

Stenting for Unprotected Left Main Coronary Stenosis: Acute and Long-Term Results of the First 145 Cases

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Objectives: The aim of this study was to evaluate the acute and long-term results of elective coronary stenting for unprotected left main coronary artery (LMCA) stenosis in selected patients with normal left ventricular function.

Methods and Results: Elective stenting with (n=98) or without debulking atherectomy (n=47) was performed in 145 consecutive patients with significant LMCA stenosis (age 56.2 ± 11.1 years) at our institution. Coronary artery lesions were located at the ostium (46%), body (17%) and bifurcation sites (37%) of LMCA. Coronary angiography was performed at 6-months and clinical evaluation at regular interval. Procedural success rate was 99%. Subacute stent thrombosis occurred in 1 patients on day 3 after the procedure and treated with elective bypass surgery. Mean follow-up duration was 31.3 ± 19.4 months. Four patients died during the follow-up (1 in cardiac origin, 3 in non-cardiac origin). Angiographic restenosis rate (>50% diameter stenosis) was 22% (26/118) (10.3% in debulking group vs 27.8% in non-debulking group, $p=0.031$), and target lesion revascularization rate was 11.7%. Event-free survival rate (death, myocardial infarction, repeat revascularization) was $21.42 \pm 17.2\%$ at the end of the follow-up period.

Conclusions: Stenting may be a safe and feasible technique for treatment of unprotected LMCA stenosis in selected patients, and be associated with a favorable long-term clinical outcome.