

No Difference in Clinical Outcome Between PCI and CABG in Patients with CAD

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Results from a nonrandomized, observational study that explored the clinical outcomes of percutaneous coronary intervention (PCI) and coronary artery bypass grafting (CABG) in patients with coronary artery disease (CAD) showed no difference in overall survival, survival that was free from unstable angina (UA), and repeat revascularizations. The study was presented by Kameel Mungrue, MD, University of West Indies, Mt. Hope, Trinidad and Tobago.

This was a retrospective cohort study, comprising consecutive patients with previously untreated three-vessel or left main CAD at two centers in Trinidad who received CABG (n=280) or PCI (n=106) during 2004. Patients who had myocardial infarction within 24 hours of treatment, age ≥ 80 years, or left ventricular ejection fraction $< 40\%$ and those who were diagnosed with a terminal illness were excluded. Patients were evaluated by a local interventional cardiologist and cardiac surgeon, and treatment decisions were made by the local treatment team.

There was no significant difference in survival at 30 days postprocedure (99.6% for CABG vs 100% for PCI; p=NS) or after either 3 years (93.6% of patients receiving CABG and 88.7% of PCI patients; p=NS) or 4 years (82% for CABG vs 77% for PCI; p=NS) of follow-up. Slightly more patients in the CABG group were free from angina at 4 years (91.4% vs 85.8%; p=NS). None of the PCI patients and only 0.7% of CABG patients required revascularization.

A secondary objective of the study was to assess the impact of dyslipidemia, diabetes mellitus, hypertension, and smoking on coronary heart disease. In this study, 84% of PCI patients and 90% of CABG patients had dyslipidemia, while 69.8% (PCI) and 81.4% (CABG) had hypertension. These rates, as well as the rate of diabetes, were higher in this study than generally reported in the literature, indicating that there is a need for more effective lifestyle management and drug intervention in patients with these risk factors. Smoking rates were also high in this study, indicating a need for additional emphasis on smoking cessation.

Overall, the authors conclude that the two revascularization procedures achieved similar outcomes; however, treatment allocation was not randomized. In addition, the authors note high rates of known cardiovascular risk factors, including smoking, diabetes mellitus, dyslipidemia, and hypertension, and note that more effective risk factor management is needed.

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