Daskalopoulos, Nikolaos B. T silimingas Surgery, University of Thessaly, Biopolis, Larissa, Greece; neurocognitive performance status is concerned result that off-pump operated patients either have a slight temporary benefit them against this category of complications (stroke, TIA, cognitive decline, cardiopulmonary bypass during heart surgical procedures really protects psychiatric complications in the elderly after heart surgery. show no differences between on- and off-pump operated patients in this and long-term follow-up studies (until up to five or six years postoperatively)

References


eComment: Avoiding cardiopulmonary bypass does not protect against neuropsychiatric complications in elderly patients

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We would like to contribute our opinion on an important related issue, not emphasized in the present study [1]; more specifically that of neuropsychiatric complications in the elderly after heart surgery. It has long been believed that, especially for elderly patients, avoiding cardiopulmonary bypass during heart surgical procedures really protects them against this category of complications (stroke, TIA, cognitive decline, postoperative delirium). However, multiple recent studies conclude to the result that off-pump operated patients either have a slight temporary benefit (over a three- or six-month period) or no benefit at all as far as their total neurocognitive performance status is concerned [2, 3]. In any case, mid- and long-term follow-up studies (until up to five or six years postoperatively) show no differences between on- and off-pump operated patients in this matter. Moreover, their total cognition performance tends to match that of the age- and gender-related general population in the long-term [2–4]. In conclusion, another reason for the avoidance of cardiopulmonary bypass in the elderly is hereby abolished.

eComment: Octogenarians and coronary artery bypass grafting: current outcomes, concerns and caution

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We read with great interest the article by Saleh et al. [1] comparing outcomes following on-pump and off-pump coronary artery bypass grafting (CABG) in octogenarians. The authors deserve credit for publishing their experience and adding to the seemingly sparse literature on this topic. In this series, the 6.7% overall mortality rate and relatively low incidence of postoperative complications compare favorably with published literature and may be due to factors related to patient selection. In addition, their results suggest that overall outcomes after CABG surgery within octogenarians have improved in recent times and that surgical myocardial revascularization can be performed safely and with acceptable operative risk using either on-pump or off-pump strategy.

Cardiac surgery among octogenarian and other elderly patients is being increasingly undertaken in recent years. Despite encouraging short-term outcomes for octogenarians after cardiac surgery it must be emphasized that several series have reported longer hospital stays as well as increased morbidity and mortality among octogenarian patients after cardiac operations [2–4]. Worse survival seen among octogenarians has been attributed to the higher prevalence of complex comorbid disease in elderly patients. Further, increasing evidence suggests that a combination of intraoperative factors, including cardiopulmonary bypass time, transfusion requirements, and left internal mammary artery utilization, are important determinants of survival among octogenarians undergoing CABG [3]. Moreover, the operative course in octogenarians is more complicated, which is reflected in longer postoperative hospitalization.

Objective outcome measures (i.e., survival, mortality, morbidity, complication rate, symptom recurrence, and need for re-interventions) have long been used as benchmarks for successful cardiac surgery, including CABG. Along with these objectively measurable outcome indicators, acquired improvement by cardiac surgery in subjectively experienced health-related quality of life (HRQoL) has gained importance during the last decade in cardiac surgical research. If an increasing proportion of adult patients referred for CABG are elderly, octogenarians or even nonagenarians, the acquired HRQoL benefit from bypass surgery should be considered to be at least as important an outcome measure as potentially marginal improvement in life expectancy or longevity alone [5]. It is extremely important that informed discussion of treatment options, potential for discharge to a nursing care facility, and quality of life expectations should precede a decision to undertake cardiac surgery in patients who are octogenarians.

Last but not the least one must emphasize that although age alone must not be a barrier to access to surgery, careful patient selection and individualized treatment decisions can minimize postoperative morbidity and reduce burden on increasingly limited resources of health care systems worldwide.

References


