not yet been fully defined, early evidence points to important cardiovascular consequences of the disease [1, 2]. SARS-CoV-2 mainly affects the respiratory tract and the first clinical manifestations are fever, dry cough, fatigue and shortness of breath, in severe cases this can lead to severe pneumonia, acute respiratory distress syndrome and dysfunction of many organs. It should be noted that a growing body of evidence indicates that in addition to typical respiratory symptoms, COVID-19 also affects the cardiovascular system, causing severe myocardial damage that worsens the condition and affects prognosis [3]. Based on currently published research results, this article discusses the manifestations, characteristics, and impact on disease prognosis of myocardial injury caused by COVID-19.

First, early reports suggest that SARS-CoV-2-infected patients with pre-existing or underlying cardiovascular disease are at higher risk of developing severe symptoms. In a report of 138 COVID-19 patients hospitalized in Wuhan, Hubei Province, China, 64 (46.4%) had one or more comorbidities, mostly cardiovascular or cerebrovascular. Hypertension was present in 31.2% of patients, diabetes in 10.1%, and cardiovascular disease in 14.5%. These conditions were significantly more common in patients with the most severe forms of COVID-19: hypertension in 58.3%, diabetes in 22.2%, cardiovascular disease in 25.0%, and cerebrovascular disease in 16.7% [3, 4]. The true overall mortality rate from COVID-19 is still undetermined and is estimated to be between 3% and 4% (based on crude mortality rate). It may be higher in elderly patients (> 60 years of age) or patients with comorbidities. Although the disease is characterized by lung

involvement, the mortality rate for patients with cardiovascular disease is higher (10.5%) than for patients with chronic respiratory disease (6.3%).

Second, while COVID-19 usually presents with symptoms of a lower tract respiratory infection, a significant proportion of patients experience cardiovascular symptoms at initial presentation. These symptoms include palpitations and chest tightness. In addition, it is likely that SARS-CoV-2 may cause myocardial damage. In various reports, an increase in highly sensitive cardiac troponin I (cTnI) was observed in 10-20% of patients infected with SARS-CoV-2 [5]. In China, experts estimate that 11.8% of patients who died from COVID-19 had significant heart damage, with elevated cTnI levels or cardiac arrest, without any pre-existing cardiovascular disease [6]. The exact conditions leading to acute myocardial injury are still not clear, but may be associated with either acute myocarditis,

Overall, these early data indicate the level of interaction between SARS-CoV-2 and cardiovascular by an indirect mechanism.

The aim of the study is to improve the treatment of psychological conditions in patients with cardiac pathology by prescribing natural antidepressants.

Materials and methods

The study included 120 patients with coronary heart disease, whose average age was 49 ± 2 years. The exception was patients suffering from diabetes mellitus, with severe disorders of cerebral circulation, chronic heart failure in the stage of decompensation. The patients included in the study underwent standard clinical, laboratory and instrumental studies for the diagnosis of diseases of the cardiovascular system, remodeling processes were studied by evaluating the structural and geometric parameters of the left ventricular (LV) myocardium using Doppler echocardiography. Of the 120 patients, 85% suffer from hypertension, 31 angina pectoris, 8% of patients had a myocardial infarction, and 1.2% of patients suffer from a repeated myocardial infarction. Age from 48 to 53 years is the heyday of career growth, activity, and improvement of social status. When calculating by sex, men of this age period suffer from cardiovascular diseases more often than women. Moreover, men are more prone to psychological disorders, and it is sometimes very difficult for a practicing doctor to balance their psychological status. They forget, and sometimes even ignore the instructions of the attending physician.

To study the effectiveness of the treatment of anxiety and depressive disorders, patients were divided into 2 groups: group 1 consisted of 65 patients who took optimal drug therapy (OMT) and group 2 - 55 patients with CHF, who were prescribed fluoxetine against the background of OMT, the dose of which was selected individually. from 20 to 40 mg / day 1 time per day.

In the first group, patients with FC I and II of CHF on the background of 6-month treatment showed a significant decrease in blood pressure. by 21.5% and 20.8% ($p < 0.01$), a decrease in heart rate by 22.1% ($p < 0.01$) and 22.8% ($P < 0.01$), respectively, compared with baseline values . Patients with CHF III FC also showed a decrease in blood pressure. and heart rate by 17.9% ($p < 0.01$) and 28.7% ($p < 0.01$), respectively, compared with baseline values. In the second group, patients with FC I and II CHF against the background revealed a significant decrease in mean blood pressure by 24 and 23.4% ($p < 0.01$), a decrease in heart rate by 17.7% and 20.9% ($p < 0, 01$) respectively compared to baseline. In patients with CHF III FC of the second group, the decrease in mean blood pressure and heart rate was 17.4 and 26.7% ($p < 0.01$), respectively, compared with baseline.

