

COMPARISON OF DRUG-ELUTING STENTS FOR UNPROTECTED LEFT MAIN CORONARY ARTERY DISEASE IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

i2 Poster Contributions

Ernest N. Morial Convention Center, Hall F
Sunday, April 03, 2011, 3:30 p.m.-4:45 p.m.

Session Title: PCI - Acute MI

Abstract Category: 6. PCI - Acute MI

Session-Poster Board Number: 2506-548

Authors: *Doo Sun Sim, Youngkeun Ahn, Myung Ho Jeong, Young Jo Kim, Shung Chull Chae, Taek Jong Hong, In Hwan Seong, Jei Keon Chae, Chong Jin Kim, Myeong Chan Cho, Ki Bae Seung, Seung Jung Park, Chonnam National University Hospital, Gwangju, South Korea*

Background: This study compared outcomes of different types of DES used for LMCAD in patients with acute MI.

Methods: A total of 233 patients enrolled in the Korea Acute Myocardial Infarction Registry between Nov. 2005 and Jan. 2008 who underwent percutaneous coronary intervention (PCI) with DES for unprotected LMCAD were divided into 3 groups: sirolimus-eluting stents (SES), N=92; paclitaxel-eluting stents (PES), N=98; and zotarolimus-eluting stents (ZES), N=43. Clinical outcomes at 30 days, 6 and 12 months were compared.

Results: Baseline clinical and angiographic characteristics were similar among the 3 groups. ST-elevation MI accounted for 50.0%, 51.5%, and 46.5% in SES, PES, and ZES groups, respectively ($p=0.884$). The rate of PCI for isolated LMCAD was 19.6%, 11.2%, and 23.3%, ($p=0.137$). There were no differences in the rates of left ventricular ejection fraction ($48.7\pm 14.5\%$ vs. $48.3\pm 13.4\%$ vs. $48.2\pm 15.2\%$, $p=0.971$), pre-PCI TIMI 3 (39.1% vs. 43.9% vs. 39.5%, $p=0.778$), post-PCI TIMI 3 (92.4% vs. 94.9% vs. 83.7%, $p=0.080$), stent size, length and number, and peri-procedural complications including cardiogenic shock, ventricular arrhythmia, cardiopulmonary resuscitation, intra-aortic balloon counter-pulsation, and mechanical ventilation. In-hospital mortality was 12.0%, 10.2%, and 16.3% ($p=0.593$), respectively. The use of medications including cilostazol and statin were similar among the groups during admission and after discharge. One-month clinical outcome was similar with the death/MI rate of 12.0%, 13.3%, and 16.3%, respectively ($p=0.789$). At 6 months, there were no differences in the rates of death/MI (12.0% vs. 14.3% vs. 16.3%, $p=0.678$) and target-lesion revascularization (TLR) (4.3% vs. 3.1% vs. 2.3%, $p=0.806$). At 12 months, likewise, no statistical difference was noted among the groups in the rates of death/MI (13.0% vs. 17.3% vs. 18.6%, $p=0.652$), TLR (5.4% vs. 3.1% vs. 7.0%, $p=0.549$), and composite death/MI/TLR (18.5% vs. 20.4% vs. 25.6%, $p=0.635$).

Conclusions: The 12-month outcomes with the 3 types of DES were similar in patients with acute MI who underwent PCI for unprotected LMCAD.