

An increase in a mean age of the candidates for coronary artery bypass surgery is observed due to universal trend of the whole mankind to grow old. Standard methods using cardiopulmonary bypass and cardiac arrest have achieved undisputable reputation in cardiac surgery and in low-risk procedures they present excellent results. In comparison with younger groups of patients, the elderly showed higher risk of mortality, stroke and morbidity dependent on using cardiopulmonary bypass, general anesthesia and prolonged in-hospital stay. New trends in cardiac surgery seem to be the alternative to accomplish better outcome of this high-risk group of cardiac patients. Those are generally the procedures in surgery, anesthesia and postoperative care called „minimally invasive“. An effort to minimize the surgical trauma, prolonged ventilation time and length of stay in postoperative ward as well as to offer prompt verticalisation, rehabilitation and shorter in-hospital stay are the key characters of the abovementioned procedure. The „Aortic No-touch Technique“ is an up-to-date method with potential to fulfill the criteria of „minimal invasiveness“. This is a procedure avoiding cardiac arrest, cardiopulmonary bypass and excessive aortic manipulation, using only pedicled or free arterial grafts, as composite grafts. Our strong feeling of „aortic no touch technique“ usefulness in elderly population > 80 years was based on a pilot study held in our institution which had demonstrated in a small cohort of 10 consecutive cases zero mortality and extremely low morbidity.