TOTAL ISCHEMIC TIME IN PATIENTS WITH ST- ELEVATION MYOCARDIAL INFARCTION (STEMI), AND FACTORS INFLUENCING IT - A CROSS SECTIONAL STUDY FROM A TERTIARY CARE HOSPITAL IN KERALA

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Background: Coronary artery Disease has become epidemic in India. The mortality rate in patients undergoing Primary Percutaneous Coronary Intervention (PPCI) is higher in patients with longer Total Ischemic Time (TIT). Main reasons for delay are lack of awareness about the symptoms hence not considering the situation a medical emergency. Composition of TIT and reasons for its delay will provide information on interventions that can be carried out to decrease TIT and improve the outcomes. **Objectives: (1)**To estimate Mean TIT and proportion of patients with TIT less than 1 hour, admitted in GMC Thiruvananthapuram with STEMI who underwent PPCI. **(2)** Study factors influencing TIT: (a) Pre-hospital phase - Time from onset of symptom till arrival to hospital where intervention is carried out. (b) After arrival to hospital till time of intervention. **Methods:** This cross-sectional study estimated mean TIT, factors influencing it and proportion of patients with TIT less than 1 hour, admitted with STEMI. Calculated sample size, 104 was met using questionnaire and case records. Data was entered into excel and analysed using SPSS. **Results:** None of the patients arrived within 1 hour of symptom onset. Mean TIT was 363.10 minutes, SD of 156.809. Median TIT was 330.00 minutes (Interquartile range 225.00). Unlike similar studies there were no significant associations with age, gender and social & educational status of patient. Lack of awareness regarding symptoms was found in patients. Mode of transport, past & family history of CAD, presence of Government Health Insurance card at time of arrival, time of onset of symptoms and time of arrival at PCI centre were found to be significantly associated with TIT. **Conclusion:** The study assesses major causes of delay in total ischemic time which will help to formulate and implement strategies to significantly shorten various delays and hence improve outcome of patients admitted with STEMI. More effective strategies like creating awareness regarding identification of ischemic symptoms and gaining immediate access to health services are needed for minimizing TIT and improving mortality rates and outcome of patients.