

ABSTRACT

Evaluation of Effective Factors on Symptom-to-Balloon Time, Medical History and Prognosis in Patients with STEMI Treated with Primary PCI in Ardebil Province

Background and objective: In the last decade, cardiovascular diseases has been recognized as the leading cause of mortality and morbidity all over the world, and also the most common causes of death in the country. Coronary Artery Disease is most important kind of it and STEMI is most dangerous kind of ACS. The aim of this study was to investigate the effective factors on STBT, Medical History and Prognosis in Patients with STEMI Treated with Primary PCI in Ardebil Province.

Methods: The research method is a cross-sectional and analytical-descriptive study. The research sample included all patients with diagnosis of acute myocardial infarction with ST elevation, which had been referred to the Emergency Department of Imam Khomeini Hospital in Ardabil from the beginning of September 2016 to the end of September 2017. Data collection was done by using the information in the patients' files, the corresponding Cath lab form and a questionnaire by interviewing themselves and patients' companions and were recorded in the relevant checklist. The data were analyzed using descriptive statistics and correlation tests with SPSSV22 software.

Results: More prevalence in men was detected and there was significant difference between the age averages of genders. The mean time from symptom onset to referral to hospital 247 was $211.64(\pm 206.84)$ mins. Also the average of Door-to-Balloon and Symptom-to-Balloon Time were calculated $101.36(\pm 107.07)$ and $304.98(\pm 235.48)$. Referral time was involved with type of medical insurance, residence location and delay in making decision ($P > 0.05$). Door-to-Balloon process was done in 90 mins (standard time) for 65% of patients. The most delay in hospital was associated with door to code time. There was significant relationship between referral time and mortality in 6 months after discharge ($P = 0.007$).

Conclusion: According to the findings, the promotion of healthy lifestyle and awareness of the angina (CP), risk factors of CAD and focusing on referral time can reduce the incidence of heart disease and improve the prognosis of patients with acute MI treated with primary PCI. The correction of defects in performance of PPCI (code 247) specially in emergency ward (door to code time) can improve the results.

Keywords: myocardial infarction, referral time, Primary PCI, symptom-to-balloon