

## Primary PCI in STEMI!!"

**ZAMANI, B**

Ardabil medical university, Ardabil, Iran

Primary percutaneous coronary intervention (PCI) has been established as the treatment of choice for patients presenting with acute ST elevation myocardial infarction (STEMI) and is associated with high success rate, low mortality in non-shock patients and low complication rates.

**STEMI** was defined as symptoms of ischemia associated with ST-segment elevation of  $\geq 1$  mm in limb leads and/or  $\geq 2$  mm in chest leads in  $\geq 2$  contiguous leads, or new left bundle branch block, or true posterior myocardial infarction with ST depression of  $\geq 1$  mm in  $\geq 2$  contiguous anterior leads. There are no situations in which fibrinolytic therapy is preferred over primary PCI unless the patient refuses invasive procedures. Fibrinolytic therapy works best when symptom onset is  $< 3$  hours since fresh thrombus lysis more readily than more organized, subacute thrombus. If symptoms have been present for  $> 3$  hours then primary PCI is preferred.

The best outcomes occur when primary PCI is performed with a door-to-balloon time of  $< 90$  minutes and when symptoms onset was  $< 12$  hours. Primary PCI is only indicated when symptoms duration is 12-24 hours (delayed presentation) if severe congestive heart failure, hemodynamic/electrical instability or continued angina is present. Primary PCI is not recommended when symptom onset is more than 12 hours and the patient is asymptomatic.

Catheterization team was activated immediately on confirmation of STEMI diagnosis. After loading with dual antiplatelets, patients were immediately shifted to catheterization laboratory.

After gaining vascular access, non-culprit vessel angiogram was done first followed by the culprit vessel angiogram. Once the decision to go ahead with angioplasty was taken, heparin was administered in dosage of 70–100 U/kg to achieve an ACT of 250–300. GIIb/IIIa inhibitor use was left to operator's discretion. The choice of guidewire, balloon, stent, thrombus aspiration and IABP was on operator's discretion.

Hemodynamically stable patients were kept in CCU for 24–48 h and subsequently shifted to step down unit and were discharged on 4th or 5th day. At discharge statins in dose of 40–80 mg and dual anti platelet (DAPT) agents were prescribed to all patients. ACEI/ARB and beta blockers were used in all patients without contraindications for their use.

Important predictors significantly associated with mortality are the door to balloon time, Killip class, final TIMI flow and severe LV dysfunction.