Evaluation of Acute Myocardial Infarction Patient Mortality Factors Admitted in Imam Khomeini Hospital

Abstract

Background & Objective: The mortality of myocardial infarction happens often during the first few hours after symptoms. Therefore, it is necessary for patients to go to the hospital as soon as possible, in order to take the necessary treatment, considering that if the treatment is not done in a timely manner, there is a high rate of mortality. In this study, we evaluated the relationship between the various factors involved in the mortality of these patients.

Methods: In this case-control study, all patients who referred to the hospital for 6 months due to acute MI were studied. 27 patients died and were considered as the case group. After number and gender matching, 27 patients were selected control group and the checklist was filled up for all patients and then the data were analyzed by SPSS 24 software using statistical methods.

Results: In this study, relationship, between 14 factors and mortality were assessed. 44/4% of case group and 7.4% of control group, had history of non-cardiac illness (P=0/002). In 40/71% of case group and 74/1% of control group, PCI was done (P=0/013). The time between patient admission and origin of PCI performing, was 110/91 minute and 56 minute in case and control group, respectively (P=0/001).

Conclusion: The factors which had significant relationship with AMI morality were history of non-cardiac illness, the number of performed PCIs, and the time between patient admission and origin of PCI performing, and the factors such as age had not significant relationship with AMI morality, although there was a significant differences between the case and control groups. So, it is suggested that, the study is performed with a large sample and with other factors such as cigarette smoking, climate, etc.

Keywords: AMI, Mortality, Heart failure, Arrhythmia