

revealed that RHI (odds ratio: 0.44, 95% confidence interval: 0.21–0.94) was an independent predictor for CAD in subjects with T2DM.

Conclusions: RHI, an acknowledged marker of microcirculatory endothelial function was a more sensitive method in evaluating the risk assessment of CAD in subjects with T2DM.

P1.3.052.

EFFECTS OF NEBIVOLOL COMBINED WITH RAMIPRIL VS NEBIVOLOL ASSOCIATED AMLODIPINE AND RAMIPRIL ON BIOMARKER OF ENDOTHELIAL DYSFUNCTION IN PATIENTS WITH ANGINA PECTORIS AND ESSENTIAL HYPERTENSION

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Aim: Evaluate the efficacy of nebivolol therapy associated with ramipril vs nebivolol combined with amlodipine and ramipril in patients with APS and EH undergoing PCI.

Methods: The study included 89 patients who were divided into three groups: I group 13 patients who were administered nebivolol 5mg/day, the II group 57 patients who were administered nebivolol 5 mg/day combined with ramipril 10 mg/day, and the III group 19 patients who were administered nebivolol 5 mg/day with amlodipine 10 mg/day and ramipril 10 mg/day. In all groups was evaluated the blood pressure, the echocardiography was performed at the beginning of the study, at 6,12 months. The biomarker of endothelial dysfunction-NO was assessed in blood: prePCI, postPCI (24 hours) at 1,3,6,12 months.

Results: At the end of study was recorded the BP level of <140/90 mmHg in all groups. Left ventricle mass index (LVMI) has reduced in comparison with the initial value in I group from 113.45±11.41 to 109.2±8.6 (at 12 months), $p>0.05$. In the II group, LVMI has significantly decreased from 129.15±4.9 to 115.6±4.5, $p<0.01$. In the III group, LVMI has reduced from 115.2±7.9 to 110.3±7.7 g/m² $p>0.05$. Level of NO has increased compared to the initial value in the I group from 66.3±6.03 up to 93.8±2.2 ($p>0.05$); in the II group from 51.4±2.1 up to 97.7±1.5 ($p<0.01$), in the III group from 60.3±5.6 up to 95.8±2.98 ($p>0.05$).

Conclusions: The combination of ramipril with nebivolol significantly decreased the LVMI by 10.5%. The association of nebivolol with ramipril favored a increase of the NO level with 90.1% vs the initial.

P1.3.053.

PATIENTS WITH PRIMARY ALDOSTERONISM HAVE LOWER CIRCULATING ADENOSINE LEVELS BUT SIMILAR SUSCEPTIBILITY TO ISCHEMIA-REPERFUSION COMPARED TO PATIENTS WITH ESSENTIAL HYPERTENSION

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Aim: Patients with primary aldosteronism (PA) experience more cardiovascular events compared to patients with essential hypertension (EHT), independent from blood pressure levels. In animal models, aldosterone increases myocardial ischemia-reperfusion (IR) injury. Mineralocorticoid receptor antagonists limit IR-injury by increasing extracellular adenosine formation and adenosine receptor stimulation.

Objective We hypothesized that patients with PA have lower levels of circulating adenosine, and are more susceptible to IR in comparison to patients with EH.

Methods: We included 20 patients with PA and 20 patients with EHT. We measured circulating adenosine levels using a purpose-built syringe. In addition, we used brachial artery flow mediated dilation (FMD) before and after forearm IR as a well established method to study IR

injury.

Results: Patients with PA had significantly lower adenosine levels compared to patients with EHT (15.3 (13.3–20.4) versus 22.7 (19.4–36.8) nM respectively, $p=0.008$). Post-IR % FMD minus pre-IR % FMD, however, did not differ between patients with PA and patients with EHT (-1.0 ± 2.9 % versus -1.6 ± 1.6 % respectively, $p=0.52$).

Conclusions: As adenosine receptor stimulation induces powerful protective cardiovascular effects, its lower concentration in patients with PA might contribute to the increased cardiovascular risk in these patients. This is not, however, due to increased susceptibility to IR. We suggest that modulation of the adenosine metabolism reduces the risk of cardiovascular events in patients with PA.

P1.3.054.

IMPROVING PERIPHERAL ARTERY DISEASE DIAGNOSIS: RESULTS OF A MODERN MULTIMARKER APPROACH

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Aim: The study evaluated the utility of biomarker diagnosis for staging in patients with peripheral artery disease (PAD).

Methods: The prospective study included 139 patients admitted in the 2nd Department of Internal Medicine and the Department of Cardiology of the Emergency Clinical Hospital Sfântul Spiridon Iasi, enrolled consecutively between January and September, 2017. We investigated the associations between the PAD Leriche-Fontaine classification and plasma levels of biomarkers, separately and in combination: Neopterin, Cistatin C, Beta-2-microglobulin, C-reactive protein, fibrinogen and D-dimer. Factor reduction by Principal Component Analysis lead to selection of optimal multimarker combinations for PAD staging.

Results: The group included 80.6% male and 19.4% female, of which 74.8% were smokers, 97.1% had cardio-vascular pathological antecedents, 90.6% dyslipidemia and 41.7% diabetes. Significant associations were observed between PAD stages and levels of C-reactive protein ($p<0.0001$) and fibrinogen ($p<0.002$). ANOVA indicated significant mean differences for multimarker levels in 4th PAD stage ($p<0.0001$). AUCs obtained by receiver operating characteristic (ROC) analysis showed that combinations of 4 biomarkers, Neopterin, C-reactive protein, fibrinogen and D-dimer have a good diagnostic performance in the terminal PAD stages (AUC 0.835, $p<0.0001$).

Conclusions: This study underlines the importance of multimarker testing in advanced PAD stage. Final results will bring more information as we continue to expand the number of patients included in the study.

P1.3.055.

RELATION OF GLUCIDIC-LIPIDIC PROFILE WITH SEVERAL VALUES OF ENDOTHELIAL INJURY: RESULTS OF A COHORT OF PATIENTS WITH ESSENTIAL HYPERTENSION

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Aim: Analyze the correlation between endothelial dysfunction markers and parameters related to glucidic-lipidic metabolism.