10030

Comparison of Clinical Outcomes Using Everolimus-Eluting Stents Versus Sirolimus-Eluting Stents in Acute Myocardial Infarction.

Background: Although there is relative consensus of the benefit of drug-eluting stents (DES) over bare-metal stents in the treatment of patients with acute myocardial infarction (AMI) on the basis of several clinical trials. Newer-generation DES with more hemocompatible polymers may improve the efficacy and safety in AMI.Methods: From January 2005 to December 2011, 211 consecutive patients who were treated with sirolimus-eluting stents (SES) or everolimus-eluting stents (EES) for AMI were included. The selection of both stents was made at each operator's discretion.Result: The rates of cardiac death were not significantly different at 30 days (EES 1.2% vs. SES 3.1%, p=0.39) and 1 year (EES 2.9% vs. SES 6.0%, p=0.33) between two groups. Target lesion revascularization (TLR) rates and the composite incidence of major adverse cardiac events (MACE) were trend to be lower in the EES group compared to SES group at 1 year (TLR 2.9% vs. 7.8%, p=0.16, MACE 5.7% vs. 13.8%, p=0.08). At 1 year, definite stent thrombosis (ST) occurred in 2 patients (1.7%) in the SES group compared to 0 (0%) in the EES group (p=0.27). Conclusion: We concluded that second-generation EES was non-inferior to SES for clinical outcomes in AMI at 1 year. ST rates were low in both groups at 1 year.