

 MYOCARDIAL ISCHEMIA AND INFARCTION

IMPACT OF PRIMARY PERCUTANEOUS CORONARY INTERVENTION ON GENDER DIFFERENCES IN THE EARLY MORTALITY OF PATIENTS WITH ACUTE MYOCARDIAL INFARCTION FROM A REGISTRY DATABASE IN JAPAN

ACC Poster Contributions

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Background: It has been reported that women with acute myocardial infarction have a higher in-hospital mortality rate than men, and primary percutaneous coronary interventions (PCI) appeared to be less protective in women than in men. However, the rate of early revascularization of previous studies was not as high as that in Japan. We evaluated gender differences in patients with acute myocardial infarction (AMI) who underwent primary PCI.

Methods and Results: We established the multicenter registry to collect data of patients with AMI. 3691 patients enrolled into a registry from 27 hospitals during 2005 and 2009. In our registry, 81% of men and 73% of women underwent primary PCI. Among these patients, 2854 patients exclusively underwent primary PCI were included in this study. Women were older (75 ± 11 y.o. vs 65 ± 12 y.o. ; $P < 0.0001$), more likely to have hypertension than men. Pre-hospital time delay was also longer in women (8.2 ± 11.3 hours vs 7.0 ± 10.9 hours ; $P = 0.016$). The unadjusted in-hospital mortality rate was 9.9% in women and 4.1% in men ($P < 0.0001$). After multivariate logistic regression analysis, women maintained a 1.9-fold higher risk of in-hospital mortality compared with men (95% confidence interval [CI], 1.3 to 2.9, $P = 0.0004$).

Conclusions: Comparing patients who underwent primary PCI for AMI from the registry in Japan, where primary PCI for AMI is broadly accepted, women still have a significantly higher in-hospital mortality rate than men.

**In multivariable Analysis;
Factors Associated with In-hospital Mortality**

Factors	SE	Odds ratio	95%CI
Women	0.21	1.95	1.29-2.94
Age per 10y	0.10	1.90	1.59-2.31
Log CPK	0.24	11.9	7.62-19.2
Hyperlipidemia	0.20	1.77	1.20-2.64
Hypertension	0.19	1.59	1.10-2.32
Pre-hospital time delay (hr)	0.009	1.02	0.99-1.03