**Influence Of Age On Long-Term Cardiac Mortality And Morbidity After Off-Pump Coronary Artery Bypass Surgery**

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Abstract:

**Background:** Age at the time of surgery is a major determinant in long-term survival. Its specific significance on long-term cardiac mortality and major adverse cardiac events (MACE) are poorly understood. *Aims of the study:* To compare long-term cardiac outcome after off-pump coronary artery bypass (OPCAB) surgery according to different age groups.

**Methods:** We used our prospective data base of 1000 consecutive OPCAB patients (777 men and 223 women) operated between September 1996 and March 2004 representing 98% of all coronary revascularizations during the same time frame. Follow-up was complete in 97% of the cohort. Average folow-up was 68432 months. Patients were divided in 3 groups: Group 1: s 50 years, Group 2: 50-65 years, and Group 3: 2 65 years of age.

**Results:** Highest men/women ratio was in Group 2. Prevalence of peripheral (PVD), cerebral (CVD) vascular disease, and diabetes was higher in Group 3. Emergencies were also more infrequent in the oldest group. Thirty-day mortality and perioperative myocardial infarction (M) were similar in all groups. Group 3 had more grafts done and prevalence of postoperative atrial fibrillation (AF), renal insufficiency, transfusion need was higher. Adjusted 10-year cardiac survival was decreased only in Group 3 (HR=2.3). Adjusted major adverse cardiac events free survival (p=0.55) were also comparable in the 3 cohorts.

**Conclusion:** Age at the time of surgery was a significant determinant of long-term cardiac mortality after OPCAB surgery but did not influence the occurrence of major adverse cardiac events.