



show the highest activity of the inflammatory reaction and clot formation in the coronary arteries in this time period.

Conclusions. It has been demonstrated that maximal activity of intravascular inflammation and clot formation takes place after 2 hours of AMI that might lead to the development of complications of AMI. Taking it into account, we can conclude that urgent percutaneous coronary intervention performed within 2 hours after occurrence of pain syndrome related to AMI can improve patient's prognosis.

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MEANING OF ENDOTHELIAL-DEPENDENT MEDIATORS IN THE
PREDICTION OF CARDIOVASCULAR DEATH IN PATIENTS WITH ACUTE
MYOCARDIAL INFARCTION AND DIABETES MELLITUS TYPE 2

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Aim of study: to develop a prediction model of cardiovascular death in patients with acute myocardial damage (AMI) and diabetes mellitus type 2 (DM2).

Materials and methods: 60 patients with AMI and type 2 DM were enrolled in the study. They were divided depending on the occurrence of acute cardiovascular death in acute period of AMI: 7 patients died during the acute period of myocardial infarction; 53 patients survived during an acute period of myocardial infarction. sVE-cadherin blood serum levels were determined with commercial enzyme linked immunosorbent assay ELISA kit (Bender MedSystems GmbH, Vienna, Austria), CD40L level – with the usage of commercial ELISA test kit (YH Biosearch Laboratory, Shanghai, China). The data were processed statistically with Microsoft Office Excel software: the mean arithmetical value (M) and standard error of the mean (m) were calculated, for estimated probability and validity of the obtained data, Student's t-test (p) was done.

Results. Assessment of endothelial-dependent mediators, namely sCD40-ligand and sVE-cadherin, presents a great interest because insufficient decreasing of sCD40-ligand level within 10 days under the influence of treatment is associated with the



higher risk of death ($-12.0 \pm 3.0\%$ and $-21.0 \pm 1.0\%$ accordingly; $p < 0.05$). Evaluation of sVE-cadherin demonstrated that its insufficient decreasing also correlated with cardiovascular death in diabetic patients ($-11.0 \pm 3.0\%$ and $-18.0 \pm 1.0\%$ accordingly; $p < 0.05$). Determination of sVE-cadherin at the first day (1.73 ± 0.08 ng/mL and 1.80 ± 0.03 ng/mL accordingly; $p > 0.05$) and at the 10 th day (1.54 ± 0.08 ng/mL and 1.47 ± 0.03 ng/mL accordingly; $p > 0.05$); sCD40-ligand at the first day (3.73 ± 0.06 ng/mL and 3.85 ± 0.04 ng/mL accordingly; $p > 0.05$) and at the 10 th day (3.28 ± 0.08 ng/mL and 3.04 ± 0.05 ng/mL accordingly; $p > 0.05$) did not show any significant differences.

Conclusions. It has been shown that for those patients with concurrent type 2 diabetes mellitus died in acute period of myocardial infarction it was typical to demonstrate less dynamics of decrease of the endothelial-dependent mediators – sVE-cadherin and sCD40L-ligand on the background of the treatment that confirms a negative influence of endothelial dysfunction on the outcome of the disease.