

Results of Unprotected Left Main Coronary Stenting Distinguished by Drug Eluting vs. Bare Metal Stenting: A Single Center Clinical Outcome Analysis

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Background: Unprotected left main coronary artery (ULMCA) disease is considered a surgical indication in most centers. However, in some cases prohibited from surgery, there is a need for percutaneous coronary intervention (PCI) in ULMCA disease. Our study aimed at assessing the clinical outcomes among patients undergoing stent-based ULMCA angioplasty at our institution and compared the results of drug eluting stents (DES) vs. bare metal stents (BMS) utilization.

Methods: We identified 77 consecutive patients who underwent PCI in ULMCA between 1/2003 and 5/2008. Procedural and angiographic data and clinical outcomes were obtained for all patients (excluding infarction-related cardiogenic shock) and distinguished between DES vs. BMS groups. Clinical follow-up was obtained for all patients at 6 months following PCI. Patients with emergent procedures due to cardiogenic shock were excluded from analysis.

Results: Baseline characteristics and results of ULMCA stenting distinguished by stent group are shown in **Table**:

	BMS (n=29)	DES (n=48)
Age (yrs)	77±13	73±11
Male (%)	52	63
Diabetes (%)	24	33
Prior MI (%)	28	42
LV dysfunction (%)	32	29
Distal LM bifurcation (%)	31	52
Renal insufficiency (%)	24	13
Anti-IIb/IIIa utilization	21	50
EuroScore*	11.2±11	7.8±6.4
6 month outcomes		
Death (%)	27	6.3*
MI (%)	3.5	0
CABG (%)	6.9	4.2
Stent thrombosis (%)	0	0
TVR (%)	14.0	4.2
MACE (overall) *	88.0	12.5*

* Statistical significant difference ($p \leq 0.05$)

The six-month mortality rate [univariate] was correlated with DES utilization ($r=-0.3$; $p=0.009$).

Conclusion: According to our experiences, in patients deferred from surgery, overall clinical results of unprotected left main stenting are improved using DES.