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KIDNEY FAILURE AS PREDICTOR OF CARDIOVASCULAR ACCIDENTS:
OUTCOME IN PATIENTS TREATED AT THE INTENSIVE CARE UNIT.
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Introduction. One of the major comorbidities in heart failure is renal dysfunction. On the other hand, severe heart failure or acute decompensated heart failure can, in turn, accelerate worsening renal function – the so-called cardiorenal syndromes (CRS) which leads to longer hospital stay, higher mortality rates and greater chance for readmission.

Objective: The aim is to characterize types of CRS, provide maximum detailed characteristics of insufficiently studied type I CRS, analyze creatinine levels, glomerular filtration rate (GFR) and coronary events relationships on the basis of our research carried out at the Departments of Cardiology and Internal Diseases and Anesthesiology and Resuscitation in 2017.

Materials and methods. We analyzed 120 medical records of cardiac patients with acute and decompensated chronic cardiovascular disease treated at Department of Anesthesiology and Intensive Care №1 and Cardiology Department №1 (for myocardial infarction) in the 9th Minsk City Hospital (01.01.2015 - 12.31.2016). Selection of 60 patients with type 1 CRS in group I and 60 patients with heart pathology but no accident of renal failure complications in group II was randomized. The two groups were subsequently compared in relation to the presence of correlation between the creatinine level dynamics, GFR and coronary events outcome. The analysis of the results was made by the «Statistica 10.0» program.

Results. The analysis of the results revealed 8.3% patients' survival and 91.7% failures. Creatinine level increase and GFR decrease with positive recovery rate dynamics were registered in the survivals whereas 7.2% of deceased patients were characterized by moderately reduced kidney function, 41.8%-severely reduced kidney function and 51% - endstage kidney failure. In group I severely reduced kidney function was identified in 5.4%, moderately reduced –in 30% and mildly reduced –in 52%. 13% had normal GFR level.

Conclusion. CRS is undoubtedly a problem of both cardiologists, nephrologists and other medical specialists, as well. Despite the tangible progress in CRS study, there is a vast domain of unsolved questions concerning pathogenesis, diagnostics and therapeutic efforts required for the effective management of this pathology. We can assert that there is a close link and correlation between creatinine levels, GFR and chronic kidney disease stage and that progressive kidney function decrease is predictively a bad sign leading to CRS type I patients' mortality rate increase.