

OFF-PUMP CORONARY ARTERY BYPASS IN OCTOGENARIANS

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Introduction: In octogenarians, coronary artery bypass surgery has been associated with increased mortality and morbidity, especially increased stroke rates. We evaluated off-pump techniques in octogenarians and compared the results with a computer-generated matched control group performed with cardiopulmonary bypass(CPB).

Methods: Between September 1998 and February 2000, 41 off-pump coronary artery bypass (OPCAB) procedures were performed by two surgeons (83.7 years) using a novel cardiac stabilizer which atraumatically incorporates coronary artery occlusion and were compared with 70 octogenarians (82.8 years) using CPB prior to our off-pump experience. Computer-generated matching of co-morbidities was performed and postoperative outcomes were compared.

Results: There were no severe neurologic events in the OPCAB group compared with 8.5% stroke rate in the CPB group. In the OPCAB group, there was a decreased mortality rate (4.9% vs. 7.1%), and reduced atrial fibrillation(14.6% vs. 27%). There was also a significant reduction in length of stay (6.5 vs. 8.8 days, $p < .05$).

Conclusion: Off-pump coronary artery bypass grafting is the preferred approach to myocardial revascularization in the high-risk octogenarian group, with a reduction in stroke rate, mortality, and a significant reduction in length of hospital stay.