Three-year survival after four major post-cardiac operative complications

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Objective
After cardiac surgery, major morbidities known to be primary contributors to perioperative mortality are cardiac failure, respiratory failure, renal failure, and the need for mediastinal exploration. The first aim of this study was to ascertain long-term survival in cardiac surgery patients with and without the occurrence of major morbidities to investigate if long-term survival was comparable. The second aim of this study was to evaluate the prevalences and risk factors related to the four major morbidities in this patient population.

Design
Retrospective observational outcome study.

Setting
Cardiothoracic intensive care unit at a university hospital.

Patients
We included 2,683 of 3,253 consecutive cardiac surgery patients cared for in a uniform fashion.

Methods and Main Results
Perioperative mortality was significantly increased by the occurrence of major morbidity. In-hospital mortality was 0.7% in the absence of major morbidity compared with 72% when all major morbidities occurred. Three-year mortality for the entire study population was 15%, whereas the 3-yr long-term survival was significantly less for patients with morbidities compared with those without. Various independent perioperative risk factors were found for perioperative major morbidity and mortality.

Conclusions
Successful acute treatment and measures to identify and reduce the risk of major morbidities are necessary to improve outcome. In addition, long-term follow-up and management of morbidities are necessary to possibly improve long-term survival.

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