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Acute Coronary Syndromes

IMPACT OF DIABETES MELLITUS ON 5-YEAR CLINICAL OUTCOMES IN PATIENTS WITH SIGNIFICANT CORONARY ARTERY SPASM: A PROPENSITY SCORE MATCHING STUDY

Poster Contributions
Poster Hall B1
Saturday, March 14, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Insights from Subgroups: Age, Gender and Diabetes
Abstract Category: 2. Acute Coronary Syndromes: Clinical
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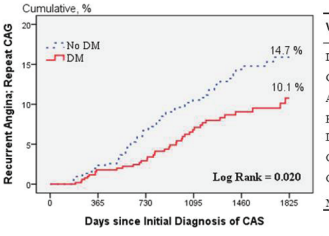
Background: Diabetes mellitus (DM) is known to be a risk factor of significant coronary artery disease (CAD). However, there is no currently available data with larger study population regarding long-term clinical outcomes of DM with CAS, particularly in a series of Korean population.

Methods: A total of 3,360 consecutive patients (pts) without significant CAD underwent acetylcholine (Ach) provocation test and diagnosed as significant CAS were enrolled. Significant CAS was defined as > 70% of luminal narrowing by incremental intracoronary injection. Patients were divided into two groups based on the presence of DM. To adjust potential confounders, a propensity score matched (PSM) analysis was performed. Major clinical outcomes up to 5 years were compared between the two groups.

Results: After PSM analysis, 2 propensity-matched groups (561 pairs, n = 1122, C-statistic=0.690) were generated and the baseline characteristics of the two groups were balanced. At 5 years, despite of similar incidence of individual hard endpoints including mortality, myocardial infarction and revascularization, the DM group was associated with lower incidence of recurrent angina requiring repeat coronary angiography than the non-DM group (HR; 0.60, 95% C.I; 0.40-0.90, p=0.014, Table and Figure).

Conclusion: Despite the expected endothelial dysfunction, DM was negatively associated with CAS and recurrent chest pain, suggesting that the mechanisms and risk factors of CAS may be different from those of CAD.

Table. Clinical Outcomes up to 5-years after Propensity Score Matching.



Variable, N (%)	HR (95%C.I)	p Value
DM	0.601 (0.400-0.902)	0.014
Gender	1.734 (1.052-2.858)	0.031
Age	1.024 (1.003-1.046)	0.022
Hypertension	0.992 (0.655-1.502)	0.971
Dyslipidemia	1.356 (0.912-2.018)	0.132
Current smokers	1.312 (0.797-2.158)	0.284
Current alcoholics	0.865 (0.540-1.387)	0.549
Myocardial_Bridge	0.788 (0.472-1.317)	0.365