Methods: BELLO (Balloon Elution and Late Loss Optimization) is a prospective, multicenter trial that randomized 182 patients with lesions located in small vessels to treatment with paclitaxel DEB and provisional bare-metal stenting (n = 90) or PES implantation (n = 92). Seventy-three of the patients had diabetes mellitus; of these 38 were treated with DEB and 36 with PES. We evaluated angiographic in-stent (in-balloon) late loss, angiographic restenosis, target lesion revascularization, and major adverse cardiac events (MACE; death, myocardial infarction, target vessel revascularization) at 6 months in the two groups.
Results: Baseline characteristics were well matched. The reference vessel diameter was 2.15±0.24 and 2.24±0.2 (p=0.069), respectively in patients treated with DEB and PES. The primary endpoint of in-stent (in-balloon) late loss was significantly less with DEB compared with PES (0.05±0.41 mm vs. 0.30±0.51 mm; p=0.033. At 6 months, DEB and PES were associated with similar rates of angiographic restenosis (6.3% vs. 16.1%; p=0.212), target lesion revascularization (5.3% vs. 11.1; p=0.357), and MACE (7.9% vs. 22.2%; p=0.083).
Conclusions: In diabetic patients the treatment of small-vessel disease with a paclitaxel DEB was associated with less angiographic late loss and similar rates of restenosis and revascularization as a PES.

TCT-333

The predictors of new stroke in acute coronary syndrome

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Background: Patients with coronary artery disease (CAD) are increased risk of stroke. Especially, patients with acute coronary syndrome (ACS) are more increased risk of stroke. The aim of this study was to analyze the prognostic accuracy of selected clinical and laboratory variables in stroke risk prediction following discharge after ACS.
Methods: We conducted a retrospective analysis of collected data on 1037 consecutive patients who had been hospitalized with ACS between May 2006 and April 2009 at our centers. The patients in ACS were divided into unstable angina group, Non-ST elevation myocardial infarction (NSTEMI) group and ST elevation myocardial infarction (STEMI) group. Patient's demographic and clinical characteristics and echocardiographic and laboratory findings were evaluated in stoke group and non-stroke group.
Results: The patients were 490 men and 547 women (47:53%) with mean age of 64±12 years. Stroke was developed in 44 of 1037 patients (4.2%). Mean event duration was 406 days. Stroke group is significantly lower hemoglobin than non-stroke group. Stroke group is significantly higher incidence of atrial fibrillation and NSTEMI, but, lower incidence of UA and NSTEMI. In multivariate logistic regression analysis, NSTEMI (p=0.001, hazard ratio: 0.001), atrial fibrillation (p=0.032, hazard ratio: 4.612) and prior stroke (p=0.032, hazard ratio: 4.595) were the independent predictors associated with stoke after adjustment of age, sex, hypertension, diabetes and hemoglobin.

Variables	Total (n=1037)	Stroke (-) (n=993)	Stroke (+) (n=44)	P-value
Age (years)	64.0 ± 12.6	63.8 ± 12.6	66.8 ± 12.5	0.128
Male (%)	490 (47.3%)	465 (46.8%)	25 (5.1%)	0.126
Hypertension (%)	416 (40.1%)	401 (40.4%)	15 (34.1%)	0.251
Diabetes (%)	312 (30.1%)	301 (30.3%)	11 (25.0%)	0.285
Hemoglobin	12.9 ± 1.9	12.9 ± 1.9	12.1 ± 1.8	0.007
Atrial fibrillation (%)	124 (12.0%)	113 (11.4%)	11 (25.0%)	0.011
UA (%)	384 (37.1%)	374 (37.7%)	10 (22.7%)	0.029
NSTEMI (%)	388 (37.5%)	356 (35.9%)	32 (72.7%)	<0.001
STEMI (%)	264 (25.5%)	262 (26.4%)	2 (4.5%)	<0.001
LVEF (%)	56.2 ± 12.5	56.3 ± 12.5	55.7 ± 9.7	0.740

Conclusions: NSTEMI, prior stroke and atrial fibrillation might be helpful to predict new stoke in ACS.

