

Factors affecting the prognosis of patient with ST elevation myocardial infarction and massive thrombosis of infarct related coronary artery

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Manual thromb aspiration (MT) is aimed at achieving optimal myocardial perfusion and improving prognosis in patients with ST-segment elevation myocardial infarction (STEMI) undergoing percutaneous coronary interventions.

Purpose. To study the factors influencing the prognosis of the disease in patients with STEMI and massive thrombosis of an infarction-associated artery, who underwent percutaneous coronary intervention in combination with MT.

Materials and methods. 2-year dynamic follow-up of two groups of patients with STEMI: 175 patients undergoing percutaneous coronary intervention with MT and 175 patients with percutaneous coronary intervention without MT.

Results. As a result of the logistic regression analysis by a step-by-step method of including factors (107 indicators in total) that affect the likelihood of developing major adverse coronary event (MACE), the parameters independently influencing the risk of their development were: age of patients over 65 years old (OR 1.9), history of coronary heart disease and MI (OR 3.35), diabetes mellitus (OR 2.54), ischemia time more than 180 minutes (OR 5.43), multivessel coronary artery disease (OR 2.16), absence of myocardial perfusion - MBG grade 0 (OR 39, 82), the ratio of neutrophils to lymphocytes is more than 3 (OR 11.05). In addition, it was found that with LV ejection fraction at discharge \leq 42%, the risk of developing BCCS after 48 months. follow-up in both groups was 17.7 times higher ($p = 0.00001$, OR: 17.7 CI 95%), and in patients in the MTA (+) group with LV EDV of more than 160 ml at discharge from the hospital, the risk of developing MACE after 48 months observation was 7.9 times higher ($p = 0.006$).

Conclusion. A retrospective analysis of the data obtained showed that all patients with STEMI and massive thrombosis of an infarction-associated coronary artery who died of cardiac causes had predictors of unfavorable outcome, most of which were determined already in the first hours of myocardial infarction.