

parison with the reference level the RR duration in the background probe fell (ph) ( $p < 0,0001$ ), humoral metabolic impact increased aloud:  $\sigma$  в ph ( $p < 0,05$ ), Vm ( $p < 0,001$ ), pA ( $p < 0,0001$ ), VLF% в ph ( $p < 0,01$ ), pA ( $p < 0,05$ ); sympathetic manipulation:  $\sigma$  в Vm ( $p < 0,0001$ ), pA ( $p < 0,01$ ), AOP ( $p < 0,001$ ), PWC ( $p < 0,01$ ), LF% в AOP ( $p < 0,01$ ); parasympathetic regulation fell:  $\sigma$  в ph ( $p < 0,01$ ), HF% в ph ( $p < 0,001$ ), Vm ( $p < 0,01$ ), pA ( $p < 0,0001$ ); with nitroglycerin intake the response value to stimulus in AOP increased: d-a NN% ( $p < 0,01$ ), d-a NN, sec ( $p < 0,05$ ). In probe with validol significantly increased the RR range in all other probes: ph, AOP ( $p < 0,0001$ ), Vm, pA ( $p < 0,001$ ), PWC ( $p < 0,01$ ); humoral-metabolic and sympathetic impact increased in all probes, except PWC, the amount of parasympathetic deflections ( $\sigma$ ) increased in AOP ( $p < 0,01$ ) and PWC ( $p < 0,05$ ), meanwhile the percentage of parasympathetic impact (HF%) ( $p < 0,05$ ) for certain reduced by ph. Thus, the prescription of these medications has both: positive aspects – SDNN increase after nitroglycerin and validol intake, with validol intake the RR increase in all probes may be observed,  $\sigma$  in AOP and PWC and negative aspects-the increase of humoral-metabolic and sympathetic regulation under the impact of surveyed medications, as normally parasympathetic regulation should predominate. It brings about the necessity of specific control of the prescription and the individual selection of the medications even contrary to standard schemes.

## THE ROLE OF CARDIAC MARKERS TNI, CK- MB, LDG FOR PREDICTION OF SURVIVAL IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

Cuciuc V., Cernit V., Grumeza D., Sandu V., Abraş M., Grib A.

*Academic adviser:* Grib L., M.D., Ph.D., Professor, State Medical and Pharmaceutical University “Nicolae Testemiţanu”, Chisinau, Republic of Moldova

**Introduction:** There is an increasing morbidity of patients with acute coronary syndrome (ACS) in the structure of population mortality. The most common risk factors in ACS group, which encompasses pathology of acute myocardial infarction (AMI) is hypertension. In 2000 the European Society of Cardiology and the ACC/AHA (*American College of Cardiology/American Heart Association*), recognized the pivotal role of biomarkers with elevations in their levels the “cornerstone” of diagnosis of AMI.

Troponina I (TnI), Creatine kinase MB isoenzyme (CK-MB), Lactat Dedhydrogenase (LDG), Myoglobin (MYO) – these are markers of cardiac injury. Established correlation in the levels of these markers would allow the prognosis of the survival chances of patients with AMI.

**Aims:** The goal of this study is to examine the distribution of the biomarkers of cardiac cell injury and their association with the AMI mortality rate.

**Materials and methods:** The research was performed retrospectively, based on the archive data of the Municipal Hospital Clinic “Sf. Treime”. It has involved 17 patients with diagnosis of AMI and hypertension, like risk factor. Our patients were tested in the laboratory, data were received using comprehensive testing platform “The Alere Triage Meter Pro”, using “Alere Triage Cardiac panel” of SANMEDICO company. This is an immunoassay, for quantitative measurements of MYO (ng/ml), CK-MB (ng/ml) and TnI (ng/ml). The marker and the main criterion of patients selection was the TnI below the 0.05 ng/ml.

**Results:** Patients were diagnosed with AMI, according to WHO criteria. Total number of 17 patients were examined (100%), with an average age of 57 years, 7 of them were men (41.17%) and 10 – women (58.83%). Survived during the first 24 hours after hospitalization – 7 ps (41.17%), and 10 ps (58.83%) have died. It was detected CK-MB: 58.82% above the norm (10 ps), 41.12% in normal limits (7 ps); LDG: 52.94% above the norm (9 ps), 47.06% below the norm or in normal limits (8 ps); MYO: 52.94% above the norm (9 ps).

Were identified arterial hypertension level 1 and 2 in all patients, 10 of them (58,82%) were identified with anterior extended MI, that corresponds to obstruction of left anterior descending artery (LAD) artery, 3 ps (17,64%) with circular MI, that corresponds to obstruction of circumflex (CX) artery, and 4 ps (23,53%) with diaphragmatic (inferior) MI, that corresponds in most cases to obstruction of right coronary artery (RCA). From the total number of patients, we identified 9 ps (52,94%) with narrow or wide QRS tachyarrhythmia.

**Discussion:** The main questions in our study were:

1. Increased serum levels of which markers have been associated with evidence of reversible or irreversible cardiac injury (cell lesion)?
2. What major coronary artery is frequently involved in AMI, in our region?

It has been demonstrated that testing for troponins initially on admission and repeatedly after 6 or 12 hours provides better risk stratification than preciously used algorithms based on ECG, CK-MB. Elevated levels of CK-MB, LDG and MYO denote a cardiac injury.

In our cases they were associated with negative troponine results, which emphasize the reversible cardiac injury. Correlated with ECG data, which determine ST elevation lead V1-V4 (52,94%), infer damage of LAD artery.

**Conclusion:** Study data estimate implying of LAD in the coronary artery pathology (58,82% cases of extended anterior MI), in condition of functionally compromised heart (52,94% of arrhythmias).

Biomarkers values ranking shows the degree of cardiac injury. At the same time they allow the prognosis of the survival chances of patients with AMI.

**Keywords:** TnI, CK-MB, LDG, AMI, LAD, RCA, CX.

## THE INFLUENCE OF TRIMETAZIDINE ON THE TREATMENT OF COPD ASSOCIATED WITH ISCHEMIC CORONARY ARTERY DISEASE

**Condaruc Natalia**

*Academic adviser:* Butorov Valentina, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chisinau, Republic of Moldova

**Introduction:** COPD associated with ischemic cardiopathy is not only a medical problem, but also a socio-economical one; its treatment still remains a current direction in contemporary medicine. The frequency of associated pathology is increasing and tends to affect younger people, of working age.

**Aim:** To study the clinical efficacy of myocardial cytoprotector - trimetazidine (Preductal MB, France) and its use in the complex treatment of patients with COPD associated with ischemic cardiopathy.

**Objectives:** 1. To study the influence of trimetazidine on clinical and paraclinical evolution of patients with COPD associated with ischemic cardiopathy. 2. Estimate the tolerance degree of trimetazidine in patients with COPD associated with ischemic cardiopathy.

**Material and methods:** The study included 52 patients with II degree COPD, associated with ischemic cardiopathy (mean age  $58,2 \pm 2,2$  years) wick were divided into 2 similar groups. The basic group (n=26) received basic therapy combined with trimetazidine (70 mg/day), the control group (n=26) - only basic therapy. Diagnosis of COPD was set based on the GOLD criteria (2006) and the diagnosis of ischemic cardiopathy on the criteria developed by the Romanian Society of Cardiology (2004). The patients were investigated by ECG, Hollter, echocardiography, spirography, POL indexes: malonic dialdehyde (MDA), superoxide dismutase (SOD) and catalase.