FIRST EXPERIENCE WITH PRIMARY ANGIOPLASTY WITHIN THE EMERGENCY DEPARTMENT

Moderated Poster Contributions
Poster Sessions, Expo North
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Authors: Ahmed A. El Ghamry Sabe, Allyson Kelly, Frank Kaeberlein, Mercy Medical Center, Canton, OH, USA

Background: Primary percutaneous transluminal coronary angioplasty (PTCA) is the treatment of choice in treating acute ST elevation myocardial infarction (STEMI), and shorter door-to-balloon time is associated with lower mortality. The question remains: will performing primary PTCA within the Emergency Department (ED) further reduce door to balloon time and affect mortality?

Methods: 1020 patients admitted to a community hospital between 4/1998 to 12/2011 with STEMI and treated with primary PTCA were prospectively reviewed. Of the 1020 patients, 534 (52%) were taken to the ED cath lab (ED) and 486 (48%) were taken to the inpatient cath lab (ICL). The protocol for initiating “Cardiac Care” and contacting the on-call interventional cardiologist and cath lab team was the same for both groups.

Results: The mean age of the ED and ICL groups were similar (60 vs 59). There was no significant difference in percent of patients presenting with LV dysfunction (7 vs 9%, p 0.4). The median door to balloon time was 53 minutes (range 6-214) with a mean of 56 minutes in the ED group, while those in the ICL group had a median time of 83 minutes (17-252) with an average of 85 minutes. One-year mortality for the ED group was 2% (25 patients) and 6% (31 patients) for the ICL group.

Conclusions: Primary PTCA performed within the ED cath lab can reduce door to balloon time and positively affect STEMI mortality.