Long-term survival of diabetic patients with multivesel coronary artery disease treated with percutaneous coronary intervention and drug-eluting stents implantation — our experiences

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Introduction: The long-term prognosis of diabetic patients with multivessel coronary artery disease (CAD) treated by percutaneous coronary intervention (PCI) is significantly worse as compared to non-diabetics.

Aim: Assessing the impact of percutaneous revascularization using drug-eluting stents (DES) on the long-term prognosis in diabetic patients with multivessel CAD.

Methods and materials: The study included 28 diabetic patients (male 57.1%, mean age 66 ± 15 years, 25% using insulin) who underwent coronary angiography, were diagnosed to have multivessel CAD and afterwards underwent PCI. SYNTAX score was used to quantify the number, complexity and location of lesions. Incomplete revascularization is considered to be one of the essential factors that influences the poor long-term outcome of the PCI in the diabetic population. Therefore, our study also assessed the impact of complete revascularization on the MACE-free long-term survival.

Results: This interim analysis was done after the mean follow-up of 3.3 ± 1.9 years. Our calculated mean SYNTAX score was 26.¹ (28 ± 10). The majority of patients (21 patient, 75%) was located in intermediate SYNTAX group (score 23-32) and 4 patients in high SYNTAX group (score >33). All the patients that experienced MACE were those with signi-

ficantly higher SYNTAX scores (mean 31.1; 30.5 ± 7.5). The overall survival rate was 92.8%. Revascularization was considered as complete in 18 (64.3%) and incomplete in 10 (35.7%) patients. Patients who underwent complete revascularization had a 94.4% MACE-free survival, compared to 80% for those with incomplete revascularization.

Conclusion: Results obtained from our relatively small study showed that PCI using DES is useful and favorable method of treating multivessel CAD in diabetic patients. Also we showed that the SYNTAX score is useful tool in predicting long-term clinical outcomes, and that the complete revascularization should be a “must do” strategy in treating this group of patients.

KEYWORDS: diabetes, coronary artery disease, percutaneous coronary intervention.

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