Medical Xpress

Study finds drug-eluting stents exhibit some benefits over bare-metal stents in patients over 80, though both demonstrat

October 26 2012

Rarely tested in patients over the age of 80, a study found that drug-eluting stents exhibited some benefits over bare-metal stents, though both types of stents demonstrated a clinical benefit. Results of the XIMA trial were presented today at the 24th annual Transcatheter Cardiovascular Therapeutics (TCT) scientific symposium. Sponsored by the Cardiovascular Research Foundation (CRF), TCT is the world's premier educational meeting specializing in interventional cardiovascular medicine.

Patients over the age of 80 are often excluded from randomized clinical trials, but this age group represents an increasing proportion of the daily revascularization workload, and in fact the fastest growing segment of the population. Octogenarians are more likely to present with complex coronary disease, anatomically expectant of drug- eluting stenting (DES). However, these same patients are at higher risk of bleeding complications from prolonged dual antiplatelet therapy (DAPT).

XIMA is an international, multicenter, prospective randomized trial to examine the safety and efficacy outcomes among octogenarians with either a bare-metal stent (BMS) or drug-eluting (DES) stent implantation for complex coronary disease in the context of stable angina or an acute coronary syndrome. Heart attack patients were excluded.

The trial enrolled 800 patients aged 80 or above who underwent

angiography for stable angina or following an acute coronary syndrome. If the coronary narrowing was deemed suitable for stenting and the lesion was either ≥15mm long and/or ≤3mm diameter, the patient was randomized to receive either BMS or DES. As long as stent deployment was considered feasible, there were no anatomical exclusions to the trial, which could include chronic total occlusions, bifurcations, severe calcification and left main stem lesions.

The primary endpoint of major adverse cardiac events (MACE) occurred in 18.7 percent of the BMS patients and 14.5 percent of the DES patients (p=0.092). Target vessel revascularization was 7 percent in the BMS group and 2 percent in the DES group (p=0.0009). Heart attack occurred in 8.7 percent of the BMS patients and 4.3 percent of the DES patients (p=0.01). There was no difference in mortality between the two groups at one year (7.2 percent vs. 8.5 percent, p=0.5) and no difference in the rates of major bleeding (1.7 percent vs. 2.3 percent, p=0.61).

"Results of the XIMA trial indicate that in patients over the age of 80, bare-metal and drug-eluting stents both offer good clinical results. Overall, patients who received drug-eluting stents experienced less major adverse cardiac events," said lead investigator Adam J. de Belder, MD. Dr. de Belder is Director of the Cardiac Catheter Laboratories at Brighton and Sussex University Hospitals in the United Kingdom.

"There were no differences in mortality between the two groups at one year and no difference in the rates of major bleeding, despite different dual antiplatelet therapy regimes. However there were significantly lower rates of target vessel revascularisation and myocardial infarction among DES-treated patients," said Dr. de Belder.

Provided by Cardiovascular Research Foundation