

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

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**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) wich 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, spirometry, POL indexes: malonic dialdehyde (MDA), superoxide dismutase (SOD) and catalase.

**Results:** Following the administration of combined therapy with trimetazidine it was found a significant decrease in the frequency of ischemic episodes by 33,6% ( $p < 0,05$ ) and in the frequency of dysrhythmias by 30,7% ( $p < 0,05$ ), while in the control group positive evolution was not statistically significant. It was determined a significant reduction of MDA by 1,85 ( $p < 0,05$ ), with the increase in SOD activity by 2,6 ( $p < 0,05$ ) and catalase by 1,5 ( $p < 0,05$ ), in the control group also being determined a positive, but insignificant, increase. It was determined the improvement of myocardial contractibility, the ejection fraction increasing by 11,8% ( $p < 0,05$ ), while in the control group the increase was insignificant. Respiratory function indexes in both groups improved, but there were no significant differences ( $p > 0,1$ ). During the study, the drug showed a good tolerance.

**Conclusion:** Trimetazidine has a pronounced anti-ischemic, antiarrhythmic and antihypoxanth effect. The obtained results allow us to recommend the combined therapy with trimetazidine in the treatment of patients with COPD associated with ischemic cardiopathy.

**Key words:** COPD, ischemic cardiopathy, trimetazidine, oxidative lipid peroxidation, ischemia, arrhythmias.

## CARDIOVASCULAR RISK ESTIMATION IN PATIENTS WITH INTRACLINIC ATHEROSCLEROSIS

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**Introduction:** Cardiovascular diseases are currently the leading cause of death in industrialized countries and are expected to become so in emerging countries by 2020. Among these, coronary artery disease (CAD) is the most prevalent manifestation and is associated with high mortality and morbidity. Quantitative assessment of risk is useful for clinical decision making. Several scores have been developed to estimate ischaemic and bleeding risks, with different outcomes and time frames (GRACE, TIMI, Duke).

**Objectives:** Cardiovascular risk assessment in patients with unstable angina pectoris and their stratification for the appropriate management election.

**Materials and methods:** The study was made in the period of december 2010 - april 2011 and included 80 patients with the diagnostic of unstable angina pectoris based on the clinical, electrocardiographic and echocardiographic evaluation. There have been assessed anginal syndromes, factors for cardiovascular risk, hemodynamic parameters at hospital admission, the results of the laboratory investigation. Duke score was calculated by the equation: Score = feature of angina x (1 + frequency of angina outbreaks/24h) + ST/T abnormalities. Depending on the total points, the risk was stratified in 3 groups: low, moderate, high.

**Results:** The mean age of the patients included in the study was  $60,72 \pm 0,89$  years. Most of the patients showed angina pain at the admission. Clinical signs were dyspnoea (93,75%), palpitations (63,75%), pre-syncope. At the admission, 68,75% of the patients showed high blood pressure. Crucial risk factors were: arterial hypertension (91,25%), overweight/obesity (91,25%), dyslipidemia (38,75%), diabetes mellitus (28,75%). Echocardiographic atherosclerotic changes of aorta and valves were registered in 98,75% of cases. The assessment of Duke score has been established that 2,5% of the patients had low cardiovascular risk, 23,75% - moderate and 73,75% - high risk that correlates with a death rate of over 2% in one year.