

ORAL PRESENTATION

Open Access

# Evaluation of risk factors for mortality and long-term survival after repair of acute type-A aortic dissection in 836 patients

B Tutkun\*, S Buz, A Abd El Al, F Büttner, M Pasic, R Hammerschmidt, Y Weng, R Hetzer

From 23rd World Congress of the World Society of Cardio-Thoracic Surgeons  
Split, Croatia. 12-15 September 2013

## Background

This study was designed to explore predictive factors for mortality and long-term survival in patients with acute type-A aortic dissection. We retrospectively assessed our data over a 15-year period starting in 1996.

## Methods

Between 01/1996 and 09/2011, 836 patients (559 men) with a mean age of  $59.6 \pm 13.6$  (range 18-92) years underwent surgery for acute type-A aortic dissection. No patients were excluded from immediate operation irrespective of age and preoperative status unless uncontrollable hemorrhage and/or cardiac arrest occurred before the patient reached the operating room. Ninety-two perioperative variables were statistically analyzed to identify predictors for early mortality.

## Results

The overall 30-day mortality was 22.3% (without cardiogenic shock 18.4%). The mortality rate was 9.8 % in patients aged < 45 years and 34.6 % in older patients aged  $\geq 80$  years. In the last 5 years the overall mortality was reduced to 17.7 % (without cardiogenic shock 15.3%). A multivariable logistic regression model showed that age >60 years (OR 1.03, 95%CI, 1.01 to 1.04,  $P < 0.001$ ), preoperative high inotropic score (OR 1.9, 95% CI 1.1 to 3.0,  $P < 0.001$ ), and additional CABG (OR 2.6, 95% CI 1.6 to 4.1,  $P < 0.001$ ) were predictors of 30-day mortality.

The long-term survival and freedom from reoperation at 1, 5 and 10 years were 70.5%, 58.5%, 42.1% and 96.4%, 91.2%, 88.8%, respectively.

## Conclusions

The results of this study support our institutional policy for acute type-A aortic dissection of not excluding any patients from the operation regardless of preoperative status and age.

Published: 11 September 2013

doi:10.1186/1749-8090-8-S1-O43

**Cite this article as:** Tutkun et al.: Evaluation of risk factors for mortality and long-term survival after repair of acute type-A aortic dissection in 836 patients. *Journal of Cardiothoracic Surgery* 2013 **8**(Suppl 1):O43.

Submit your next manuscript to BioMed Central  
and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
[www.biomedcentral.com/submit](http://www.biomedcentral.com/submit)



\* Correspondence: [tutkun@dhzb.de](mailto:tutkun@dhzb.de)  
Cardiothoracic and Vascular Surgery, Deutsches Herzzentrum Berlin, Berlin, Germany