REHABILITATION OF CARDIOVASCULAR DISEASES.
MYOCARDIAL INFARCTION

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Abstract: 112 male patients with Q-wave MI participated in the study. Depending on the implementation of thrombolysis, patients were divided into 2 groups: Group 1 (n=48) patients without thrombolysis, Group 2 (n=64) patients undergoing thrombolysis. Comparative analysis showed that in the group of patients who did not undergo thrombolysis, AHF was significantly more frequent than in group 2 (87.5% and 42.6%, r<0.05). After that, we analyzed the correlation of clinical and anatomical indicators with the severity of AHF in the group of patients who underwent thrombolysis using correlation analysis.

Keywords: Assessment of possible predictors of the development of acute heart failure (AHF) in patients with Q-wave myocardial infarction (MI), thrombolytic therapy, acute heart failure, myocardial infarction.

Introduction. Introduction. Currently, there is a significant decrease in the frequency of acute heart failure (AHF) due to the introduction of thrombolytic therapy (TLT) into clinical practice in the early stages of myocardial infarction (MI) [1,2]. Nevertheless, AHF is the most terrible complication of mi and one of the urgent problems of cardiology in the end, more deaths than from any other cause [3,4]. As has been shown in many studies, the severity of AHF depends on the size of necrosis, including in patients with MI to predict the development of this complication, patients with extensive damage to the heart muscle who need more active treatment and inpatient treatment of patients with minor myocardial necrosis can reduce the time [3,5]. despite the fact that research in the field of forecasting the development of AHF has been conducted for a long time, this problem remains relevant [5,6,8]. This is a polymorphism of many symptoms of the disease, a smaller number of symptoms detected on the first day of MI. With MI, various methods of treatment can be applied (thrombolysis, surgical correction in the early period) due to the significant effect, the corresponding correction in the early prognosis of complications and diagnostic practice does not allow.

Research methodology and empirical analysis. We examined 112 patients (men) with large-focal myocardial infarction. 64 patients underwent TLT after hospitalization. As a comparison group (in order to determine the incidence of AHF in patients with large focal myocardial infarction who did not receive TLT), we selected 48 patients with MI with similar clinical forms and conditions who were hospitalized during the first 12 hours of the disease, but were not subjected to thrombolysis for various reasons (contraindications, refusal of treatment).

The diagnosis of Mi is generally accepted according to such indicators as the clinical picture (angina attack for more than 30 minutes), ECG indicators (elevation of the ST segment by 1 mm or more in standard networks, 2 mm or more in at least two chest networks), increased activity of cardiospecific serum enzymes tested based on criteria.

Patients aged 40 to 79 years (mean age 62.5±2.6 years) were hospitalized in the intensive care unit within the first 6 hours after the onset of the disease. Signs of myocardial reperfusion after TLT administration were registered in 40 out of 64 patients (62.5%). The development of AHF in patients receiving TLT out of 64 examined patients, 27 (42.2%) patients were registered, of which 24 (37.5%)

had AHF of class 2 according to the Killip classification, and 3 (4.7%) had AHF of class 3 according to Killip.

42 (87.5%) of 48 patients with large-focal MI and who did not undergo TLT for various reasons (r<0.05) developed AHF. We divided 64 patients who received TLT into two groups: the main group – 27 (42.2%) people (patients of the 2nd and 3rd class according to Killip) and the control group -37 (57.8%) people (Patients who have no clinical signs of AHF, or class 1 according to Killip).

Results. In patients with MI and receiving TLT, AHF was observed from the first hours of the disease to several days after the onset of the disease. Analysis of the data obtained showed that clinical signs of heart failure in patients with AHF were observed in 14 (51.9%) patients on day 1, on day 2 -in 8 (29.6%) patients, on day 3-5 – in 5 (18.5%) patients. Symptoms of myocardial reperfusion after TLT were statistically observed significantly more often in the group of patients without AHF – in 34 (91.9%) out of 37, and in the main group-6 (22.2%) out of 27 people (r<0.05). Analysis of the relationship of clinical symptoms with the development of AHF revealed a significant positive correlation in individuals with sinus tachycardia and those over 65 years of age (Table 1).

Table 1. The relationship between the development of acute heart failure and clinical signs in patients with myocardial infarction

symptoms	r	p<
shortness	0,85	0,001
cyanosis	0,81	0,001
sinus tachycardia	0,48	0,05
older than 65 years	0,48	0,05
presence of reperfusion	0,39	0,05
diabetes mellitus	0,35	0,05
Postinfarction cardiosclerosis	0,37	0,05

The study of clinical signs in patients with AHF revealed the following features: the average age of patients in the main group was 68.6±0.9 years, while in patients in the control group it was 57.5±0.9 years (R<0.05), the previously observed duration of coronary heart disease MI was 5.9±0.3 years in the main group and 2.9±0.4 years (R<0.05) in the control group, which was noticeable in patients with AHF. at the level of more postinfarction cardiosclerosis was observed in 10 (39.1%) people, and in the control group – in 9 (25.8%) people (r<0.05).

The analysis of the studies showed that in patients with coronary artery occlusion, AHF was statistically more common - 11 out of 15 (81.6%), while in patients without AHF – 6 out of 15 (41.2%) (r<0.05). Thus, it changed due to the process of stenosis, the number of cardiac arteries was significantly higher in patients with AHF compared to patients without AHF - in the ratio from 2.8±0.6 to 1.9±0.8 (r<0.05). Stenosis of the body of the left coronary artery was observed in 5.9% of people in the control group and 18.4% in the main group despite the fact that we noted a trend towards greater detection in the patient, we did not find a statistically significant correlation between the development of AHF and the localization of the coronary artery associated with a heart attack.

Conclusion. Analysis of clinical parameters in patients with large-focal MI showed that the main predictors of AHF are postinfarction cardiosclerosis, chronic heart aneurysm, diabetes mellitus, age over 65 years, absence of signs of myocardial reperfusion after thrombolytic therapy. Initial

myocardial infarction instrumental and laboratory predictors of acute heart failure are a decrease in ST segment elevation (less than 50%), a decrease in QOBF by more than 50% and an infarct-dependent coronary artery.

Literature

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