TCTAP A-201
Impact of Simvastatin on Development of New-onset Diabetes Mellitus in Asian Population: Three-year Clinical Follow up Results
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Background: Although statin therapy is beneficial for vascular diseases, the relationship between specific statin therapy and incidence of new-onset diabetes mellitus (DM) remains uncertain. We evaluated the impact of Simvastatin therapy on the development of new-onset DM from 3-year clinical follow-up data in a series of Asian population.

Methods: A total of 3,436 consecutive patients who did not have DM were enrolled. New-onset DM was defined as having a fasting blood glucose ≥126 mg/dL or HbA1c ≥6.5%. Baseline characteristics between the Simvastatin and the control group were propensity score matched (PSM, C-statistic=0.808). Three-year cumulative incidence of new-onset DM was compared between the two groups.

Results: At baseline, patients in the Simvastatin group showed higher prevalence of obesity, male gender, dyslipidemia, coronary artery disease, smoking and alcoholic history, and higher levels of HbA1c, fasting glucose, triglyceride, fibrinogen, and ALP. Three-year clinical follow up results showed a higher incidence of new-onset DM in the Simvastatin group (3.8% vs. 2%, p=0.017). Following PSM (C-statistic=0.808), the 2 groups were well balanced except for higher levels of fibrinogen, ALT, and ALP in the Simvastatin group. After adjustment, there was no difference in the incidence of new-onset DM between the 2 groups up to 3 years (Figure).

Conclusion: In our study, the relationship between the use of Simvastatin and the incidence of new-onset DM remains unclear. Long-term follow up with a larger study population will be necessary for further information.

TCTAP A-202
Is Acetyltransferase Activity an Indicator of BMS Condition in the Follow-up of Coronary Stenting
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Background: In-stent stenosis remains one of the most thrilling problems of interventional cardiology, and the search of the ways of its solution includes the study of causes and mechanisms of neointimal hyperproliferation. For this reason the study of the impact of N-acetylation phenotype on the process of restenosis seems very interesting.

Methods: Retrospective study included 100 male patients aged 56.8 ± 6.1 years on the average, who received 116 coronary BMS for chronic CHD from December 2003 to January 2007. The patients have been selected for the study after control coronary angiography performed in 7.2 ± 2.2 months after PCI. The main inclusion criterion was the presence of in-stent stenosis (Group 1, n=50) and good mid-term results (Group 2, control, n=50) in the absence of known clinical and angiographic risk factors for restenosis development. Baseline angiographic data of patients and immediate results of PCI were evaluated by two independent experts. The standard Sulphadimine was used as the test-agent. After single peroral intake of 500 mg of Sulphadimine, the urine has been collected for 6 hours, and then the ratio of pro-metabolized (N-acetyl-sulphadimine) and non-metabolized sulphadimine in urine was determined with the help of high-effective liquid chromatography.

Results: Among the studied patients, there were 38% slow acetylators and 62% fast acetylators. The analysis of the distribution of acetylation phenotype on groups 1 and 2 revealed high statistically significant value of fast acetylators among patients with in-stent stenosis in the mid-term after PCI, F=0.0006.

Conclusion: We revealed reliable direct correlation between the velocity of acetylation processes and the degree of in-stent stenosis after coronary stenting with BMS in patients with chronic coronary heart disease.

TCTAP A-203
The “4S” Law for the Management of Iatrogenic AortoCoronary Dissection: Clinical Results and Importance of Immediate Bail-out Stenting
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Background: Iatrogenic aortoarterial dissection is a rare but potentially disastrous complication of percutaneous coronary intervention (PCI). However, there is a paucity of data on the optimal initial management of this complication. The aim of this study was to depict the characteristics and causes of iatrogenic aortoarterial dissection and to elucidate the importance of a new strategy based on immediate bail-out stenting.

Methods: We collected 18 cases of iatrogenic aortoarterial dissection during PCI in 8 cardiac catheterization centers between 2005 and 2013, which were managed by a single senior operator. A “4S” law based on immediate bail-out stenting performed within 15 min was the initial strategy in most cases. The characteristics, treatment, and in-hospital outcomes of the patients were evaluated.

Results: According to the NHLBI classification, 15 patients (83.3%) had extensive dissection (Type D to F) with acute closure (Type F) in 4 patients. In 3 patients (16.7%), the dissections were diagnosed during coronary angiography, and in 15 patients (83.3%), during PCI. From the 18 patients, 16 patients (88.9%) underwent bail-out stent implantation, with technical success in 14 patients. Among them, 13 patients followed the “4S” law, with 7.7 ± 3.2 min from onset of dissection to completion of bail-out stenting, and the procedural success rate was 100% with no deaths. Two patients died due to time delay (stenting > 15 min) and the third one died due to hemodynamic collapse because the guidewire failed to cross the true lumen. Conclusion: This study indicated that the “4S” law based on immediate bail-out stenting is a feasible and efficient strategy for the management of iatrogenic aortoarterial dissection.

TCTAP A-204
Abdominal Adiposity Measured with Dual Bioelectrical Impedance Analysis of Hospitalized Patients in the Cardiology Ward
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Background: Obesity is a well-known risk factor of cardiovascular disease. However, several reports demonstrated “obesity paradox”, while central obesity was associated with the highest risk of mortality, which suggests the significance of visceral fat measurement. Recently, a novel system with dual bioelectrical impedance analysis (DBIA-2000, Ohmeda healthcare, Kyoto) was developed. This technique do not need radiation exposure and the measurements were validated to have a good correlation with computed tomography.

Methods: A total of consecutive 60 patients (69.3 ± 10.6 years old, male 80%) admitted to the department of cardiology were measured their visceral fat areas with dual bioelectrical impedance analysis. Control group included 23 healthy volunteers (31.5 ± 8.3 years old, male 57%).

Results: The values of body mass index (24.0 ± 4.6 vs 21.6 ± 2.6, p=0.03) and visceral fat area (82.0 ± 51.6 vs 46.1 ± 15.7 cm², p<0.001) in the hospitalized patients