

# Role of Cardiac Troponin I Level in Predicting in Hospital Outcomes in Patients with ST-segment Elevation Myocardial Infarction in Erbil-Iraq

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## Abstract

**Background:** The correlation of cardiac troponin I with early in-hospital outcomes in acute myocardial infarction is not well established.

**Objective:** To assess the role of troponin I in predicting in-hospital outcomes and early left ventricular systolic dysfunction in patients with ST-segment elevation myocardial infarction.

**Patients and Methods:** A prospective study which consist of 116 patients (74 were males and 42 were females), with ST-segment elevation myocardial infarction who had been admitted to the Coronary Care Unit from March 2015 to September 2015 were enrolled. Patients were divided according to the level of troponin I on admission into 3 groups (low, medium and high elevation).

**Results:** The mean age (+ SD) of the patients was 60+11.4 years. The troponin level of 66.2% of males was high compared with 52.4% of females (p=0.002). The incidence of acute pulmonary edema (21.1%), cardiogenic shock (7%) and early left ventricular systolic dysfunction (49.3%) was significantly higher among patients with high troponin level compared with (0%, 0% and 16%, respectively) among patients with low troponin level. All deaths and cardiac arrest were of high troponin level.

**Conclusion:** High admission troponin I in ST-segment elevation myocardial infarction permits early identification of patients at increased risk of major cardiac complications and death.

**Key words:** Cardiac troponin I, Ischemic Heart Disease.

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