

Positive results for unprotected left main coronary artery PCI with drug-eluting stents

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Patients with normal left ventricular function who undergo elective unprotected left main coronary artery (ULMCA) percutaneous coronary intervention (PCI) with drug-eluting stents (DES) had favorable outcomes according to new research. Results of the multicenter, retrospective study are reported in the June issue of *Catheterization and Cardiovascular Interventions*, a journal published by Wiley-Blackwell on behalf of The Society for Cardiovascular Angiography and Interventions (SCAI).

For patients with ULMCA disease, [coronary artery bypass](#) grafting (CABG), known commonly as heart bypass surgery, is the standard of care based on medical evidence that shows a survival advantage with this intervention. Current guidelines for PCI state that ULMCA stenting may be an option for patients who are at high risk for adverse surgical outcomes, but have a low risk for procedural complications. In patients with severe aortic calcification, cerebrovascular disease, or limited life expectancy angioplasty may be elected over [heart bypass surgery](#).

The present study, led by Michael Lee, MD, FSCAI, from the University of California, Los Angeles (UCLA) Medical Center evaluated the safety and efficacy of ULMCA PCI with DES in patients with normal left ventricular function. Researchers used data from a multicenter international registry, identifying 221 patients who underwent elective PCI for ULMCA disease between 2002 and 2009. Patients in the study had a mean age of 68 years and 75% were male; 25% had diabetes, 39% had a history of heart attack, and 40% had a prior PCI.

"Our analysis confirms that elective PCI with DES in patients with normal left ventricular function is a safe and effective treatment for ULMCA disease," said Dr. Lee. In the first 30 days following angioplasty no cardiac death, target lesion revascularization (TLR), [stent thrombosis](#), or stroke were reported. While no cases of Q-wave [myocardial infarction](#) occurred, seven patients had periprocedural myocardial infarction.

The authors found that event-free survival estimates for cardiac death and TLR at five years was 96% and 89%, respectively. Further analysis established that patient age of 75 years or older and a history of myocardial infarction were independent predictors of cardiac death. "Research comparing the safety and efficacy of ULMCA PCI with DES versus CABG are needed and results from a large multicenter trial are forthcoming." Dr Lee concluded, "ULMCA PCI may be a viable option for low-risk patients with normal left ventricular function."

More information: "Long-Term Outcomes of Elective Drug-Eluting Stenting of the Unprotected Left Main Coronary Artery in Patients with Normal Left Ventricular Function." Michael S. Lee, Tae Yang, Giuseppe Biondi-Zoccai, Dario Sillano, Enrico Cerrato, Giuseppe Tarantini, Jola Xhaxho, Joseph Aragon and Imad Sheiban. *Catheterization and Cardiovascular Interventions*; Published Online: April 8, 2011 ([DOI: 10.1002/ccd.22777](#)); Print Issue Date: June 2011. onlinelibrary.wiley.com/doi/10.1002/ccd.22777/abstract

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