Background

An Indian patient with chest pain spends 5 hours on average before reaching the first medical contact. The recently published Indian national consensus statement for STEMI (ST-elevation myocardial infarction) management was an effort to streamline the complex and diverse standards of healthcare and channelize patient presentation in critical care situation, and recommend a pharmacoinvasive approach for STEMI patients in India to ensure early reperfusion. We focused on early reperfusion and education. Two very recently published data further emphasize the importance of these two factors.

First, the data from the authors who wrote the editorial in the same journal showed that in the STREAM study subgroup a pharmacoinvasive approach of very early fibrinolysis (90 min) more frequently aborts Myocardial Infarction than even primary PCI and patients managed with this strategy had more favourable long term outcomes.

The second, are results from the first of its kind well-designed study in patients hospitalized for ACS (n=1,944). At time of discharge, patients in the intervention group received a 40-minutes individualized ‘education session’ using motivational techniques and this was reinforced one month later by telephone. It was found that median delay time in presenting to the hospital in patients receiving ‘education’ was significantly lower compared to those who were not given education (1.7 hours vs. 7.1 hours; p ≤ 0.001). Educated patients reported their symptoms more promptly compared to those who did not receive patient education (p = 0.01) and fewer consulted a general practitioner (p = 0.02).

What matters the most: Despite improvements in door-to-balloon times, there was no significant overall change in risk-adjusted in-hospital mortality (P = 0.34) nor was a significant difference observed in unadjusted 30-day mortality (P = 0.64). These data suggest that additional strategies are needed to reduce in-hospital mortality.

Ultimately, reducing the total ischemic time (TIT) which accounts for the additional delay in patient presentation to the hospital and the time to reperfusion makes the difference in STEMI management.

The key elements in the patient’s alarm clock in STEMI are:

- Awareness about symptoms of chest pain
- Gravity in addressing the situation
- Preparedness about how to respond
- Urgency to rush to the nearest appropriate medical care center

Simple measures like mass public awareness drives/ campaigns can substantially reduce the pre-hospital delays that will ultimately aid in reducing the TIT in Indian patients.

References


myocardial infarction: insights from the Strategic Reperfusion Early After Myocardial infarction trial. *Heart* 2014; doi:10.1136/heartjnl-2014-306023
