

LETTER TO EDITOR

Door to Electrocardiography (ECG) and Needle Times in Patients with Myocardial Infarction

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Dear editor:

Acute myocardial infarction is one of the most prevalent causes of hospitalization in emergency department. In United States 650,000 patients annually suffer from acute myocardial infarction and in Iran ischemic heart diseases are considered as the second cause of mortality in population of 15-49 years (1). Taking thrombolytic drugs leads to 40-50% decrease in mortality rate of such patients. Based on the current standards, less than 10 and 30 minutes are estimated for appropriate door to electrocardiography (ECG) and door to needle times, respectively (2). In a study performed on 100 patients referred to the emergency department of Nemazi Hospital, Shiraz, Iran, through March 2013 to April 2014, the mean time from the chest pain starting to emergency ward admission was estimated more than 90 minutes. The mean time from admission to do ECG were 11 minutes at morning shift, 16 minutes at evening, and 23 minutes at night. Also, the mean time from admission to ECG performing and thrombolytic therapy (door to needle) were around two times more than standard times and no significant difference was seen among the morning, evening, and night shifts. The mean door to needle time in one hospital of Hamedan, Iran, was reported around 84 minutes, in Jahrom, Iran, 190 minutes, and in three hospitals in Tehran, Iran, 44 minutes (3-5). The findings of previous studies showed a significant relation between crowdedness of the work shift and longer treatment time in patients with myocardial infarction. Considering to the importance of door to needle time in improving the final outcome and decreasing the mortality rate of patients with ischemic heart disease, planning and correct training of hospital and pre-hospital staffs are critical for approaching these mean times to international standards.

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