Hellenic Journal of Cardiology 2011 Jan-Feb;52(1):15-22.

Long-term results after drug-eluting stent implantation in diabetic patients according to diabetic treatment.

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Abstract

INTRODUCTION:

In this prospective, single-center study we assessed the long-term results after drug-eluting stent implantation in non insulin-dependent diabetic patients compared to insulin-dependent patients.

METHODS:

A total of 610 consecutive diabetic patients (mean age 65 ± 9 years) underwent percutaneous coronary intervention with drug-eluting stent implantation. They were classified into 2 groups according to their diabetic treatment: 1) non insulin-dependent patients (477); 2) insulin-dependent patients (133). The primary endpoint was the composite of death, non-fatal myocardial infarction, bypass surgery and target lesion revascularization.

RESULTS:

Clinical follow up for more than 12 months (median 29 months) was achieved in 597/610 patients (98%). The insulin-dependent group had more women (29% vs. 18%, p=0.003), as well as a higher incidence of multivessel disease (84% vs. 65%, p<0.0001) and ejection fraction <40% (16% vs. 9%, p=0.037) compared to the non insulin-dependent group. The in-hospital results were almost the same in both groups, except for the incidence of non-Q myocardial infarction and bleeding complications, which were more frequent in the insulin-dependent group (9.8% vs. 4.8%, p=0.03, and 1.5% vs. 0%, p=0.047, respectively). During clinical follow up, no significant differences in the incidence of death or non-fatal myocardial infarction were observed, but target lesion revascularization and bypass surgery were more frequent in the insulin-dependent group (8.5% vs. 3.4%, p=0.01, and 4.7% vs. 1.3%, p=0.01, respectively). The event-free survival was lower in the insulin-dependent group (hazard ratio: 0.52; 95% confidence interval, 0.31-0.85, p=0.01).

CONCLUSION:

The implantation of drug-eluting stents in diabetics is associated with excellent in-hospital and long-term results. However, the long-term effectiveness in insulin-dependent patients is lower, because of the greater risk of new revascularization.

PMID: 21292603 [PubMed - indexed for MEDLINE]