

PROMPT TREATMENT OF HEART ATTACKS THROUGH STEMI/NSTEMI PROGRAMME

In a nutshell: ST Elevation in Myocardial Infarction (STEMI), a grave complication of Coronary Artery Disease (CAD) is a significant healthcare problem in India

Nodal agency: Government of Tamil Nadu

Ischemic heart disease is the leading cause of death in India. A treatment plan for the acute care of ST Elevation Myocardial Infarction (STEMI) was launched within a large rural district of Tamil Nadu, India. The STEMI programme of Tamil Nadu Accident and Emergency Care Initiative (TAEI), Government of Tamil Nadu aims at free and prompt treatment of coronary artery disease.

Traditionally, a heart attack is treated by two strategies of re-perfusion. If a patient arrives at a hospital equipped with a catheterisation laboratory or 'cath lab', a procedure known as Primary PCI is performed – an urgent balloon angioplasty.

The patient is then 'Thrombolysed' – treated to dissolve clots in blood vessels, improve blood flow, and prevent damage to tissues and organs before being discharged.

The new model implemented in Tamil Nadu uses the pharmaco invasive strategy, which can be administered in any small hospital or even in the ambulance.

The Classic STEMI India model has a hub hospital, where a cath lab is available and primary PCI is done for patients directly presented at these hospitals.

These are linked to peripheral spoke hospitals, where thrombolysis is done following which the patient is shifted within three to 24 hours to the hub hospital for invasive treatment.

Impact:

This "systems of care" for STEMI management creates new opportunities to deliver adequate reperfusion therapies in India. As a result of this initiative, data demonstrates an improvement in the quality of acute STEMI care by dramatically decreasing the time from symptom onset to hospital arrival and subsequent receipt of Percutaneous Coronary Intervention. Other states like Telangana and Karnataka are in the process of adopting this model with government support.



Training session for Tamil Nadu STEMI Program