Role Of Coronary Artery Calcium Score In Patients With Stable Angina Pectoris Underwent Multivessel Percutaneous Coronary Intervention

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Objectives: This study sought to identify whether coronary artery calcium score (CCS) is associated with procedure complexity, procedure-related complications and long-term clinical outcomes in patients with stable angina pectoris (SAP) underwent multivessel percutaneous coronary intervention (PCI).

Methods: 145 SAP patients (male/female, 103/42; age, 65±69 months) follow-up. Kaplan-Meier survival analysis showed that different cumulative non-events survival rates in female subgroup (100% vs 83.3% vs 75.0%, p<0.05).

Results: Mean age was 66.3±10.0 years and 83.8% of patients were males. Mean SYNTAX score was 28.22±7 (mean SYNTAX score in patients with Left main involved 33.5±4.5). Mean EuroSCORE II was 4.05±1.83. PCI was performed in all patients (n=70), in 52 pts (75.2%) before MIDCAB and in 24.8% of cases after surgery (interval 2.2±1.3 months). In 12 patients (18.6%) Left Main was involved and MIDCAB was performed prior to PCI. No intra-operative or in-hospital deaths were reported. At follow-up one cardiac death for acute inferior myocardial infarction occurred. Two patients with Left Main needed a repeated non-LAD revascularization: one case for an acute myocardial infarction and the other due to recurrent angina with in-stent restenosis at angiography. At 12±13 months follow-up the overall population freedom from MACCE was 82.6% (CI: 79.5% to 85.7%) and the freedom from TVR was 86.1% (CI: 82.9% to 89.3%). Despite the rate of MACCE and TVR was higher in patients with intermediate and high coronary risk than in patients with SYNTAX score ≥22, however such difference was not statistically significant (p>0.05).

Conclusions: Hybrid Coronary Revascularization is a viable option to perform a minimally invasive functionally complete revascularization in high risk patient that can’t undergo conventional revascularization. However this strategy has better results when performed on patients with a SYNTAX score ≤22. In our experience patients with Left Main HCR had a good outcome at the end of revascularization, although being burdened by an high TVR rate.

Other
Drug Eluting Stents versus Bare Metal Stents in Non-Insulin Dependent Diabetic Patients with Large Coronary Arteries

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Background: It is well known that the risk of restenosis and other adverse cardiac events with bare metal stents (BMS) is increased with smaller stent diameters especially in diabetic patients. Drug eluting stents (DES) have a particular benefit in small vessel disease that been repeatedly shown in several studies; however, whether this benefit occurs in diabetic patients with stenoses in large coronary arteries, is still not clear.

Objective: To evaluate the 6 months angiographic & clinical outcome of non-insulin dependent diabetic patients with large coronary vessels undergoing PCI using DES versus BMS. The objective was to evaluate the 6 months angiographic & clinical outcome of non-insulin dependent diabetic patients with large coronary vessels undergoing PCI using DES versus BMS.

Methods: 6 months angiographic follow up & clinical follow up for the occurrence of major clinical events were recorded, including death, myocardial infarction (MI), unstable angina, cerebrovascular accidents and target lesion revascularization (TLR) were performed for a 60 consecutive non-insulin dependent diabetic patients with stenoses in large coronary arteries, requiring PCI using stents of 3.0 mm or more in diameter. The patients were divided into 2 groups: Group I: 30 patients who underwent successful PCI using second generation DES & Group II: 30 patients who underwent successful PCI using BMS.

Results: Even though there were no statistically significant difference between both groups in the occurrence of cardiovascular events (death, MI, unstable angina, cerebrovascular accidents) there was a significantly lower incidence of angiographic restenosis and TLR in the DES treated group compared to BMS treated group (2.2% vs. 9.3%, P= 0.02). There was also a similar incidence of denovo lesions in both groups (6.7% in each group).

Conclusion: In non-insulin dependent diabetic patients with large coronary arteries, Second generation DES demonstrated significantly lower 6 months restenosis rate & TLR compared to BMS, while there was no significant differences in rates of cardiovascular events during 6 months follow up between both of them.

Age Differences in Long-Term Outcomes of Coronary Patients Treated with Drug Eluting Stents at a Tertiary Medical Center

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Background: Limited data exist on contemporary age-related differences in long-term outcomes of coronary patients receiving drug eluting stents. In this study we evaluate men (M) and women (W) differences for 2-year target lesion failure (TLF) in an unselected consecutive series of patients treated with the everolimus- (EES) and paclitaxel-eluting (PES) stents at a tertiary medical center.

Methods: Data on 347 consecutive patients (M 220, W 127) stented with the EES and PES were retrospectively analyzed. The primary endpoint of the study was to compare gender related outcomes in TLF defined as the combined endpoint of cardiac death, non fatal myocardial infarction and target lesion revascularization (TLR), Secondary endpoints included TLR, target vessel failure (TVF), target vessel revasculatization (TVR), acute stent thrombosis (ST) as defined by the academic research consortium (ARC) and cardiac death. The cine angiograms of the first consecutive 162 patients (M 105, W 57) were independently reviewed by a cardiologist blinded to clinical outcome and SYNTAX scoring was performed. Follow-up was achieved using medical records and/or phone calls and was censored at 2 years. Descriptive analysis was performed on all variables. Univariate analysis compared the men and women cohorts. Propensity matched analysis was performed to account for differences between M and W.

Results: M had more prior PCI and restenotic lesions and a higher prevalence of smoking. They also had longer length of disease and received more stents than W. M were older and had higher prevalence of prior stroke. Angiographic complexity was statistically similar between the 2 groups as judged by SYNTAX scoring (M 20.8 ± 13.8, W 19.7 ± 13.9, p = 0.650). At 2 years follow up, TLF was 27.4% and 24.8% (p=0.614) with no statistical difference between TLR (23.3% vs. 21.6%), cardiac death (2.8% vs. 3.2%) and definite and probable stent thrombosis (2.3% vs. 0.6%). Propensity matched analysis showed a statistically similar TLF and TVF between M and W (20.3 ± 16 vs. 27.5 ± 22 (p=0.363) and 28.8 ± 23 vs. 35.5 ± 29 (p=0.400) respectively).

Conclusion: In this cohort of patients receiving EES and PES, men and women had similar outcomes at 2-year follow-up consistent with recent reports in the current era of PCI.