The effect of patients' time of arrival at the hospital on the rate of Thrombolytic therapy

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Letter to Editor

The honorable editor-in-chief of the Journal of ARYA

We read with interest the article of Dr. Maleki that has recently been published.[1] We conducted a similar study in Birjand Vali-e-Asr Hospital in 2009-2010. This study was done on 125 patients with STEMI with a mean age of 59.2 ± 11.9 years. In this study, 65.6% of patients underwent thrombolytic therapy. This showed a crucial increase compared to the previous study in Birjand in 2003 that showed 17.3% of patients underwent thrombolytic therapy.[2] Mean door to needle time was 74.8 ± 42.7 minutes (median 60 minutes). Thrombolytic therapy showed no difference for difference in sex (69.4% in males, and 51.9% in females, P = 0.08). However, in working staff (86.7% in employees, and 51.2% in farmers/workers, P = 0.003), in highly educated individuals (92.3% at university level, and 45.5% illiterate, P < 0.001), and in citizens (73.2% in urban, and 51.2% in rural citizens, P = 0.01) there was a higher percentage of thrombolytic therapy. The main reason for this difference between them is earlier arrival to the hospital since the onset of symptoms. The arrival time in the city's residents was 166.7 ± 179.6 minutes, but for villagers it was 221.6 ± 112 minutes (P = 0.001). Furthermore, the rate of thrombolytic therapy during the night was not significantly different compared to the rest of the day (73% during morning, 62.9% during afternoon, and 62.3% during night, P = 0.52). The patient's arrival time to the hospital at night was not different compared to the rest of the day (166.9 ± 174.7 minutes in the morning shift, and 148.2 ± 85.2 minutes during the night shift, P = 0.63). Visiting patients during the night shift was similar to other shifts; visit by intern was 12.3 ± 9.1 minutes during the morning shift, and 14.1 ± 9.3 minutes during the night shift (P = 0.73). The rate of thrombolytic therapy in our study was similar to the study by Dr. Maleki;[1] however, door to needle time was longer. In our hospital (Birjand Vali-e-Asr Hospital), due to lack of residents, it is necessary that patients should certainly be visited by a cardiologist (on call) before starting thrombolytic therapy and the cardiologist should himself/herself be present at the patient's bedsides.

It is necessary that public awareness be increased through educational programs on television, and local journals. Providing telemedicine facilities, through which a patient's ECG is observed by a cardiologist at home, is one of the necessities.

Conflict of Interests

Authors have no conflict of interests.

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