Incidence and Predictors of Cardiac Death in MADIT-II Eligible Korean Patients: Data from KAMIR (Korea Acute Myocardial Infarction Registry)

Jumsuk Ko¹, Namho Kim¹, Jeongwan Cho²
¹Wonkwang University School of Medicine and Hospital, Korea, ²Chonnam National University Medical School

Introduction: The second Multicenter Automatic Defibrillator Trial (MADIT-II) demonstrated improved survival rate in patients with reduced left ventricular function after myocardial infarction by implantable cardiac defibrillator. We investigated clinical implication of MADIT-II result for Korean population and aimed to identify predictors of cardiac death in MADIT-II eligible patients.

Methods: We analyzed 154 patients (male 71.8%, age 64.7±13.7yr) from KAMIR (Korea Acute Myocardial Infarction Registry). All enrolled patients were eligible for MADIT II criteria: reduced LV systolic ejection fraction (less than 30%) at 1 month follow up exam after acute myocardial infarction. We checked baseline characteristics, laboratory, echocardiographic and angiographic findings. Clinical outcomes were assessed during 1 year follow up. Results: Demographic data and baseline clinical characteristics were comparable with MADIT-II patients except higher incidence of coronary angioplasty (66.9% in enrolled patients). During follow up period of mean 19.5 months, cardiac death was observed in 12 patients (7.8%) and non cardiac death was developed in 5 patients (3.2%) which were compatible with MADIT-II population. Predictors for cardiac death were advanced age (HR=1.15, p=0.03) and low BMI (HR=3.53, p=0.04).

Conclusion: Korean population who were eligible with MADIT-II criteria showed comparable incidence of cardiac death. And low BMI and advanced age were predictors for cardiac death.

Keywords: MADIT II, KAMIR, low BMI