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EFFICACY OF SACUBITRILE / VALSARTAN TREATMENT IN CHRONIC HEART FAILURE

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Resume. Chronic heart failure is the main cause of hospitalization in elderly patients. With acute decompensation of heart failure, more than half of hospitalized patients are aged 75 years, while about 20% are elderly i.e. patients older than 85 years. Patients with heart failure in different states have different average ages. This is probably due to lifestyle in different states, nutrition culture, life expectancy, health system as well as social and economic factors.

Keywords: chronic heart failure, sacubitrile, valsartan, treatment, efficacy

Introduction. Chronic heart failure is a common clinical syndrome and has been a heavy burden on the healthcare system worldwide. Currently, 1-2% of the adult population of developed countries, and 10% of the population over 70 years old suffer from chronic heart failure [1-8]. chronic heart failure is a disease that is at its peak and weakens patients, leading to a decrease in the quality of life of patients and an increase in health-related economic costs. Chronic heart failure is a complex disease, the diagnosis of which is determined by the doctor based on the results of physical examination of patients, patient complaints, medical history [9-14]. It is characterized by the inability of the heart to meet the need for oxygen by peripheral cells and tissues and negatively affects all organs [15-18]. Patients with chronic heart failure have reduced quality of life, most patients have shorter life expectancy, and a higher mortality rate within 5 years after diagnosis [19-21]. According to recent data, 5.8 million people in the United States suffer from chronic heart failure, while worldwide the figure is 23 million people. While medical costs associated with chronic heart failure in the United States itself amounted to $ 20.9 billion in 2012, this indication is expected to reach $ 53.1 billion by 2030. However, considering the increase in the average life expectancy of the population due to advances in the medical treatment of cardiovascular disease, the number of patients with chronic heart failure is expected to increase in the following years [22, 23]. Considering the reforms and results carried out in medicine in the Republic of Uzbekistan, there is no doubt that the number of patients suffering from this pathalogical process will increase in the near future.

Material and methods. As an object of study, 120 patients of the functional class II - IV of chronic heart failure were taken over the age of 68, who were treated by the Bukhara Regional Medical Association, the Bulim of therapy and emergency therapy, against the background of ischemia.

As the subject of the study,anamnestic data was obtained from venous blood and blood serum for clinical trial, immunological and biochemical examination, ECG, EchoCG, stress EchoCG examination results were obtained.

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The study used general, clinical, functional, laboratory - instrumental, biochemical and statistical analysis.

Results and its discussion. The use of the drug sacubitrile/valsartan has had a positive effect on the subjective state of patients. This positive effect was especially pronounced in patients who suffer from nausea. In particular, when the incidence decreased from 78% to 17% in patients in Group 1, this rate increased from 83% to 43% in the valsartan group ($p<0.05$) i.e., against the background of treatment in both groups, the incidence decreased significantly, but when comparing groups, the differences were observed to be significant in patients in the first group ($p<0.05$). In addition the rest Hangover also gave significant changes in patients in both groups against the background of treatment, including in the sacubitrile/valsartan group, where 48% of patients were found to have a rest hangover after 3 months of treatment, this figure was found only in 8% of patients ($p<0.05$). In the valsartan group, however, only 15% of patients suffered from this complaint against the background of treatment, while 45% of patients experienced a calm whining during the initial examination ($p<0.05$). Although complaints were significantly reduced against the background of treatment in both groups, these changes were observed to be significant in the sacubitrile/valsartan group ($p<0.05$). In Group 1, it was observed that hansirash decreased from 93% to 27% in physical load, while in Group 2 it decreased from 85% to 47% ($p<0.05$). In addition other subjective clinical signs also showed significant changes in both groups against the background of treatment, but no statistically significant change was observed between the groups ($p>0.05$).

Against the background of treatment, we can see that in both groups there was a positive change in the functional classes of patients on NYHA. In particular, we can observe that in the sacubitrile/valsartan group, patients with functional Class IV initially on NYHA were 28%, this indicator decreased to 5% after treatment. In contrast, patients with functional class III under NYHA were also observed to be significantly reduced in Group 1-i.e. decreased from 47% to 12% ($p<0.05$). On the contrary NYHA, we can observe that patients with functional class II are in excess due to improvements in high functional classes against the background of treatment (from 25% to 47%). Even in 2 groups, we can observe that the functional classes of chronic heart failure have improved against the background of treatment. In this group, too, we can observe a significant decrease in patients with functional Class IV and III under NYHA, as well as a significant increase against the background of treatment for patients with functional class II. But when the groups are compared, we can observe that the sacubitrile/valsartan group has significantly affected functional classes on NYHA ($p<0.05$).

