

Does diabetes mellitus explain the higher hospital mortality of women with acute myocardial infarction?

- Results from the Berlin Myocardial Infarction Registry -

(deutscher Titel fürs Abstract:

Erklärt Diabetes mellitus die höhere Krankenhaussterblichkeit von Frauen mit einem akuten Myokardinfarkt? - Ergebnisse des Berliner Herzinfarktregisters -)

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Abstract

Background: Women with acute myocardial infarction (AMI) exhibit greater hospital mortality than do men. In general, diabetes mellitus is one of the major factors influencing the outcome of patients with AMI. The aim of this study was to analyse the interaction between diabetes and gender, specifically with regard to the higher hospital mortality of female AMI patients.

Methods: We prospectively collected data from 3715 patients ≤ 75 years (2794 men and 921 women) with acute myocardial infarction who were treated in 25 hospitals in Berlin during the years from 1999 to 2002. In a multivariate analysis we specifically studied the interaction among the factors diabetes mellitus and gender in their effects on hospital mortality.

Results: After adjustment in multivariate analysis, the interaction between gender and diabetes was statistically significant, and the estimated odds ratios were as follows: female diabetics compared to male diabetics OR = 2.24, female diabetics compared to male non-diabetics OR = 2.92, and female diabetics compared to female non-diabetics OR = 2.78. There was no statistically significant difference between the risk of dying for female non-diabetics or for male diabetics, when compared to male non-diabetics.

Conclusions: In AMI patients younger than 76, female gender alone is not an independent predictor of hospital mortality. Detailed, multivariate analysis reveals that specifically diabetic women demonstrate higher hospital mortality than do men. Special attention should be provided for these female diabetic patients.