COMPARISON BETWEEN BOLUS INTRACORONARY VERSUS BOLUS INTRAVENOUS INJECTION REGIMENS OF EPTIFIBATIDE DURING PRIMARY PCI IN PATIENTS WITH ANTERIOR STEMI

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BACKGROUND
Eptifibatide achieve high local concentration via direct intracoronary injection as it promotes clot disaggregation, but it remains unclear if it is of superior benefit than the routine intravenous administration.

AIM
The current study aimed to examine the safety and efficacy of intracoronary versus intravenous bolus regimen dose of eptifibatide during primary PCI.

PATIENTS AND METHODS
Prospective, controlled, randomized study enrolled 100 patients with acute anterior STEMI eligible for primary PCI equally divided into 2 groups (group A received bolus intracoronary eptifibatide and group B received it intravenous) followed by 12h continuous IV infusion. Predictors of myocardial salvage in the form of TIMI flow grade III, myocardial blush grade 3, ST segment resolution and left ventricular systolic function were evaluated with short term follow up for 1 month.

RESULTS
Mean age of the study population was 50.95±8.45years, there was statistically insignificant difference between both groups regarding baseline characteristics regarding age (p=0.062), gender (p=0.488) and coronary artery disease risk factors (p>0.05), time from onset of pain to admission (p=0.86) or door to balloon (p=0.12). Group A achieved statistically significant better myocardial blush grade 3 (42% versus 10%, p=0.005), ejection faction 30 days after PPCI (46.11±7.81, versus 40.88±6.26, p=0.005) but statistically insignificant TIMI flow grade III (p=0.29) and ST resolution (p=0.34). Incidence of in hospital compilations and 30 days after discharge was statistically insignificant (p>0.05).

CONCLUSION
Regimen of intracoronary bolus eptifibatide achieved better myocardial salvage predictors and was as safe as intravenous bolus during PPCI and at short term follow-up.