TCT-334

Heart rate reserve for discrimination false negative from true negative result in exercise treadmill test.

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Background: False negative result in exercise treadmill test (ETT) is still problematic to physician due to age, gender, medication, and medical history. The aim of this study was to determine whether the heart rate recovery (HRR) and heart rate reserve (HR reserve) discriminate false negative from true negative result in ETT.
Methods: We enrolled 738 patients to visit to our hospital due to typical chest pain. Patients underwent symptom-limited exercise treadmill testing using modified Bruce protocols and Computer tomography (CT) or coronary angiography (CAG) for evaluation of coronary artery disease (CAD). We calculated the Duke treadmill exercise score (DTES) and divided the patients into low-, intermediate- and high-risk according to DTES. Also, HRR was calculated as maximal HR minus recovery 1 min HR and HR reserve was calculated as (peak HR-supine HR)/(220-age-supine HR).The patients with low risk DTES was divided into two groups according to presence of significant CAD in CT or CAG; true negative (TN) group (645 patients, 55.3±10.7 years) and false negative (FN) group (93 patients, 59.3±8.4 years).
Results: There was higher incidence of male and older in FN group. The HRR (34.1±11.5 vs 29.7±11.8, p=0.001) and HR reserve (82.7±18.6 vs 70.8±20.9, p<0.001) in FN group was significantly higher compared to it in TN group. In multivariate logistic analysis, the HR reserve was independent predictor for discrimination FN from TN group after adjustment of age, sex, diabetes, hypertension and medication history like beta blocker and calcium channel blocker, and nitrate. (OR: 0.968, p<0.001) The cutoff value of HR reserve for prediction of FN was 77 with 60.1% of sensitivity and 59.1% of specificity.
Conclusions: The HR reserve might be a useful predictor for discrimination false negative from true negative result in exercise ECG.

TCT-335

Angiographic findings and clinical predictors of coronary artery disease in high-risk, asymptomatic patients undergoing kidney transplantation evaluation.

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Background: Assessment of surgical risk before kidney transplantation (KT) is challenging due to low sensitivity of non-invasive tests. Coronary angiography (CA) is generally used, at least in high-risk patients, despite its high cost, low availability and associated morbidity. We examined the findings of CA in a retrospective cohort of asymptomatic patients undergoing pre-KT evaluation in a high volume center.
Methods: High-risk patients, defined by one of the following, were analyzed: (1) presence of diabetes mellitus (DM); (2) cerebrovascular disease; (3) ≥3 years of dialysis; (4) ≥3 coronary artery disease (CAD) risk factors. Patients with known CAD were excluded. CA analysis and Duke Jeopardy score were executed by agreement between two interventional cardiologists. Comparison between patients with and without CAD applying multiple regression analysis was performed to identify independent predictors of CAD.
Results: A total of 380 patients with CA performed between Jan/11-Dec/12 were retrospectively analyzed. Mean age was 53+12 years, 64% were male and median time of dialysis was 19 months. Hypertension was present in 93% and 74% had DM. Severe lesions (> 70% stenosis by visual estimation) were found in 39%; among those, 54% had multivessel disease. However, high-risk anatomy was not frequent (multivessel disease including proximal LAD = 22%; left main >50% stenosis = 5%; at least one chronic total occlusion = 18%). Duke score was 1.4 + 1.8 (median = 1). After diagnosis, 73 patients underwent revascularization. The only predictors of CAD were age (OR = 1.040, 95% CI = 1.015, 1.065, p <0.001) and hyperlipidemia (OR = 1.614, 95% CI = [1.00; 2.605], p = 0.050). Complications associated to CA occurred in 1.3%.
Conclusions: CA as screening is safe. Even though one third of patients showed severe CAD, anatomy related to surgical high-risk as left main/proximal LAD/ multivessel disease were less common and Duke score was low. Decision to perform CA before KT can be improved by a better combination of risk factors, especially considering the lack of evidence favoring preventive revascularization.