Dynamics of indicators of psychological status showed that both in patients of the 1st group who took OMT, and in the group of patients of the 2nd group who took OMT and fluoxetine, there was a positive trend in terms of psychological status. The most highly significant changes were observed in patients with II-II FC CHF.

The study of the severity of depressive disorders after 6 months of treatment showed a decrease in the number of patients with severe depression in patients in group 1 by 1.3 times and in group 2 by 1.8 times, due to an increase in the proportion of patients with moderate and mild depression.

Against the background of OMT, after 6 months, the clinical condition of patients, assessed by the SHOKS scale, significantly improved in both groups - by 24.5%, 33.6% and 36.2% ($p < 0.01$), respectively, compared with baseline. indicators.

An increase in exercise tolerance in patients of group 2 was also accompanied by an improvement in their clinical condition according to SHOKS.

In patients of the first group after 6 months of treatment, SI QoL was 27.7 ± 1.8 points, respectively, which is 20.8% lower than baseline, and in patients of the second group, 24.1 ± 1.2 points, respectively, which is 30.3% ($p < 0.001$) below baseline.

To study the adherence of patients to drug therapy, the Morisky-Green test was used. Analysis of the obtained results showed that initially 87.9% of patients were either non-adherent or weakly adherent to drug therapy, however, after 6 months, the level of compliance of patients both in group 1 and in group 2 patients increased, amounting to 53.5% in group 1 and 88.9% in group 2. Patients with a high level of compliance were characterized by a smaller total component of unfavorable predictors.

conclusions

Examining patients with cardiovascular diseases for three to six months, we can say that the frequency of occurrence of cardiovascular diseases at the age of 49 years is occupied by the male half. This is due to the influence of various hormonal changes that can be observed in female patients. Applying in practice the treatment of diseases of the cardiovascular system an integrated approach to the treatment of anxiety and depressive disorders using the antidepressant fluoxetine, we achieved the desired result. The bed-days of inpatient treatment were reduced, the majority of patients improved their psychological state, they became more adapted to social life and, as a result, their social status improved both in the family and in society.

REFERENCES

1. Kodirova et al. Psychosocial features of patients with coronary artery disease // *Biology and Integrative Medicine*. 2021.-No. 4. P.64-79.
2. Kadirova Sh.S., Kamilova U.K., Alimov U.Kh. Evaluation of indicators of psychological status in patients with chronic heart failure// *Cardiology of Uzbekistan*. 2011. - No. 1-2 .S. 42-44.
3. Kodirova Sh. S., Jabbarova M. B., Arashova G. A. Psychosomatic aspects of the course of chronic heart failure // *Biology va tibbiyat muammolari, Samarkand -2019*. -No. 4.2 (115). – p.57-60.
4. Kodirova Sh. S. Study of emotional states and quality of life of patients with chronic heart failure // *Biology va tibbiyat muammolari, Samarkand -2019*. - No. 4.2 (115). - S. 232-236.

