

Stents as Safe as Bypass Surgery for Left Main Heart Disease



Drug-eluting stents are as effective as surgery for many patients with a blockage in the left main coronary artery, according to findings from the international EXCEL (Evaluation of XIENCE versus Coronary Artery Bypass Surgery for Effectiveness of Left Main Revascularization) trial, published online in the New England Journal of Medicine and presented at the Transcatheter Cardiovascular Therapeutics conference in Washington, DC.

"Our study has shown that many patients with left main coronary artery disease who prefer a minimally invasive approach can now rest assured that a stent is as effective as bypass surgery for at least 3 years, and is initially safer, with fewer complications from the procedure," said first author Gregg W. Stone, MD, professor of medicine at Columbia University Medical Center and director of cardiovascular research and education at the Center for Interventional Vascular Therapy at NewYork-Presbyterian/Columbia, in a media release.

Results of previous randomised clinical trials suggested that first-generation drug-eluting stents, which release antiproliferative medications to prevent the artery from becoming re-occluded after stent placement, might be appropriate for patients with left main coronary artery disease (LMCAD) without extensive blockages in the remainder of the heart arteries, but results were inconclusive.

Results

In the EXCEL trial 1,905 patients with LMCAD and low or intermediate coronary artery disease complexity (as determined by the SYNTAX score)) received either a drug-eluting stent that releases the antiproliferative agent everolimus (XIENCE, Abbott Vascular) or bypass surgery. The patients were followed for at least two years, with a median follow-up of three years. Mortality in both groups was approximately 15 percent.

Secondary outcomes studies were complications in the first 30 days after treatment. Stent patients had a significantly lower incidence (4.9 percent) of death, stroke, heart attack, or revascularization than those who had bypass surgery (7.9 percent). In addition, fewer stent patients had major bleeding, infections, kidney failure, or severe abnormal heart rhythms compared to those treated with surgery.

Key Points

The researchers write that bypass surgery should still be considered standard therapy for those with LMCAD and extensive blockages in the remainder of the heart arteries, although the study did not include patients with severe disease.

"Our study establishes stents as an acceptable or preferred alternative for patients with LMCAD and low or moderate disease complexity in the other 3 coronary arteries--about two-thirds of all LMCAD patients," said Dr. Stone. "While bypass is still considered a more durable repair, patients and doctors may prefer a percutaneous treatment approach, which is associated with better upfront results, fewer complications, and quicker recovery."

Source: Columbia University Medical Center

Published on: Mon, 31 Oct 2016