The characteristics and long term outcome of patients with ST segment Elevation Myocardial Infarction (STEMI) following Percutaneous Transluminal Coronary Angioplasty (PTCA)

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Introduction & Aims:
To determine the characteristics and long term outcome of patients who had STEMI and were treated with PTCA.

Method:
A retrospective study was conducted among patients diagnosed with ST segment elevation myocardial infarction (STEMI) and treated with PTCA in a private hospital in Colombo from 1st January 2009 to 1st November 2012. Details of patients were abstracted from medical records of patients and the survival status, cause of death and date of death where relevant, were obtained from records, patients themselves or close relatives.

Results:
197 patients (153 men; 77.7%) were enrolled. More than 50% had a history of diabetes, dyslipidemia or hypertension. Among the patients who had a history of smoking and alcohol consumption, 98% were men. 82.7 % (95% CI: 77.9% - 90.5%) of patients survived for 3 years. Based on Cox Proportional Hazardous model, site of arterial occlusion (proximal vs distal segment of left anterior descending artery [LAD] [HR 10.98; 95% CI: 1.096-110.205] was significantly associated with poor prognosis of patients. Low ejection fraction, not on regular medication and delay of more than 3 hours between onset to door time were independently (unadjusted) associated with poor long term outcome of patients who had coronary artery involvement other than the LAD artery.

Conclusion:
A high proportion of patients had traditional risk factors. The three year survival of patients was 83%. Patients with proximal LAD occlusion were 11 times more likely to die within 3 years of PTCA as compared to those who had a distal LAD occlusion.

Keywords: Survival, STEMI, PTCA