Long Term Results of Drug Eluting Stenting in Saphenous Venous Grafts

Abid Assali, Hana Vaknin-Assa, Eli Lev, Igal Teplitsky, Tamir Bental, David Brosh, Shimrit Ukabi, Danny Dvir, Shmuel Fuchs, Alexander Battler, Ran Kornowski

Cardiology Department, Rabin Medical Center, Sackler Faculty of Medicine, Tel-Aviv University, Petah-Tikva, Israel

BACKGROUND: Percutaneous coronary intervention (PCI) of saphenous vein graft (SVG) lesions is associated with worse outcomes and high incidence of in-stent restenosis compared with PCI of native coronary arteries.

OBJECTIVES: The purpose of the present report was to evaluate the long-term clinical and angiographic outcomes of DES implantation in SVG lesions.

METHODS: Data from consecutive patients who underwent PCI of SVG were imputed into a clinical Database. We evaluated the clinical outcomes up to three years after DES stenting. Included 90 patients [97-grafts] [89% male]. Major adverse cardiac events (MACE) including death, myocardial infarction, target lesion revascularization (TLR), and target vessel revascularization (TVR) were recorded.

RESULTS: The patients mean age was 69±9yrs and the mean age of SVG was 10.6±5.2yrs. The presenting diagnosis was ACS in 71% of patients. And 59% had DM and 14% of lesions were 'in-stent' restenotic. Distal protection device was used in 39% of cases and procedural success was achieved in all patients.

	Six months [n=90]	One year [n=90]	Two years [n=83]	Three years [n=51]
Death	1-1.1%	1-1.1%	6-7.2%	6-11.7%
MI	2-2.2%	4-4.4%	5-6%	6-11.3%
Definite Stent thrombosis	0-0%	2-2.2%	3-3.6%	3-5.9%
TVR/graft	7-7.2%	11-11.3%	22-24%	26-4.2%
TLR/graft	6-6.2%	9-9.3%	19-21%	23-38%
CABG	1-1.1%	3-3.3%	5-6%	5-9.8%
MACE	9-10%	15-16.6%	25-30%	28-47%

CONCLUSIONS: DES implantation in SVG lesions appears safe with favorable and improved short-term outcomes. Nonetheless, long-term results are limited by disease progression in degenerated SVGs and high rate of target lesions/vessel revascularization procedures.