5. Kodirova Sh.S., Djabbarova MB, Arashova GA, Hudoydodova SG, Farmonova MA, Elmuradova AA Features of the Clinical Course of Chronic Heart Insufficiency Depending on the Psychological Status of Patients// American Journal of Medicine and Medical Sciences.-2020.- R. - 127-131.
6. Kodirova Sh.S., Khamroeva Yu.S. Psychological features of patients with coronary heart disease// Questions of science and education. Moscow. - 2018. - No. 7 (19). - S. 264 - 265.
7. Kodirova Sh.S., Avezov D.K., Shaolimova Z.M., Rasulova Z.D. Assessment of the psychological state of patients with postinfarction atherosclerosis complicated by heart failure // IV Congress of the Society of Heart Failure Specialists "Heart Failure 2009". -2009.- S. 54-55.
8. Kadirova Sh.S., Kamilova U.K., Alimov U.Kh. Study of the relationship between indicators of psychological status and the course of the disease in patients with chronic heart failure // Collection of scientific papers of the IX International Forum of Cardiologists and Therapists, March 25-27. International Journal of Heart and Vascular Diseases Moscow, Russia - 2020. - P. 120.
9. Kodirova Sh.S. The study of emotional states and quality of life in patients with chronic heart failure // Problems of biology and medicine. - 2019. - No. 4 - 2 (115) P. 232 - 237.
10. Kadirova Sh.S. Kamilova U.K. Avezov D.K. Pulatov O.Ya. The relationship of the psychological state with the progression of heart failure in patients with postinfarction atherosclerosis // Proceedings of the Russian National Congress of Cardiologists Appendix 1 to the journal "Cardiovascular Therapy and Prevention" 2011.- No. 10 - C 135.
11. Kodirova Sh.S., Rasulova Z.D., Avezov D.K. The study of psychological status in patients with chronic heart failure // Proceedings of the Russian National Congress of Cardiologists. - Moscow. - 2010. -S. 139.
12. Kodirova Sh.S., Alimov U.Kh. Psychological status in patients with chronic heart failure // Abstracts of the Republican scientific and practical conference with international participation "The role of a general practitioner in reducing cardiovascular morbidity and mortality" // Cardiology of Uzbekistan No. 2.-2011. P.-135.
13. Kodirova Sh.S., Kamilova U.K., Alimov U.Kh. Indicators of psychological status in patients with chronic heart failure // Proceedings of the Russian National Congress of Cardiologists Appendix 1 to the journal "Cardiovascular Therapy and Prevention". - 2011. - S. 135.
14. Kadirova Sh.S., Kamilova U.K., Alimov U.Kh. Indicators of psychological status in patients with chronic heart failure // Abstracts of the P International Congress "Cardiology at the Crossroads of Sciences". - Tyumen.-2011. P.153
15. Kamilova U.K., Kadyrova Sh. The study of the psychological state in patients with chronic heart failure // Abstracts of the IV Eurasian Congress of Cardiologists October 10-11. Yerevan, Armenia, 2016.- P.82-83.
16. Kadirova Sh.S., Kamilova U.K. The study of the psychological state in patients with postinfarction atherosclerosis, complicated by chronic heart failure // Proceedings of the forum. 4th International Educational Forum "Russian Heart Days" April 21-23, 2016, Russia. St. Petersburg Russian Journal of Cardiology, 2016.-p.37-38
17. Kodirova Sh.S., Kamilova U.K., Nuritdinov N.A. The study of indicators of quality of life and prognosis in patients with chronic heart failure //Materials of the V International Educational Forum "Russian Days of the Heart". - Moscow, 2017. - P.85.

18. Kamilova U.K., Kadirova Sh.S. Assessment of the psychological status in patients with chronic heart failure // Proceedings of the V International Educational Forum "Russian Days of the Heart" March 30 April 01, 2017, Russia. St. Petersburg, 2017.- P.162
19. Kamilova UK, Kadirova SH. The study psychological state of patients with chronic heart failure // Abstracts of the Heart Failure 2017 and the 4th World Congress on acute Heart Failure. Paris. France. 29 April-2 May 2017. European Journal of Heart Failure Supplements, 2017. - P.247
20. Kamilova U.K., Kadirova Sh.S. The relationship between indicators of psychological status and the course of the disease in patients with chronic heart failure // Proceedings of the Russian National Congress of Cardiology "Cardiology 2020 - New Challenges and New Solutions", Russia, Kazan. -2020.- p.705
21. Kodirova Sh.S. Depression and chronic heart failure // Lambert Academic Publishing.- 2022.
22. Kodirova Sh. S., Khamroeva Yu. S. Influence of grandaxin on the psycho-emotional state of patients with chronic heart failure after myocardial infarction // Voprosy nauki i obrazovaniya. – 2018. – no. 5 (17). - S. 120-122.
23. Kodirova Sh. S., Dzhabbarova M. B., Radzhabova G. B. Psychosocial characteristics of patients with coronary artery disease //Biology and Integrative Medicine. – 2021. – no. 4 (51). - S. 64-78.
24. Kodirova Sh.S., Dzhabbarova M. B., Salomova N. K. “Effectiveness of the Use of Psychological Tests for the Diagnosis of Psychological Disorders in Patients After Covid-19.” Central Asian Journal of Medical and Natural Science, October, 2021. 323-26.
25. Kodirova Sh. S. Features of the treatment of psychological disorders in patients with heart diseases // Biology and Integrative Medicine. – 2022. – no. 1 (54). - S. 118-127.
26. Kodirova Sh.S. Antidepressant and. b. With. and other biology and integrative medicine // Biology. – no. 1. - S. 118-127.
27. Kodirova Sh. S., Dzhabbarova M. B. Clinical and psychological analysis of patients with chronic heart failure // New day in medicine. – 2020. – no. 2. - S. 159-161.