Clinical Impacts of Living Alone on in-hospital and One-year Prognosis after Acute Myocardial Infarction in Korean Patients

Objective: The aim of this study is to evaluate the impact of living alone in short term and one year clinical outcomes after acute myocardial infarction (AMI) in Korean patients.

Methods: A total 1,700 patients who were admitted at Chonnam National University Hospital were enrolled. We divided the patients into two groups by the existence of a spouse or family member that lived together with the patient at the first time of hospital visit due to AMI. The primary endpoint was composed of in-hospital death and cardiac death during one year clinical follow up. Secondary end points were other major adverse cardiocerebral events (MACCE) including non-fatal MI, repeated revascularization, ischemic or hemorrhagic stroke during the one year of clinical follow-up.

Result: Living alone patient group had higher proportion of Killip class II-IV (34.3% vs. 26.6%, p=0.006) and higher value of high sensitivity C-reactive protein than not living alone group. In-hospital death (8.9 % vs. 5.1%, p=0.01) and one year cardiac death (7.7% vs. 4.6%, p=0.031) developed more in living alone groups. However, living alone was not an independent prognostic factor for in-hospital death (HR 1.51, 95% CI 0.91-2.52, p=0.113) and one year cardiac death (HR 1.18, 95% CI 0.59-2.34, p=0.64) after AMI after multivariate analysis.

Conclusion: Living alone was not an independent prognostic factor for short-term and one-year clinical outcome after AMI.