and severe LV systolic dysfunction are independent predictors of sudden cardiac death. However, it has been uncertain the significance of LV remode-ling and its relation with different survival rates in patients with coronary artery disease (CAD) without heart failure and severe arterial hypertension.

Aim: To compare LV geometry and systolic function in patients with CAD with and without VA occurring during myocardial ischemia.

Methods: We studied 48 patients with CAD who had electrocardiographic signs of ischemia during ergometer exercise testing. Nitrates, calcium antago-nists and β-blockers were abolished the day before the investigation. All patients were divided into 2 groups: 24 subjects (16 men) with reproducible VA occurred at peak exercise or during recovery were included in the group I. Group II consisted of 24 patients (20 men) without VA. Mean age of the patients did not differ among the groups I and II (58.1±8.2 vs 59.4±6.0 years, respectively). 13 patients in group I and 9 ones in group II had a history of myocardial infarction (0.54 vs 0.38, respectively, ns). None of the patients had severe arterial hypertension or signs of heart failure. Assess-ment of LV geometry and systolic function was performed using B- and M- mode echocardiography.

Results: LV mass indices were increased in both groups I and II (49±29 vs 136±25 g/m², respectively, ns). The prevalence of various LV geometry pat-terns differed significantly among the groups. So, eccentric hypertrophy was observed in the most of the patients (18) in group I and only in 9 patients in group II (0.75 vs 0.38, respectively, p<0.01), and LV relative wall thickness was lower in the group I compared with group II (0.39±0.04 vs 0.43±0.07, respectiv-ely, p<0.01). LV end-systolic and end-diastolic volume indices were increased in the group I and greater compared with group II (80±14 vs 68±13 ml/m², respectively, p<0.004; and 30±8 vs 24±7 ml/m², respectively, p=0.002). There were no significant differences in LV wall motion score indices among the groups I and II (1.0±0.2 vs 1.0±0.17, respectively, ns). LV ejection fraction was lower in the group I compared with group II (62±4.5±3 vs 65.9±6.5%, respectively, p<0.05).

Conclusions: The patients with CAD and VA occurring during ischemia com-pared with ones without VA have structural and functional LV peculiarities such as eccentric hypertrophy and initial global systolic dysfunction.

529 The correlation of electrocardiographic findings and left ventricular systolic function in patients treated invasively for acute myocardial infarction

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Background: The echocardiographic assessment of ejection fraction (EF) in patients in the acute phase is one of the most important parameters of the patient's condition. The aim of the study was to evaluate the correlation of electrocardiographic findings and left ventricular systolic function in patients treated invasively for acute myocardial infarction.

Methods: The study group consisted of 400 patients (103 - 25.8% F, mean age 58.5±1.16 years old and Killip class I -2.16±0.63) with diagnosis of MI (45.5% STEMI, 54.5% NSTEMI). The group was selected from the popula-tion of 441 consecutive patients admitted due to acute MI. 41 patients were excluded from the analysis because of: LBBB, RBBB, pacemaker and ven-tricular rhythm or artifacts, QRS duration, Q and R wave amplitude and HR without recording of 12 leads ECG on admission (1-ECCG), 30 min, after per-cor-nal coronary intervention (2-ECCG) and in 5th day of hospitalization (2-ECCG). The systolic function of left ventricle was assessed echocardiographically in 2D bi-plane apical views as EF in the 5th day post intervention.

Results: The correlation coefficients (r) for the mean values of analyzed ECG parametrs and EF are shown in the table I.

Conclusion: The QRS duration, as well as amplitude of Q wave and HR correlates negatively with global systolic function, whereas the amplitude of R wave corresponds well with better EF.

Table 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>r</th>
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<th>Parameter</th>
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<td>QRS-1</td>
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<td>QRS-2</td>
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<tr>
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530 Platelet activity - new marker of impaired left ventricular function in patients with ST-segment elevation myocardial infarction

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Background: The aim of the study was to assess if presence of false tendon (FT) is a risk factor for acute myocardial infarction with ST-elevation myocardial infarction (STEMI). Material and methods: The primary end points of the study were to investi-gate the relationships between the FT and LV global and LV re-gional systolic function at early post-infarction period in patients with STEMI. The secondary end points were to evaluate predictive value of TIMI risk score on mortality at one month and at one year after STEMI. 118 consecutive pts with STEMI, mean age 56.6±10.2 years, were enrolled in the study. The TIMI risk score was calculated according to baseline clinical characteristics, age, body weight, risk factors, time from symptom onset and ECG findings. We assessed ejection fraction (EF), left ventricular end-diastolic volumes (LVEDV) and wall motion scores were performed by ECHO (WMSI) within 7±2 days. Patients were monitoring within one year of STEMI.

