

Abstract

Objective of the current study was to the clinical and laboratory features and the level of growth differentiation factor 15 (GDF-15) in patients with acute ST-segment elevation myocardial infarction (STEMI) at the inpatient stage of treatment.

Materials and methods. Clinical and laboratory characteristics of STEMI patients were assessed during the hospital stay; echocardiography was also performed. The prognosis of in-hospital mortality was calculated using the GRACE scale. Statistical analysis was performed using the statistical software package «Statistica 10.0 for Windows».

Results. The GDF-15 level increases on the first day of STEMI and correlates with the risk of in-hospital mortality according to the GRACE scale. STEMI patients with GDF-15 values ≥ 1200 ng/ml doesn't reach the reference values during inpatient treatment. Patients with an unfavorable in-hospital outcome of STEMI were at a high risk of in-hospital mortality according to the GRACE scale with a tendency to GDF-15 concentration rise. Myocardial contractility of the left ventricle was also reduced in these patients.

Conclusion. The persistence of high GDF-15 values during the in-patient treatment determines the prognosis of STEMI.

Key words: acute myocardial infarction, GDF-15.