CORONARY ARTERIES DAMAGE IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AND OBESITY

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**The aim of the study.** To analyze the state of coronary arteries in patients with acute myocardial infarction and concomitant obesity, depending on the localization of the lesion by angiography data.

**Materials and methods of research**. Angiography followed by stenting of the infarct-related artery was performed in 31 patients with AMI and obesity. Among them, 24 patients (77.4%) had been established drug-eluting stents and 7 (22.6%) - bare-metal stents.

**Research results.** The analysis of major coronary artery lesions frequency showed that the most commonly detected atherosclerotic lesion was found in the left anterior descending artery (LAD) in 89% of cases. The second place is the right coronary artery (RCA) - 59.3%, about half of patients with AMI and obesity (48.1%) had a defeat of the circumflex artery (CA). The left coronary artery (LCA) remained the least frequent afflicted in patients with AMI on the base of concomitant obesity - 11%. In the case of coronary arteries of the second order, the majority of proximal and medial parts of LAD (41% and 52% respectively) and proximal part of CA (37%) were most often diagnosed in the group of patients under study.

There were found both hemodynamically significant and hemodynamically insignificant stenoses in all major arteries. Hemodynamically significant stenoses (69.3% and 60.9% respectively) were observed more frequently in LAD and RCA, while in CA and LCA the proportion of hemodynamically insignificant stenoses exceeded that for hemodynamically significant by 15.8% and 34% respectively.

**Conclusions**. Thus, it was found that the most vulnerable coronary arteries according to the angiography are left anterior descending artery and right coronary artery both in frequency and degree of lesion, and in the frequency of hemodynamically significant stenoses in patients with acute myocardial infarction and obesity.