CONCLUSION The value of TnI after PCI was highly related to the incidence of short-term (6-months) MACE after PCI. Measuring TnI value after PCI might be easy-to-use predictor for post-procedural MACE and patient prognosis.

**TCTAP A-069**

Admission Low-Density Lipoprotein Cholesterol Is Associated with 30-Day Mortality but Not with Long-Term Clinical Outcome

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**BACKGROUND** It is well known that low-density lipoprotein cholesterol (LDL-C) is a risk factor for atherosclerosis. However, the relationship between admission LDL levels and clinical outcome in patients underwent percutaneous coronary intervention (PCI) has not been established. The aim of this study was to evaluate the effect of admission LDL-C on short- and long-term clinical outcomes.

**METHODS** Among patients underwent PCI from single center prospective registry, total 2,638 patients without history of dyslipidemia and with fasting lipid profiles measured within 24 hours of admission were selected for analysis. Patients were divided into 4 groups according to the quartile of LDL-C as: Q1 (<86 mg/dl; n = 655), Q2 (86 to 109 mg/dl; n = 657), Q3 (110 to 134 mg/dl; n = 655), and Q4 (LDL-C >134; n = 671). Primary endpoint was patient-oriented composite outcome (POCO) consisted with any death, myocardial infarction, and any revascularization for 3-year of follow-up. Secondary endpoint was any death at 30 days after index PCI.

**RESULTS** When compared with other groups, patients in Q1 group were older and thinner. The incidence of hypertension, diabetes, chronic kidney disease, previous myocardial infarction, previous PCI was higher in Q1 group. The incidence of myocardial infarction was similar among groups. Although, the rate of multi-vessel disease and multi-vascular PCI was similar among groups, PCI for chronic total occlusion was most frequent in Q1 group. The POCO was highest in Q1 group (22.3% vs. 19.3% vs. 16.9% vs. 17.3%, log-rank p = 0.015; Figure) and mortality at 30 days was also higher in Q1 group (7.0% vs. 3.3% vs. 2.7% vs. 2.4%, p <0.001). After exclusion the patients with mortality at 30 days, the POCO was not different among groups (16.4% vs. 16.5% vs. 14.6% vs. 15.3%, log-rank p = 0.651). However, LDL-C was not an independent predictor for both endpoints on multivariate analysis.

**CONCLUSION** In our registry, low LCL-C on admission was associated with 30-day mortality but not with long-term clinical outcome. However, this finding is related to confounding by baseline characteristics. Thus, more intensive lipid lowering therapy may results in better clinical outcomes.

**TCTAP A-070**

Impact of Hypertension on 5-Year Clinical Outcomes in Patients with Significant Coronary Artery Spasm; A Propensity Score Matching Study

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**BACKGROUND** Hypertension (HTN) is known to be a risk factor of significant coronary artery disease (CAD). However, currently there is no enough available data with larger study population with long-term clinical outcomes of significant coronary artery spasm (CAS) patients (pts) with HTN in real world clinical practice.

**METHODS** A total of 3,349 consecutive pts without significant CAD underwent acetylcholine (Ach) provocation test and only pts with significant CAS were enrolled. Significant CAS was defined as >70% of narrowing by incremental intracoronary injection of 20, 50 and 100 μg into left coronary artery. Pts were divided into two groups based on the presence of HTN: the HTN group (n=1,489), the Normotensive group (n=1,860). To adjust potential confounders, a propensity score matched (PSM) analysis was performed using the logistic regression model.

**RESULTS** After PSM analysis, 2 propensity-matched groups (1,143 pairs, n = 2,286, C-statistic=0.720) were generated and, the baseline characteristics of the two groups were balanced. In clinical outcomes up to 5-year, there were similar incidence of individual hard endpoints including mortality, myocardial infarction, revascularization and recurrent angina requiring repeat coronary angiography. Hypertension was not an independent predictor of adverse clinical outcomes in pts with CAS (Table).

**CONCLUSION** Despite the expected endothelial dysfunction, hypertension was not associated with a worsening factor for adverse clinical outcomes in pts with significant CAS documented by intracoronary Achprovocation test, suggesting that the mechanisms and risk factors of CAS may be different from those of atherosclerotic CAD.
Clinical Outcomes of Multivessel Coronary Intervention in Octogenarians Hospitalized for Acute Coronary Syndrome: Comparisons with Younger Counterparts

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BACKGROUND Octogenarians (aged ≥80 years) are high risk patients and largely under-represented in clinical trials. The use of evidence-based therapy is, therefore, lower in this age group than in younger individuals, resulting in a reliance on non-evidence-based decision-making. The elderly usually have higher prevalence of comorbidities and more often experience complications during and after revascularization procedures. There is a trend towards increased number of PCI procedures in the elderly, but this is troubled by increased short and long term morbidity and mortality. Our aim was to evaluate clinical outcomes of PCI after ACS in patients older than 80 years, compared to their younger counterparts.

METHODS From January 2012 to November 2013 we included 212 consecutive all comer patients in our hospital with ACS undergoing PCI who were divided into 2 groups according to age: ≥80 years (n = 74) and <80 years (n = 138). Baseline clinical characteristics, indications for coronary intervention, in hospital outcomes and 1 year outcome were obtained. All patients received heparin bolus (5000–10000 IU). Routine antiplatelet treatment included long-term aspirin and clopidogrel for one year. Study endpoint was in hospital outcome (Renal impairment, MI, LVF, emergency revascularization, death) & 1 year follow up for MI, repeat revascularization & death.

RESULTS The elderly patients aged ≥80 years were more frequently male (86%) and nonsmoker at present (41% vs. 63%, p=0.003), had higher prevalence of hypertension (60% vs. 50%, p=0.12), more often presented with NSTEMI (54% vs. 23%, p<0.001). Admission ejection fraction (EF) >50% were higher in <80 years group (46% vs. 6.5%, p=0.02). Elderly group had higher incidence of TVD and LM disease (36% vs. 26% and 9.5% vs. 2.9%, p=0.07) & lesions treated were mostly ostial (16.2% vs.5.1%, p=0.007) and calcified (31.1% vs. 14.5%, p=0.004). Procedural success (TIMI III) were high in both groups, but still lower in the elderly as compared to younger group (95% vs. 97%, p=0.65). The elderly had higher incidence of post PCI bleeding, CIN, MI, LVF & death (9.5% vs.6.1%, 8.2% vs. 3.7%, 6.8% vs. 5.8%, 9.5% vs. 5.1% & 5.4% vs. 3.6%, p=0.07). Whereas emergency revascularization were higher in younger group (5.4% vs. 6.5%, p=0.07). At 1 year MI & death were higher in elderly group (9.5% vs.6.5%, 8.2% vs.6.5% p=0.66), whereas repeat revascularization were higher in younger group (6.8% vs.8%, p=0.66).

CONCLUSION Octogenarians undergoing PCI due to ACS are mostly hypertensive male, usually present with NSTEMI and poor LV function. They face more bleeding and vascular site complications during PCI, usually have more LM and TVD with more ostial and calcified lesion in compare with younger group. Though procedural success is similar with younger group they face more post PCI bleeding, CIN, LVF, MI. Repeat Revascularization was higher in younger group. At 1 year follow up MI & repeat revascularization were slightly higher in octogenarians whereas repeat revascularizations were higher in younger group. Though immediate interventional procedure related complications are more in octogenarians, a long term outcome seems to be promising & comparable with younger counterparts. Further studies into the optimal ACS management strategy in octogenarians are warranted.