

## Sex and Gender differences in Outcome after Coronary Artery Bypass Surgery

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**Objectives:** To test the hypothesis that women have a higher early mortality rate after coronary artery bypass graft (CABG) surgery than men and to investigate possible factors influencing outcome.

**Methods:** 1) The mortality rates of 17 528 patients operated on consecutively at our institution were analyzed 2) At present a prospective study (N=600) is being carried out by the Competence Network Heart Failure. Questionnaires are used to assess the influence of psychosocial factors on the outcome after CABG.

**Results:** In comparison to men of the same age, women have a 1.5-fold risk of dying in the first 30 postoperative days. We found an interaction between age and gender: women under 50 years old have the highest risk of mortality, whereas the mortality rate of women over 70 is comparable to that of the men. Initial results of the prospective study show that men and women do not profit equally from CABG operation in terms of subjective quality of life. The findings suggest a relationship between gender-specific roles, depression and complications in the early postoperative phase.

**Conclusions:** Female gender is an independent risk factor for early mortality after bypass surgery in patients < 70.5 years of age. Conventional risk factors only partially explain the gender difference. Psychosocial variables play an important role in terms of morbidity and possibly also mortality following CABG. Future research has to have a close look at social support as a possible moderator or mediator variable.