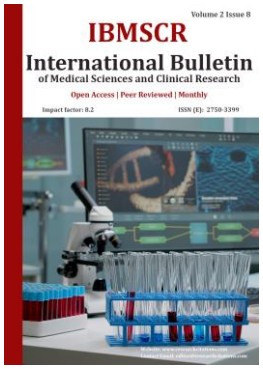

EXPERIMENTAL AND CLINICAL STUDIES OF CHRONIC HEART FAILURE WITH ACUTE MYOCARDIAL INFARCTION IN YOUNG MEN

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https://doi.org/10.5281/zenodo.7898701

Introduction.

In the modern world, coronary heart disease (CHD) is one of the leading pathologies leading to death and disability of the planet's population. Every year more than 4 million people die in Europe, and the cost of treatment is about 196 billion Euros [4 , 8, 12, 18]. In the United States of America (USA), each year, 785,000 people suffer from acute myocardial infarction, which is the leading cause of death [3, 9, 11, 20, 25], 47,000 people suffer a second myocardial infarction [4, 12, 17, 23]. In the Russian Federation, cardiovascular disease accounts for about 30% in the structure of morbidity. A formidable complication of the postinfarction period is early postinfarction angina (20–60%), which often leads to death [6, 12, 14, 15]. The first 3 months of the postinfarction period are the most dangerous, and in the period of 6-22 months, mortality ranges from 17 to 50%. In addition, repeated myocardial infarction often occurs with severe complications: cardiogenic shock, pulmonary edema, severe arrhythmias [5, 7, 13, 16]. According to publications, lethality in recurrent MI ranges from 23.2% to 60.7%. The shorter the time interval between the first and repeated MI, the higher the mortality rate, which can reach 80%. The search for improvement in treatment outcomes and its improvement is constantly ongoing [1, 2, 6, 14, 22].

Chronic heart failure (CHF) is a term denoting a group of pathological conditions that differ in etiology and mechanism of development, in which the heart gradually loses the ability to provide adequate blood supply to organs and tissues [9, 14, 16, 18]. The results of studies on the management of patients with CHF show that this pathology in modern cardiology is becoming the most relevant due to the fact that effective treatment of the main etiological causes of the formation of CHF (ischemic heart disease, arterial hypertension and heart defects) increases the number of patients with CHF, the course of this syndrome becomes more expensive and in the structure of mortality, CHF occupies one of the main positions in the world today . [7, 11, 19, 20].

Target: study the clinical course and the relationship of severity CHF from localization of acute myocardial infarction (AMI) at patients hospitalized in the Samarkand regional branch of the Republican Scientific and Practical Specialized Medical Center for Cardiology **.**

Materials and methods of research: The study included 100 men who underwent inpatient treatment in the departments of coronary heart disease and acute coronary syndrome of the Samarkand Regional Branch of the Republican Scientific and Practical Specialized Medical Center for Cardiology with a diagnosis of IHD AMI with a Q wave with isolated lesions of the walls of the anterior -septal, front, side and back. The mean age of the

patients was 38.3±5.8. The diagnosis of AMI was inserted on the basis of clinical signs, ECG and EchoCS data . To assess the severity of the functional class (FC) of CHF according to the New York Heart Association, after 3 months of AMI, a 6-minute walk test (TSW) was performed.

Results of the study: According to ECG data, in 21 (21%) patients, AMI was localized in the anterior -septal wall, in 27 (27%) in the anterior, in 35 (24%) in the lateral, and in 17 (17%) - in the back. Localization of AMI according to ECG data corresponded to changes in EchoCS in the form of dis -, hypo - and akinesia. According to the results of TST after 3 months in patients with anterior septal infarction, the walking distance was on average 252.4±23 m, among patients with AMI in the posterior wall - 332.7±27 m, lateral - 342.7±21 m and anterior - 326.5±19 m. When conducting TSHH, it was found that in patients with anterior - septal localization of MI, the data differed significantly compared to MI of other localizations. In the acute period of myocardial infarction in the main subgroup (MI+CHF over 2 cells NYHA), all patients had acute heart failure (AHF) in the form of Killip II and Killip III. The predictors of the development of CHF were the presence of a history of coronary artery disease, confirmed in accordance with the recommendations, before AMI; reduced fraction of the left ventricle, identified before discharge and on day 30 of MI; the presence of atrial fibrillation (AF). Annual adverse outcomes in the main group were significantly more common. The long-term drug sub-analysis showed that CV death was significantly less common in the ARNI subgroup than in the enalapril subgroup .

Conclusions: Thus, in all patients with Q-wave myocardial infarction, regardless of localization, CHF develops in varying degrees of severity. With anterior -septal infarction during TSHH, CHF corresponded to FC III (252.4±23 m), in other localizations, CHF corresponded to FC II and within these three groups had no significant difference. Based on the above, we can conclude that MI localized in the anterior -septal region is complicated by more pronounced CHF. In the present study, post-infarction myocardial remodeling was studied, which is realized in the form of the formation of a syndrome of acute and chronic heart failure. It has been shown that immediate reperfusion and restriction of the necrosis zone, as well as long-term use of drugs that inhibit the SAS and RAAS, stimulating NUP, can slow down the development of AHF and death. The problem of CHF requires further fundamental research in order to develop new approaches that can affect more subtle mechanisms, such as the expression of specific genes involved in the disease, in order to reduce the persistence of excess mortality in this pathology.

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