STUDY OF THE THERAPEUTIC POTENTIAL OF TELMISARTAN IN PATIENTS WITH CHRONIC HEART FAILURE AND RENAL DYSFUNCTION

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Relevance of the Topic. Chronic heart failure (CHF) is a serious condition in which the heart is unable to adequately supply the organs and tissues with the blood necessary for their normal functioning. This leads to the development of extracardiac complications. Despite significant progress in the treatment of CHF over the past two decades, this pathology remains one of the major challenges in modern clinical medicine. It is especially important to note that the presence of renal dysfunction in patients with CHF worsens the prognosis of the disease, contributes to its progression, increases the frequency of hospitalizations, and raises the risk of mortality.

Objective of the Study. The present study aimed to assess the effects of telmisartan, as part of combination therapy, on the clinical manifestations and cardiac pump function in patients with CHF and renal dysfunction.

Materials and Methods. The study included 40 patients with CHF and renal dysfunction, divided equally into two groups. The first group received standard therapy (betablockers, ACE inhibitors, mineralocorticoid receptor antagonists, and diuretics). The second group received a similar combination treatment, except that the ACE inhibitor was replaced with telmisartan.

Results of the Study. At the initial stage, no statistically significant differences in exercise tolerance indicators were found between the main and control groups. By the tenth day of treatment, patients receiving telmisartan showed a significant improvement in physical endurance, as evidenced by the increase in distance covered during the 6-minute walk test — from 240.2 m to 435.4 m. In the control group, where ACE inhibitors were used as part of standard therapy, the corresponding increase was from 240.8 m to 360.4 m.

Clinical improvement in the form of reduced dyspnea in the control group was observed mainly on the third day in 14 patients (63%), on the fifth day in 3 patients (21%), and only by the 9th–10th day in 3 patients (16%). In the main group, where telmisartan was used, relief of dyspnea symptoms occurred significantly earlier: in 16 patients (85%) within 1–2 days, and in the remaining 4 patients (15%) by the fourth day of treatment.

A similar trend was observed in the regression of peripheral edema and rales in the lower lung fields. In the control group, complete resolution of these symptoms was observed in 15 patients (75%) only by days 7–9 of treatment, while in 5 patients (25%) the symptoms partially persisted at the time of discharge. In the telmisartan group, edema fully regressed in 16 patients (80%) by days 7–8 of hospitalization.

Cystatin C levels were 1.47 ± 0.06 mg/L in the main group and 1.4 ± 0.01 mg/L in the control group. After combination therapy, these values decreased to 0.9 ± 0.01 mg/L in the main group and 1.13 ± 0.02 mg/L in the control group, respectively.

Post-treatment evaluation showed that in the main group, glomerular filtration rate (GFR) increased to 87.4 mL/min/1.73 m² compared to the baseline value of 73.9.

Conclusions.

The data obtained indicate that the inclusion of telmisartan in the combination therapy of patients with chronic heart failure and renal dysfunction leads to more pronounced clinical improvement compared to standard treatment. The use of the drug promotes faster stabilization of the condition and improves the quality of life of patients.

REFERENCES:

- 1. Шахизирова, И. Д., С. Р. Абдухамидова, and М. С. Шодиева. "Оптимизация терапевтической тактика при лямблиозах у детей." Педиатрия 3 (2019): 104-106.
- 2. Фазылбеков, Р., Каттаходжаева, М., Сулейманова, Н., & Абдурахманова, С. (2022). Значение новых подходов в диагностике и лечении гнойно-воспалительных заболеваний придатков матки. in Library, 22(1), 65-70.
- 3. Agzamova, Shoira. "Value of heart rate variability parameters in prognosis of intrauterine infection of infants with cytomegalovirus." Medical Health and Science Journal 4.4 (2010): 24-29.
- 4. Агзамова, Ш. А., and Ф. Т. Махкамова. "Влияние вирусной инфекции у беременных на жизнеспособность новорожденных." Детская больница 3 (2014): 22-25.
- 5. Агзамова, Ш. "Артериальная гипертензия у детей: Полиморфизм BsmI (rs1544410) гена VDR и витамина D." Актуальные вопросы практической педиатрии 1.1 (2023): 17-19.