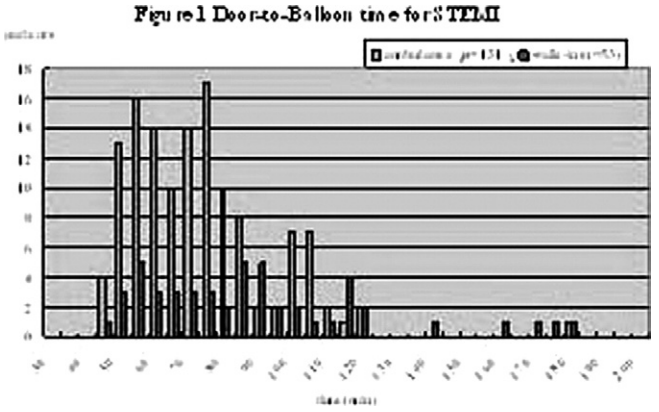
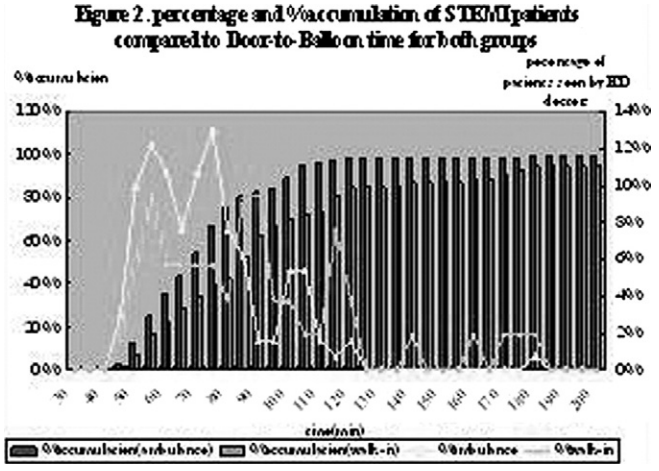
demonstrates that despite "walk-in" cases with STEMI exhibiting a lower overall mortality rate, they still required urgent triage and expedited coronary intervention and improvements are required in order to meet coronary intervention times within the current 90 minute target.





195 Causes of In-Hospital Delay for Door-to-Needle Times in Patients Presenting With Acute ST-Elevation Myocardial Infarct in Rural Malaysia

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Study Objective: Background: In developing countries such as Malaysia, the primary mode for revascularization is via thrombolytic therapy. The Malaysian Clinical Practice Guideline on acute ST-elevation myocardial infarction advised the implementation of a 30-minute door-to-needle time. This study aims to evaluate the mean door-to-needle times and the reasons for in-hospital delays.

Methods: Ninety four patients with acute ST elevation myocardial infarction patients were screened and 75 patients were recruited in this prospective observational study. The mean door-to-needle times were recorded and the reasons for delays in door-to-needle times were elucidated.

Results: The majority of patients were male (89.3%), of Malay ethnicity (84%), presenting with anterior MI (69.3%) with a mean age of 57.0 ± 9.52 years. The mean door-to-needle time was 80.54 ± 84.8 minutes. Only 20% achieved the 30-minute door-to-needle time and only 65.3% achieved the 60 minute door-to-needle time. The reasons for late thrombolysis were quoted as late referrals from A+E (50%), hypertensive emergency (22%), resuscitation (17%) and others (11%).

Conclusion: There is significant in-hospital delay in administrating thrombolytic agents for patients presenting with acute ST-elevation myocardial infarction. Some of the delays were unavoidable (hypertensive emergency and hypotension or VT/VF requiring resuscitation) but the majority of the delay is due to late referrals from A+E to attending cardiology on-call officers.

196 ST-Segment Elevation Myocardial Infarction: Is There a Sex Difference?

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Study Objectives: Diagnosis of patients with myocardial infarction (MI) continues to pose a significant challenge to many emergency departments (ED). This study aims to study if amongst patients with STEMI, are there differences in the characteristics, presenting symptoms between male and female patients.

Methods: A retrospective chart review of patients with a diagnosis of STEMI was done for patients admitted via our ED from 01/07/2003-30/06/2004. Patient characteristics, presenting complaints, risk factors for coronary artery disease were recorded. The data was analyzed using SPSS 13.0.

Results: 548 patients were discharged with a diagnosis of STEMI during the study period (402 male, 146 female).

The mean age of female and male STEMI patients was 72.5 and 58.9 years of age respectively. The mean difference was 13.6 years (95% CI: 11.2-15.9). 77.9% of male patients presented with a chief complaint of chest pain; this was the case for only 50.7% of the female patients ($p<0.001$). 47.8% of male and 22.6% of female patients presented with complaint of diaphoresis ($p<0.001$). Female patients had significantly higher rates of diabetes (47.3% vs. 30.1%) and hypertension (63.7% vs. 46%) compared to the males. Smoking was a significant risk factor amongst male patients (54.7%) but only 7.5% of female patients were found to be smokers ($p<0.001$).

Conclusions: There are differences amongst female and male STEMI patients. It is essential that the ED educate its staff who understand these differences and put in place work processes to overcome these potential pitfalls.

197 Where are the AMI (ST-Elevation): Rise of NSTEMI and Rise in Mortality

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Study Objective: Acute myocardial infarction has undergone a great change in presentation and type of intervention. In the past 20 years, we have seen the need for door to needle time has been replaced by door to PCI time and now ED simply admit NTEMI that rule in without intervention. Poorly understood is the real outcome for those that enter hospital system through the ED than direct admit from office practice.

Setting: 950 bed urban, tertiary care hospital with ED visits 82,000 annually.

Methods: ED patient receiving EKG and cardiac enzyme for chest pain were included in a consecutive, observational study over a 36 month period NSTEMI meant no ST elevation, WHO criteria for chest pain and elevation of CK-MB > 5.0 or Tn I > 0.4 or both markers. Groups were created for AMI (with ST elevation) and NSTEMI further evaluation included ED admits and direct admits.

Results: 6304 patients were admitted over 3 years with AMI: 72% were NSTEMI with 25% of those admited through the ED with a 17% mortality rate. Of the 285 AMI (NSTEMI) 6% admit thru ED and a 5% mortality rate ($p<01$). Inferior 37%, anterior 31%, lateral 5%, post 4%. Direct comparison between the NSTEMI and AI (ST elevation) found marked increased mortality, younger age, more male, and more admits through the ED. The current decision based on allcomers finding that NSTEMI do not benefit from aggressive treatment are not validated by large ED populations despite the patients being younger and more commonly without pre-existing CAD history.

Conclusion: Future treatment protocols for NSTEMI need to focus on more aggressive interventions and attempts to reduce a markedly increased mortality.