Thrombolytic surveying outcomes in reducing mortality and morbidity in patients with cardiogenic shock following acute myocardial infarction

A retrospective study

Zahra Soroureddin[1], Roxana Sadeghi[1], Zohreh Maghsoumi[2]

1- Department of cardiovascular disease, Emam Hussein hospital, Shahid Beheshti university of medical science, Tehran, Iran.

2- Department of medicine, Iran University of medical science, Tehran, Iran

Abstract:

Background: Cardiogenic shock is a sudden complication that occurs in 5 to 10% of patients with acute myocardial infarction. According to statistics, mortality and morbidity from this event, despite all hospital care, are approximately 70-80%, so the medical community is looking for a way to reduce this.

Objective: We studied the safety and efficacy of thrombolytic treatment in patients with cardiogenic shock after acute myocardial infarction, compared with other hospital treatments.

Methods: This study was conducted over 3 years (2012 to 2015) in 28 cases of acute myocardial infarction, which was complicated by cardiovascular shock, before, during or after admission. We divided patient into 3 groups; the first group was treated with thrombolytic therapy, the second group was underwent primary PCI, and the rest (group 3) were initially treated with medical stabilization.

We compared the outcomes of these three groups. The 30-day follow-up was the first end point, and the 3-month follow up was the second end point of the study.

Result: Mean (± SD) age of the patients was 62.99 ± 13/99 years. 41.7% of patients had 3SVD involvement. 80% of the thrombolytic group died. 100% of the medical stabilization group and 50% of primary PCI group died. 7 patients (58%) of the primary PCI group underwent IABP, 5 cases of this group (71%) died. The median time to the onset of shock was 648.75±1393.58 minutes after infarction.

Conclusion: Although cardiogenic shock is a potential risk of early death, it is important that the thrombolytic in these patients doesn't increase survival and the primary PCI is more effective than thrombolytic agents.

Keywords: Acute Myocardial Infarction, cardiogenic shock, early revascularizations, Thrombolytic, mortality.