

## Does Gender Influence the Impact of Impaired Renal Function on Prognosis after ST-segment Elevated Myocardial Infarction?

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**Background:** A limited number of studies have investigated the impact of gender on renal function and clinical outcomes after ST-segment elevated myocardial infarction (STEMI), and these studies have provided discrepant results.

**Methods and Results:** This study was based on a retrospective cohort, the Korean Acute Myocardial Infarction Registry (KAMIR). Patients (n=7,679) with a discharge diagnosis of STEMI were analyzed to investigate association of gender with renal function and clinical outcomes. Compared to men, women were older and exhibited more comorbidity, including impaired renal function. Women showed higher mortality compared with men (1-month mortality, 5.6% in men vs. 12.6% in women,  $p<0.001$ ; 1-year mortality, 6.8% in men vs. 14.4% in women,  $p<0.001$ ). The risk for death proportionally increased as estimated glomerular filtration rate (eGFR) decreased in both genders. After adjusting for potential confounders, hazard ratios for women did not significantly differ from those for men at each eGFR level. The interaction test showed no significant interaction between gender and eGFR in 1-month mortality and 1-year mortality.

**Conclusions:** Impaired renal function was an independent prognostic factor after STEMI in both genders, and the impact of impaired renal function on prognosis after STEMI did not significantly differ between genders.

**Key Words:** 성별, 신기능 손상, ST분절상승심근경색  
Gender, Impaired renal function, STEMI