Results: The mean value of TIMI risk score was 3.07±2.15 (min=0, max=12). The mean value of EF within 7 days was 47.83±6.28% and the mean value of WMSI was 1.25±0.22. There was significant negative correlation between EF and TIMI risk score (r = -0.339, p=0.001), also there was signifi-cant positive correlation between WMSI and TIMI risk score (r = 0.3, p=0.002).

Conclusion: TIMI risk score correlate with global and regional systolic func-tion in patients with STEMI. Furthermore, TIMI risk score is independent predictor of one month mortality, as well as one year mortality in patients with STEMI.

532 Is the false tendon of the left ventricle thrombi risk factor after myocardial infarction?

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Background: We collected venous blood samples on admission from 140 pa-tients with STEMI. Platelet activity (adhesion and aggregation) was estimated with the use of rapid, point-of care platelet analyzer (PFA-100®). Dade Behring, Newark, DE) as the time for flowing whole blood to occlude a collagen-adenosine diphosphate (ADP) platelet activation. The ADP-CPT (platelet activat-ion greater activity. An echocardiograms (2-D) were performed at baseline (within 12 h after PCI), 1 month and 6 months thereafter. An increase of more than 20% in end diastolic volume index (EDVI) at 6-months relative to the baseline value was considered as left ventricular remodeling.

Results: Study population was divided according to medium CADP-CT (95 ms). Considering patients with increase platelet activity during the ex-amined period, after 6 month, significant increase of EDVI in compar-i-son with initial values was observed (86.3±6.3 ml/m² vs 71.7±7.2 ml/m², p<0.0001). Fifty nine percent of patients of the inframedian group (n=71) were diag-nosed with left ventricular remodeling, in comparison to 12% in supramedian group (n=69) in 6 month follow-up (p<0.0001). In multivariate logistic re-gression model, after controlling for a series of possible confounders, CADP-CT >795 sec. (high platelet activity) remained an independent predictor of developing left ventricular remodeling.

Conclusions: High platelet activity estimated by rapid, point-of-care plate-let function analyzer (PFA-100®) is a strong and early predictor of develop-ment of left ventricular remodeling in 6 month follow-up in STEMI patients treated with primary PCI.
Results: Pts were divided in two groups: group I - pts with FT 202 pts (26%), group II - without FT 556 (74%). Left ventricle thrombi were found in 16 pts (4%), 23% of pts of group II (7%) left ventricle thrombi were localized or connected to false tendon. This group of pts was treated by thrombolitics, had extensive antero-lateral MI (ET35%), and FT localized in the region of MI. Two patients of group I and 1 of group II had necrosis of the ischaemic stroke. As well as analyze frequency of thrombus occurrence dependency of therapy: PCI or thrombolitics. In group of 582 pts treated by PCI we observed thrombosis in 23 (4%) cases, in 178 pts treated by thrombotic therapy thrombi were found in 32 (18%) pts - p<0.001.

Conclusions: 1. Extensive antero-lateral MI in pts with FT in the infarcted region, treated by thrombolitics, could be a risk factor of thrombus on FT with a possibility of neurological complications. 2. FT in LV do not increase frequency of thrombi occurrence after MI. 3. At pts treated by primary PCI significantly rare the thrombosis is observed in comparison to pts treated by thrombolitics.

533 Study of the echocardiographic predictors for 10-year survival after thrombolytic therapy of acute myocardial infarction
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Aim: We studied retrospectively the predictive role of echocardiographic changes which took place after the thrombolytic therapy (TT) applied in acute myocardial infarction (AMI) concerning their predictive role in 10-year survival after hospital brain natriuretic peptide.

