

# TOTAL ARTERIAL REVASCULARIZATION OF THE HEART - NEW PERSPECTIVE OF CORONARY ARTERY SURGERY IN PATIENTS OVER 70 YEARS OF AGE

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**Objective.** The development of civilization (improving welfare and living conditions) will extend the life of societies in developed countries. Demographic analysis of Eurostat population predicts growth of people over 65 years of age in Western Europe with 15.2% in 1995 to 19.5% in 2020. Due to demographic and epidemiological factors in coronary surgery the percentage of elderly patients with various diseases including additional peripheral vascular changes increasing each year, enforce changes in surgical strategie. In our center every year about 1,500 coronary artery bypass grafting procedures were performed, including TAMR ( about 15% of procedures). However, this applies to most young patients with diabetes. Aim of this study was comparative evaluation of early postoperative results of total arterial revascularization (TAMR) with classic coronary-artery vein cardiac revascularization (CABG) in patients over 70 years of age. Method:

All operations were performed with cardiopulmonary bypass, in normotermii using blood cardioplegia by one surgical team. The study concerns a comparative analysis of the early results of operations patients over 70 years of age who underwent TAMR - 101 patients and conventional CABG patients -100. Results:

Operative mortality was similar in both groups and amounted to 1.98% - TAMR group and 2% of the CABG group. Number of adverse events MACCE was about 7% in both groups. MACCE risk factors were age and associated peripheral atherosclerosis. Use TAMR did not affect the incidence of MACCE. In the CABG group was significantly lower proportion of patients with prolonged ventilation, ie 3% compared to 9.9% TAMR and a shorter average length of stay in the department of Intensive Care Unit, ie 2.7 and 3.1 days in TAMR group. Need to re-suture of the sternum occurred in 2 patients in the TAMR and 1 in CABG group. Re-suture of the sternum, as a complication of sternal infection, occurred significantly more often in older patients with a high BMI and require long mechanical respiratory. Harvesting both internal arteries did not increase the risk of infection and is not a risk factor. Conclusions:

Early results of operations (mortality, postoperative complications) indicate that total arterial revascularization of the heart is a safe and potentially an alternative surgical technique in coronary artery surgery in patients over 70 years of age.