Based on the 6-minute trial results in patients with chronic heart failure in Group 1, we can see that the average distance traveled in the initial examination was 206.4±38.0 meters against the background of treatment, patients with increased tolerance to physical load, and patients in this group covered an average distance of

379.0±48.0 meters (p<0.05), 0.05). Alternatively, we can observe that the minute oxygen consumption factor in the preliminary examination has changed from 12.8±6.2 ML/(kgxmin) in Group 1 to 15.2±7.0 ML/(kgxmin) in the treatment background (p<0.05), and 13.1±6.4 ML/(kgxmin) in Group 2 to 15.3±7.6 ML/(kgxmin) (p<0.05). When the groups were compared, patients in the sacubitrile/valsartan group were observed to have significantly higher distance traveled in a 6-minute trial compared to the valsartan group (p<0.05), but oxygen demand accounted for nearly identical results in both groups, and no discrepancy between the groups was observed (p>0.05).

When the hemodynamic indicators of patients are analyzed, systolic arterial blood pressure is 129.6±19.2 mm in the sacubitrile/valsartan group.SM.who. from 127.7±21.6 mm.SM.who. reduced to 131.6±24.5 mm in the valsartan group.SM.who. from 129.6±23.5 mm.SM.who. a decrease in GA was observed. Diastolic blood pressure has also been observed to decrease slightly against a treatment background in both groups, including 78.9±12.4 mm in the sacubitrile/valsartan group.SM.who. from 77.8±12.9 mm.SM.who. reduced to 79.0±14.1 mm in the valsartan group.SM.who. from 77.0±14.1 mm.SM.who. a decrease in GA was observed, but these changes were not statistically significant within and among groups (p>0.05). We can observe that the average blood pressure is also slightly reduced against the background of treatment in both groups, but we can see that these changes do not have statistical significance (p>0.05). The number of cardiac contractions can be observed to decrease from the initial 85.4±22.0 in the sacubitrile/valsartan group to 81.1±21.6 in the treatment background (p<0.05). The valsartan group also showed a reliable decrease in the number of cardiac contractions against the background of treatment (R<0.05), but when the groups were compared We can see that this change was not statistically significant (p>0.05).

When NT-proBNP and BNP, biomarkers of chronic heart failure, were studied, we can observe that the amount was significantly reduced to 1835±1118 pg/mL as a result of treatment with NT-proBNP 3812±1326 pg/mL on preliminary examination in patients in the sacubitrile/valsartan group (p<0.05). At the same time we can observe that the amount of NT-proBNP in the valsartan group also varies from 3612±1287 pg/mL to 2459±1154 pg/ml, decreasing against the background of treatment (p<0.05). In chronic heart failure, we can observe that the Blockers of the renin-angiotensin-aldosterone system have a positive effect on biomarkers as well as clinical manifestations of chronic heart failure. When comparing the effects of treatment on the NT-proBNP biomarker among groups, we can see that the 1 sacubitrile/valsartan group significantly reduced this biomarker compared to the valsartan group (0.012). When studying the effect of BNP, a biomarker of chronic heart failure, on plasma mean concentration of the two groups, we can observe that BNP concentration changed from 512±46 pg/mL to 375±39 pg/mL in the sacubitrile/valsartan group, and from 498±52 pg/mL to 412±49 pg/ml (p<0.05).

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When the groups are compared, we can observe that group 1 has a significant effect on BNP than Group 2 (p=0.024).

When indicators of kidney function are evaluated, we can observe that in the sacubitrile/valsartan group, the amount of mochevina in the blood changed from 9.0±4.6 mmol/l to 8.7±4.2 mmol/l in the valsartan group, and from 8.9±4.8 mmol/l to 8.6±4.4 mmol/l (p>0.05). Creatinine levels can also be observed in groups decreasing from 121.0±24.4 mkmol/L to 115.0±22.4 mkmol/L in Group 1, respectively against a treatment background, and in Group 2 decreasing from 118.0±21.9 mkmol/L to 115.0±20.4 mkmol/l.When comparing the groups, we can observe that among them there was a significant effect on neither mochevina nor createninin (p>0.05). Although ball filtration increased slightly against the background of treatment in both groups, but no significant difference was observed between them (p>0.05). When liver enzymes were studied using sacubitrile/valsartan and Valsartan in addition to standard treatment in patients with chronic heart failure, no significant effect of drugs on liver enzymes was observed against the background of treatment and between groups (p>0.05).

When the indicators of General blood analysis are evaluated, it can be observed that there are no significant changes in the background of treatment in the sacubitrile/valsartan as well as in the valsartan group (p>0.05). When the effect of groups on the S-reactive protein was studied there was a significant discrepancy between groups (p=0.02). In particular, it can be observed that the S-reactive protein decreased from 18.2±5.8 g/l to 11.0±5.3 g/l against a treatment background with sacubitrile/valsartan, and from 20.0±8.0 g/l to 16.4±8.7 g/l in the valsartan group (p<0.05).

Conclusion. In the treatment of ogrigan patients with chronic heart failure with ischemic etiology, the introduction of the drug Sacubitrile into standard therapy showed a more isolated manifestation of myocardial remodeling. Last diastolic dimension: (I-group last diastolic dimension from 66.3 mm to 61.1 mm, II-guru last diastolic dimension from 69.4 mm to 67.8 mm p<0.043).

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