COMPARISON OF SINGLE VERSUS TWO STENT TECHNIQUES IN TREATMENT OF UNPROTECTED LEFT MAIN CORONARY ARTERY STENOSIS

i2 Poster Contributions
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Background: Limited data is available on long-term outcomes of patients with distal unprotected left main coronary artery (LMCA) disease treated with different stent techniques using drug-eluting stents (DES). We compared 3-year outcomes of single- versus two-stent techniques in patients with unprotected LMCA disease treated with DES.

Methods: A total of 392 patients with distal unprotected LMCA disease who receivedDES with single (n=234) or two-stent (n=158) were evaluated. Primary end point of this study was the major adverse cardiac events (MACE), defined as the composite of death, myocardial infarction (MI), and target lesion revascularization (TLR).

Results: The two-stent group was likely to be more complex lesion subsets; more ACC/AHA type B2 or C lesions, higher SYNTAX score, higher involvement of three-vessel disease, and more frequently involvement of right coronary artery. After adjustment with weighted Cox model using the inverse probability of treatment weighting, the 3-year risk of death (HR, 0.77, 95% CI, 0.28-2.13, p=0.62) was similar in single-stent and two-stent groups. However, the risk of MI (HR, 0.38, 95% CI, 0.19-0.78, p=0.008), TLR (HR, 0.16, 95% CI, 0.05-0.57, p=0.005), and MACE (HR, 0.89, 95% CI, 0.22-0.67, p=0.0007) at 3 years were significantly lower in single-stent group.

Conclusions: Compared with two-stent technique, single-stent technique showed more favorable long-term clinical outcomes in patients with distal unprotected LMCA disease who received DES.