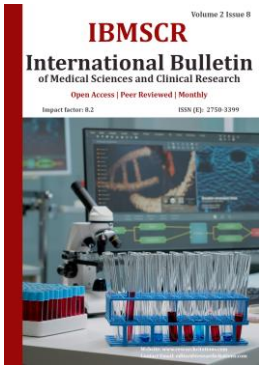

CLINICAL STATUS OF PATIENTS WITH UNSTABLE ANGINA AND CHRONIC HEART FAILURE WITH RETAINED EFFICIENCY FRACTION

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https://doi.org/10.5281/zenodo.8005350

Annotation

This study assessed the clinical status of patients with unstable angina pectoris with chronic heart failure with preserved left ventricular ejection fraction (CHF–SFV) and its relationship with other factors. This study was conducted on the basis of the Samarkand regional branch of the Republican Specialized Scientific and Practical Medical Center for Cardiology (SRF RSNPMCC). The object of the study was 92 patients aged 45 to 70 years (45 men, 47 women) suffering from coronary heart disease complicated with CHF - SEF stage I-II A, I-III FC. Women with unstable angina pectoris most often suffer from HFpEF , the vast majority of whom have AO. The leading complaint is dyspnea on exertion. With an increase in the total score for SHOKS, the quality of life and exercise tolerance deteriorate. The severity of clinical manifestations of CHF correlates with the degree of LV hypertrophy. Patients with hypertension and coronary artery disease have more pronounced CHF symptoms, tolerate physical activity worse and have a higher degree of LV hypertrophy.

Keywords: Chronic heart failure , preserved ejection fraction, coronary artery disease, hypertension, quality of life, TSHH, SHOKS, etc.

Relevance

Chronic heart failure is a common complication of many cardiovascular pathologies among the population around the world, which is increasing every year, which is largely due to inadequate therapy for hypertension and coronary artery disease [7, 17] . Over the past decades, CHF has been considered as a complex of symptoms and signs with an unfavorable prognosis [8, 18] . It has been established that in 56-59% of patients with symptomatic CHF, a preserved ejection fraction (EF) (EF> 50%) of the left ventricle (LV) (CHF-EF) is recorded [9, 19] . CHF with LV EF is caused by a violation of diastolic relaxation and filling, which is accompanied by an increase in end-diastolic pressure (EDP) in the LV, blood stasis in the pulmonary circulation and other signs of CHF. It accelerates the development and aggravates the course of atherosclerosis, IHD, CHF, atrial fibrillation, cerebrovascular disease, and chronic kidney disease [10, 20].

It is believed that the incidence of HFpEF increases with age, and the combination of comorbid conditions significantly worsen treatment and prognosis [2, 4, 6, 8] . Other researchers believe that LV diastolic dysfunction (DD) is the basis for the occurrence of CHF-EF , which is characterized by a violation of active relaxation of the myocardium associated with damage to the process of diastolic Ca2 + transport and a deterioration in compliance of the LV walls, which is due to a change in the structure and properties of cardiomyocytes,

myocardial fibrosis and the development of concentric hypertrophy [1, 3, 5, 7] . Also, an important role in the development and progression of CHFpEF is played by neurohumoral systems - sympathoadrenal, renin- angiotensin - aldosterone and the system of natriuretic peptides [11, 13, 15] .

It is known that timely diagnosis and adequate treatment play a major role in curbing the progression of CHF, preventing complications, and due to the fact that the main burden in the management of patients with CHF falls on cardiologists, it is important to assess the current situation with the quality of diagnosis and treatment of CHF in conditions of typical inpatient practice and develop recommendations for optimizing the management of patients with this pathology [12, 14, 16] . Despite new methods of diagnosis and treatment, the incidence of CHF continues to grow. At the moment, there are many patients with CHF of various origins, while the management of these patients at the inpatient stage in the initial stages of heart failure has not been sufficiently studied, which indicates the absence of clear criteria for diagnosing CHF in the earliest period of its development at the inpatient stage [21, 23, 25] . At the same time, practicing cardiologists in inpatient practice do not use the diagnostic capabilities of echocardiography (ECHOCG) enough, although the choice of CHF therapy largely depends on the prevalence of systolic or diastolic LV dysfunction [22, 24].

Aim : to evaluate the clinical status of patients with unstable angina pectoris with chronic heart failure with preserved left ventricular ejection fraction (HFpEF) and its relationship with other factors.

Materials and Methods . This study was based on Samarkand _ regional branch of the Republican Specialized Scientific and Practical Medical Center for Cardiology (SRF RSNPMCC) . The study included 92 patients with ischemic heart disease complicated with CHF-SFV I-II A stages, I-III FC. The study included 45 male patients and 47 female patients aged 45–70 years (mean age 58.0±7.8 years). All patients underwent anamnesis, anthropometry, general clinical examination with an assessment of CHF symptoms according to the SHOKS scale. All patients underwent an assessment of exercise tolerance using a 6-minute walk test (WST). Instrumental studies were also carried out in the form of ECG, EchoCG according to the standard method. Statistical processing of the results was carried out using the Statistica 6.1 program.

Results. In 50% of patients with a substrate for the development of CHFpEF, there was progressive angina pectoris, in the remaining 50% - hypertension in combination with coronary artery disease. In women, HFpEF more often developed against the background of unstable angina (73% of cases), in men - against the background of a combination of hypertension with coronary artery disease (73.3% of cases). Abdominal obesity (AO) (OT≥80 cm in women and ≥94 cm in men) was observed in 79.3% of patients. The proportion of patients with AO among men and women was 80 and 85%, respectively.

During the general clinical examination, all patients complained of shortness of breath during exercise; 55 (59.7%) had pastosity of the feet and legs, 10 (23.8%) had edema; congestive rales in the lungs were heard in 8 (19.0%); also in 8 (19.0%) - the liver was enlarged. Correlation analysis revealed a relationship between the total score for SHOKS and quality of life (QoL) (r=0.43; p=0.003), as well as SHOKS and the result of TST (r=-0.46; p=0.002). The severity of the clinical condition according to SHOCS was also influenced by the thickness of the IVS (r=0.47; p=0.002), GL (r=0.34; p=0.03), LVML (r=0.38; p=0, 03) and LVMI (r=0.35; p=0.04).

Patients with hypertension and coronary artery disease had a higher total score for SHOCS than patients with progressive angina pectoris: 4.0±1.6 versus 3.3±0.8 (p=0.08); and they also tolerated physical activity worse: the distance covered by them during the TSH was 376.3±82.2 m and 415.4±78.6 m, respectively (p=0.09).

Differences were also obtained between some structural and functional parameters of the myocardium in these groups of patients: the size of the pancreas in patients with only unstable angina was 30.0 ± 3.2 mm versus 32.1 ± 2.8 mm in patients with hypertension and coronary artery disease (p = 0.03), IVS thickness – 13.1±0.9 and 14.1±1.7 mm (p=0.02), IVRT – 112.1±26.9 and 131.7±27.4 mm (p=0.04), LV MM – 257.6±41.0 and 310.5±63.1 g (p=0.006), LV IM – 138.8±21.2 and 154.2±19, 9 g/m2 (p=0.04), respectively.

Conclusions. Women with unstable angina pectoris most often suffer from HFpEF , the vast majority of whom have AO. The leading complaint is dyspnea on exertion. With an increase in the total score for SHOKS, the quality of life and exercise tolerance deteriorate. The severity of clinical manifestations of CHF correlates with the degree of LV hypertrophy. Patients with hypertension and coronary artery disease have more pronounced CHF symptoms, tolerate physical activity worse and have a higher degree of LV hypertrophy.

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