Methods: 70 consecutive patients younger than 65 years who were treated in our department between 1990 and 1995 and because of their first AMI and satisfied criteria were included in the study group. Streptokinase was used as a thrombolytic agent, which was administered in each patient within 6 hours after the onset of the chest pain. The control group consisted of 85 consecutive patients under the age of 65 who also were treated because of AMI during this period, but they couldn’t receive TT either because of the lack of indication or because of contraindication. Echocardiography was performed in each patient within 72 hours after the admission and before the 10th and 16th days of the myocardial infarction. The 10-year survival was 73% in the thrombolytic group (T gr) and 59% in the control group (C gr), and within that there was no difference in the frequency of the event-free survival - lack of myocardial reinarfarction and/or coronary revascularisation - between the two patient groups.

Results: On the basis of the first echocardiogram there was significant difference between the T gr and the C gr only in the frequency of left ventricular (LV) ejection fraction (EF) lower than 40% (T gr: 5% vs C gr: 16%, p<0.05). Among the patients who died within these 10 years LV EF lower than 40% (T gr: 11% vs 2%; C gr: 29% vs 6%) and the LV aneurysm (T gr: 11% vs 2%; C gr: 9% vs 2%) were more frequent in both groups (p=NS for all). Incidence of LV thrombus was detected less frequently in patients who died (T gr: 0% vs 12%; C gr: 6% vs 14%). As compared to the data of the C gr at least 10% improvement of the LV wall motion abnormality (WMA) index (T gr: 55% vs C gr: 16%, p<0.001) and the improvement of the quality of the most severe LV segmental WMA (T gr: 25% vs C gr: 9%, p<0.05) were more frequent in patients who received TT. In the T gr the improvement of the quality of the most severe LV segmental WMA was as follows: sensitivity 39%, specificity 89%, negative predictive value 30%, positive predictive value 91% from the point of view of the 10-year survival.

Conclusion: Qualitative and quantitative improvement of the LV WMA is a good prognostic factor in AMI. These changes following TT refer to successful coronary reperfusion and the lack of pathological LV remodeling.

534 Left ventricle diastolic function after acute myocardial infarction: association with autonomous nervous balance assessed by heart rate variability
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Background: Coronary artery by-pass graft on the systolic and diastolic function: women versus men
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535 Serial echocardiographical follow-up of ventricular function in patients with reperfusion for ST-elevation myocardial infarction - correlations with BNP
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Background: Echocardiographical assessment of left ventricular ejection fraction and wall motion score index and also of ventricular long axis function, diastolic dysfunction and post-infarction remodeling is crucial for risk stratification in patients with ST-elevation myocardial infarction (STEMI). In this population, elevated brain natriuretic peptide (BNP) levels were significantly associated with adverse outcome beyond left ventricular ejection fraction (LVEF) and identified patients with survival benefit from early invasive strategy. However, correlations of BNP levels to echocardiographical measurements of ventricular function by serial follow-up to predict risk of future clinical events have not been studied.

Methods: The study (in-course) recruited 61 patients (49 males, mean age 53.95±14.05 years) with Killip class I STEMI with indication of reperfusion. Serial echocardiographical assessment of left and right ventricular function were performed before reperfusion, after 24 hours, at hospital discharge and at 30 days. Blood levels of BNP were measured on admission, 24 hours following reperfusion and at 30 days and the patients completed 30 days follow-up.

Results: Reperfusion by primary angioplasty was performed in 7 patients (11.4%), the rest were thrombolysed with various fibrinolytic agents. BNP levels were lower on admission (mean 86.27 pg/mL) and increased significantly after 24 hours (mean 196.38 pg/mL), irrespective of success of reperfusion, baseline LVEF and wall motion score index (WMSI), presence of diastolic dysfunction and of longitudinal dysfunction assessed by mitral annulus plane systolic excursion (MAPSE) assessed in 4 points. However, BNP level at 24 hours and at 30 days was correlated with WMSI at 30 days (r=0.17, p=0.006) and had a tendency towards correlation with left atrial volume (r=0.09, p=0.05), but not with ventricular volumes. No predictive parameters for clinical events and cardiac death were identified by serial echocardiography in correlation with serial BNP levels in this small preliminary study.

Conclusion: The early (24 hours) and late (30 days) elevation of BNP in patients with reperfused STEMI seems to correlate with late echocardiographical alterations of WMSI and left atrial volume, reflecting pathological left ventricle remodeling and strain. Prognostic implications of these correlations remain to be further evaluated.

536 Effects of the coronary artery by-pass graft on the systolic and diastolic function: women versus men
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The results of CABG procedures are related to factors that influence the systolic and diastolic function of the left ventricle.

Aim: The comparison of the CABG results of the ventricular function in women versus men.

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