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

Sang-Ho Park1, Seung-Woon Bhat2, Ung Jun3, Se-Whan Lee4, Won-Yong Shin5, Seung Jin Lee1, Dong-Kyu Jin2, Byoung Geol Choi2, Se Yeon Choi7, Sung Il Je8, Sun Won Kim1, Jin Oh Na2, Seong woo Han3, Cheol Ung Choi4, Hong Eay Lim4, Jin Won Kim5, Eung Ju Kim2, Chang Gyu Park3, Hong Seong S6, Dong Joo Oh6,1
1Cardiology Department, Soonchunhyang university cheonan hospital, Cheonan, Korea, Republic of, 2Cardiovascular Center, Korea University Guro Hospital, Seoul, Korea, Republic of

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 aforementioned 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±670 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

Giuseppe Ferrante1, Marie-Claude Morice1, Olivier Darremont2, Didier Carrié 3
1Coronary Artery Disease, Somenchunhyang university cheonan hospital, Cheonan, Korea, Republic of, 2Cardiovascular Center, Korea University Guro Hospital, Seoul, Korea, Republic of

non-diabetic patients were found with respect to MI (10.3% vs 6.1%; p=0.19), TLR (6.9% vs 4.9%, p=0.48) or TVR (16.1% vs 9.0%, p=0.04).

At multiple cox regression analysis, diabetes was a significant predictor of death/MI/stroke (HR 2.39, 95% CI 1.30-4.27, p=0.005), of death/MI/TLR (HR 1.97, 95% CI 1.12-3.46, p=0.018) and of death/MI/TLR/ stroke (HR 2.08, 95% CI 1.21-3.58, p=0.008).

Conclusions: In patients undergoing PCI with drug eluting stents for unprotected left main coronary artery disease, diabetes status is associated with a significantly worse prognosis at 2-year follow-up.

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

Francesco Listro1, Paolo Angioli1, Guido Bellandi1, Leonardo Bolognese1, Kenneth Ducz1, Iulo Porto1, Filippo Tarini1, Giorgio Ventorozzo2
1San Donato Hospital, Arezzo, Italy

Background: Plain Old Balloon Angioplasty (POBA) 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 recurrence 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 (Admiral 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 POBA 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 POBA, P=0.1; insulae therapy 23/44(52%) vs 21/48(45%), p=0.9; Rutherford Class>3 33/44(75%) vs 28/43(67%), p=0.8; seman creatinine 1.0±1.5mg/dl vs 1.0±1.5mg/dl, p=0.9; occlusive ISR 23/44(52%) vs 28/46(66%), p=0.1; restenosis length 131±86mm vs 138±85mm, p=0.4. Procedural success, defined as a residual stenosis > 30% in the restenotic segment (sten %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 POBA), one patient in POB group underwent major amputation. Restenosis, assessed by angiography or ultrasound, occurred in 8/41(19%) PEB vs 28/39(72%) POBA, p=0.05. Repeat angioplasty for symptomatic in stent re-restenosis occurred in 6/44(13%) PEB vs 13/42(31%) POBA, p<0.05.

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 POBA at 1-year follow-up.

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

M.A. Velders1, H. Boden1, B.L. van der Hoeven1, AACM Heestermans2, VAWM Uman3, SH Hofma4, JW Jukema1, M.J. Schalij1, A. J. van Boven4
1Leiden University Medical Center, Leiden, Netherlands, 2Medical Center Alkmaar, Alkmaar, Netherlands, 3Medical Center Leeuwarden, Leeuwarden, Netherlands

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% 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 suboptimal 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).