Background: Chronic kidney disease (CKD) is highly prevalent with significant morbidity and mortality rates among patients with coronary artery disease (CAD). The SYNTAX Score (Synergy Between Percutaneous Coronary Intervention With TAXUS and Cardiac Surgery) predicts the outcomes of patients undergoing percutaneous coronary intervention. Our aim was to evaluate the correlation between CKD and severity of coronary artery stenosis by calculating SYNTAX Score in non diabetic CKD patients.

Methods: SYNTAX Score was calculated for 180 non diabetic patients with CKD scheduled for coronary angiography. Serum creatinine and 24 hour proteinuria prior to invasive coronary angiography (ICA) were assessed in all patients. Patients were divided into 2 groups according to their estimated glomerular filtration rate, (group 1 with eGFR >15 to < 30 ml/min per 1.73 m²) and (group 2 with eGFR ≥ 30 ml/min per 1.73 m²).

Results: coronary arteries lesions complexity increased progressively with decreasing kidney function as there were significant negative correlation between e-GFR and SYNTAX Score (r = −0.5, P = 0.0004) and significant positive correlation between 24 hr proteinuria and SYNTAX Score (r = 0.6, p = 0.0001). A multivariate regression analysis was performed for the predictors of the SYNTAX Score, including age and e-GFR. In this analysis, e-GFR (β = −0.098, p = 0.01) and age (β = 0.35, p = 0.001) were both independent predictors of higher Syntax Score.

Conclusion: Serum creatinine, estimated glomerular filtration rate and 24 hours proteinuria were predictors of higher SYNTAX Score.
implantation (90.0% vs. 89.4%, p=0.659) were similar between two groups. There was no difference in MACE rate and occurrence of stent thrombus between the two groups (p=NS), however, higher all-cause death rate in the ROTA group at 6 months, 1 and 2 years (p<0.05).

Conclusions: ROTA was used in patients with more lesion complexity. However, the MACE rate was comparable between ROTA and CA at 6 months, 1 and 2 years.

Conclusions:

Newer generation stents by means of more biocompatible components

Background:

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Intervention

Treated with Everolimus-Eluting Stent for Multivessel Percutaneous Coronary

Clinical Impact of Diabetes Mellitus on Long-term Clinical Outcomes in Patients

Treated with Everolimus-Eluting Stent for Multivessel Percutaneous Coronary

Intervention

MedStar Heart Institute, Washington, DC

Background: Newer generation stents by means of more biocompatible components limiting inflammatory response have led to significant improvement in the cardiovascular outcomes.

Objective: The purpose of the present study is to evaluate the long term outcomes of diabetic patients undergoing multivessel PCI with the use of everolimus-eluting stent (EES).

Methods: 350 consecutive diabetic patients that underwent multivessel PCI defined as ≥2 vessel with EES during the same index procedure were analyzed. Patients were further stratified by the need for insulin (n=55) or oral medications only (n=82) for control of blood glucose in comparison once that were non-diabetic (n=213).

Results: Diabetic group had more African-Americans, and higher hypertension, renal failure and higher body mass index compared to non-diabetics. At 1 year there was no significant TVR rate in the insulin group compared to non-diabetics (20% vs. 350 consecutive diabetic patients that underwent multivessel PCI defined as ≥2 vessel with EES during the same index procedure were analyzed. Patients were further stratified by the need for insulin (n=55) or oral medications only (n=82) for control of blood glucose in comparison once that were non-diabetic (n=213).

Results: Diabetic group had more African-Americans, and higher hypertension, renal failure and higher body mass index compared to non-diabetics. At 1 year there was no significant TVR rate in the insulin group compared to non-diabetics (20% vs. 4.3%, p<0.001). There were no differences in the over-all mortality and no cases of definitive stent thrombosis were noted in the entire cohort at 1 year.

Conclusions: Despite the higher risk nature of multivessel intervention in diabetic patients, with the use of newer generation EES, the event rates at one year in oral-diabetics were similar to the non-diabetic population. But patients with insulin treated diabetes continue to be a challenging population.

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Clinical Impact of Diabetes Mellitus on Long-term Clinical Outcomes in Patients Treated with Everolimus-Eluting Stent for Multivessel Percutaneous Coronary Intervention

MedStar Heart Institute, Washington, DC

Background: Newer generation stents by means of more biocompatible components limiting inflammatory response have led to significant improvement in the cardiovascular outcomes.

Objective: The purpose of the present study is to evaluate the long term outcomes of diabetic patients undergoing multivessel PCI with the use of everolimus-eluting stent (EES).

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Coronary Heart Disease and Genetic Polymorphisms; Clinical, Angiographic, Procedure Technique and Long-Term Follow-Up Evaluation Post Percutaneous Coronary Intervention; Major Events and Restenosis

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Background: There are clinic and genetic polymorphism differences in coronary artery disease (CHD). Percutaneous coronary intervention (PCI), clinical, angiographic, procedure technique may influence the evolution, major events (death, AMI, revascularization) and clinical restenosis. This study aims to evaluate if there are genetic polymorphism differences between patients with and without CHD and if it would influence in long-term follow-up after PCI.

Method and Results: It was studied two groups: the coronary disease group (CDG) with 182 patients of a closed health system with CHD that were submitted to PCI from 2001 and 2007 and to genetic follow-up evaluation until 12/31/2008; the control group (CG) with 36 patients, were angiographically normal and were also submitted to genetic evaluation. The polymorphisms evaluated were the ACE I/D and A166C genetic evaluation. The polymorphisms evaluated were the ACE I/D and A166C genetic evaluation. The polymorphisms evaluated were the ACE I/D and A166C genetic evaluation. The polymorphisms evaluated were the ACE I/D and A166C genetic evaluation.

In this period 221 procedures were performed in 182 patients of CDG. Qui square, Fisher exact and Student t test were used. Cox multivariate regression analysis were not performed because only three clinical characteristics and A166C had p=0.010 and in unfavorable analysis.

The CG and CDG patients were: female 20 (55.6%) and 49 (26.9%), (P=0.0007); age 55.9±11.1 and 60.8±10.5 (P=0.016); tobacco smokers 5 (13.9%) and 67 (36.8%), (P=0.0132); diabetes 4 (11.1%) and 48 (26.4%), (P=0.0802); hypertension 29 (80.6%) and 146 (80.2%), (P=0.9631); dyslipidemia 14 (38.9%) and 112 (61.5%), (P=0.0119); family history 12 (33.3%) and 60 (33.0%), (P=0.9659); obesity 9 (25.0%) and 60 (33.0%), (P=0.3476); ACE polymorphism DD 16 (44.5%), DI 17 (47.2%), II 3 (8.3%) and DD 81 (44.5%), DI 70 (38.5%), II 31 (17.0%), (P=0.3612); A166C

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