WHAT CAN BE EXPECTED FROM OFF-PUMP CORONARY ARTERY SURGERY?

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Coronary artery bypass surgery with beating heart (off-pump) has become more common in the last ten years allowing seven randomized studies with at least 60 patients, comparing off-pump and on-pump coronary bypass. Anaesthesia, monitoring and haemodynamic complications are described. Randomized studies concluded to less elevation of biochemical markers of myocardial and renal injury, less hydric inflation, less cerebral microemboli, reduction of homologous blood transfusions, of hospital stay and global costs. However in low risk patients no reduction in myocardial infarction, atrial fibrillation, stroke, acute renal failure, early reoperation, surgical site infection and mortality was observed. Non randomized studies suggest a benefit in stroke and mortality in elderly patients but the possibility of incomplete revascularization remains.