

Predictors associated with 3-year adverse clinical outcomes following Successful PCI for left main disease with Drug-eluting Stents

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Background: There is limited evidence regarding predictors associated with long-term clinical outcomes of patients with left main disease successfully treated with drug-eluting stents (DESs). **Methods:** We investigated the 221 patients (pts) during 3-year follow-up period following successful PCI for left main disease with DESs from Apr 2004 to Apr 2012. **Results:** The incidence of cardiac death was 9.5% (21 of 221 pts) during 3-year follow-up period and any MI 5.9% (13 of 221), TLR 10.1% (26 of 221), stent thrombosis 1.9% (5/221), ALL-MACEs 33% (73 of 221), and TLR-MACEs 21.7% (48 of 221). Multivariate logistic regression was used to identify predictors affecting 3-year CD, any MI, TLR, ALL-MACEs and TLR-MACEs (table). **Conclusions:** In our study, the presentation with AMI at admission was associated with hard adverse clinical outcomes in left main disease during 3-year follow-up period. IVUS use during PCI for left main disease can lower the incidence of the adverse clinical outcomes and then, statin and triple antiplatelet medication can be useful for reduction of adverse clinical events

Table. Predictors associated with 3-year clinical outcomes following Successful PCI for left main disease.

Independent clinical variable	P value	OR	95% CI*
Independent clinical variable: Cardiac death			
use of IVUS	0.033	0.181	0.047-0.697
Statin medication	0.005	0.127	0.033-0.495
presentation with AMI at admission	<0.001	9.971	2.733-36.383
Independent clinical variable: any MI			
use of triple antiplatelet agent	0.016	0.172	0.041-0.723
presentation with AMI at admission	0.023	4.895	1.243-19.294
Independent clinical variable: TLR			
use of IVUS	0.032	0.372	0.151-0.919
Independent clinical variable: ALL-MACE			
use of IVUS	0.005	0.384	0.196-0.754
presentation with AMI at admission	<0.001	5.607	2.665-11.797
Independent clinical variable: TLR-MACE			
use of IVUS	0.004	0.231	0.119-0.495
presentation with AMI at admission	<0.001	4.856	1.984-10.009
Statin medication	0.077	0.471	0.204-1.085

* Multivariate logistic regression adjusted by gender, age, hypertension, diabetes, hyperlipidemia, the presentation with acute myocardial infarction (AMI) at admission, chronic kidney disease, dialysis, cardiovascular accident, peripheral arterial disease, current smoker, current alcoholics, prior myocardial infarction (MI), prior PCI, prior CABG, the use of intravascular ultrasound (IVUS), lesion calcification, statin, the use of triple antiplatelet agent, statin medication.