TCT-341
Impact of Chronic Statin Therapy on Development of Glucose Intolerance and New-onset Diabetes Mellitus in Asian Population

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Background: There have been several reports that statin therapy is associated with a slightly higher incidence of new-onset diabetes mellitus(DM) or impaired glucose intolerance(IGT). It is still controversial whether the chronic statin therapy is a risk factor of IGT and new onset DM, in Asian population.

Methods: We investigated the 13,561 patients(pts) that was HbA1c level <6.0% and fasting glucose level <124 mg/dl (statin therapy group = 4016 and control group = 9545).

To adjust potential confounders including age, gender, hypertension, hyperlipidemia, chronic kidney disease, hyper/hypo-thyroidism, lipid profile, beta-blocker, diuretics, a propensity score matched analysis was performed using the logistic regression model. The primary end-point was the cumulative incidence of new-onset DM, IGT, and impaired fasting glucose(IGF). Also, Multivariable Cox-regression analysis adjusted aforemention variables was performed to determine the impact of statin therapy on the incidence of new-onset DM, IGT, and IGF.

Results: Mean follow-up duration was 534 ±604 days in all group, and 608±607 days in propensity score matching group. Baseline characteristics was similar between the two groups except hyperlipidemia (11.1% vs. 3.5%, p<0.001). In Kaplan-Meyer curve, there was no difference between the two groups (p=0.501, figure A). Also, in cox-regression analysis performed in all pts, statin therapy was not associated with the increased incidence of primary end-point (figure B).

Conclusions: In our study, there was no clear association with statin therapy and IGT and new-onset DM in a series of cardiovascular pts in Asian population.

TCT-342
Impact of Diabetes Mellitus on Clinical Outcomes After Percutaneous Coronary Intervention With Drug-Eluting Stents for Unprotected Left Main Coronary Artery Disease

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1Coronary Artery Disease, Coronary Intervention With Drug-Eluting Stents for Unprotected Left Main Disease.

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Conclusions: In our study, there was no clear association with statin therapy and IGT and new-onset DM in a series of cardiovascular pts in Asian population.

TCT-343
Paclitaxel Drug Eluting Balloon Versus Standard Angioplasty To Reduce Restenosis In Diabetic Patients With In Stent Restenosis Of The Superficial Femoral And Proximal Popliteal Artery

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Background: Paclitaxel Drug Eluting balloon (PDB) for in-stent restenosis (ISR) in the superficial femoral artery (SFA) and proximal popliteal artery (PA) has a recurrent stenosis rate of up to 70% within 12 months. Aim of the study was to test the ability to reduce this high recurrency rate with a Paclitaxel Eluting Balloon (PEB).

Methods: Since January 2010, 44 consecutive patients with symptomatic in-stent restenosis of the SFA or proximal PA were treated with PEB (Admeda In.Pact, Medtronic, Minnesota, USA). The occurrence of re-restenosis and repeat intervention at 1-year follow up was compared to those of 42 consecutive patients treated with PDB from January 2008 to December 2009.

Results: No significant difference in terms of clinical, angiographic and procedural characteristics were observed among the two study groups. Respectively: Age 74±11 in PEB vs 76±7 in PDB, P=0.1; insuline therapy 23/44(52%) vs 21/42(48%), P=0.9; Rutherford Class 1/3(24%) vs 33/44(75%), P=0.1; BMI 28±4.6 in PEB, P=0.8; serum creatinine 1.0±1.5mg/dl vs 1.02±1.5mg/dl, P=0.9, esclusive ISR 23/44(52%) vs 28/42(66%), P=1; re-restenosis length 131±86mm in PEB vs 138±85mm, P=0.4. Procedural success, defined as a residual stenosis > 30% in the restenotic segment (stent ±5mm of proximal and distal edges), was obtained in all treated lesions and no adverse clinical events occurred during hospitalization in both groups. At one-year follow-up, 6 patients died (3 in PEB and 3 in PDB), one patient in PDB group underwent major amputation. Restenosis, assessed by angiography or ultrasound, occurred in 8/44(18%) PEB vs 28/37(72%) PDB, P=0.05. Repeat angioplasty for symptomatic in stent re-restenosis occurred in 6/44(13%) PEB vs 13/42(31%) PDB, P=0.1.8.

Conclusions: Repeat balloon angioplasty for ISR in the SFA and proximal PA artery using PEB showed a significant reduction in re-restenosis and repeat angioplasty compared to PDB at 1-year follow-up.

TCT-344
Importance of Optimal Reperfusion in Diabetic Patients Treated with Primary Percutaneous Coronary Intervention for STElevation Myocardial Infarction

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Background: Diabetic patients (DP) show more complex coronary artery disease than non-diabetic patients (N-DP) and diabetes mellitus (DM) predicts adverse outcome after MI. We sought to investigate the interaction of reperfusion and DM on mortality after STEMI treated with primary PCI.

Methods: A multicenter registry of consecutive patients treated with primary PCI in 3 centers. Vital status was obtained through municipality records. Reperfusion was scored by TIMI flow. Cox regression was used to analyze effect modification of the correlation between sub-optimal reperfusion (TIMI-3) and mortality by DM.

Results: In total, 385 DP and 3063 N-DP were treated with primary PCI. DP were older (66.7 vs. 62.8 years in N-DP, p<0.001), less often male (68.4% vs. 75.9% in N-DP, p=0.001), more frequently suffered a previous MI (14.3% in DP vs. 10.3% in N-DP, p=0.018) and renal insufficiency (12.5% vs. 2.6% in N-DP, p<0.001). Moreover, DP showed more multi-vessel disease (31.3% vs. 20.3% in N-DP, p=0.001). TIMI flow before and after PCI was similar. Mortality was higher in DP (30 day: 9.1% vs. 3.8% in N-DP, p<0.001), 1 year: 14.5% in DP vs. 6.1% in N-DP, p<0.001). Furthermore, DP patients showed substantially worse 1 year mortality after sub-optimal reperfusion compared to N-DP (figure), an interaction which was confirmed by cox regression (interaction HR 2.36, 95% CI 1.11-5.03 after correction for confounders).