

Thrombus Aspiration in STEMI Patients Undergoing Primary PCI - Insights from ACSIS 2010

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Background: Prior studies have suggested that thrombus aspiration prior to coronary stenting in patients with STEMI undergoing primary PCI (PPCI) improves clinical outcome.

Aim: To assess the impact of thrombus aspiration (TA) before stent implantation in STEMI pts undergoing PPCI on: (a) Infarct size: assessed by maximal CPK/troponin levels and LVEF; (b) MACE at 30 days (death, recurrent MI/ischemia, stent thrombosis, urgent revascularization, ischemic stroke). Methods: 517 STEMI patients who underwent PPCI and hospitalized in 26 CCUs during a 2-month national ACS Israeli Survey (ACIS) 2010 were included.

Results:

On multivariate regression analysis only TIMI 0-1 before PPCI was independently associated with use of TA (OR=3.47;2.28-5.28, p<0.0001). Use of TA was not associated with a better 30-day MACE (OR=0.93;0.48-1.81, p=0.84) after covariate adjustment for pertinent variables and the propensity score for TA use.

Conclusions: In "real-world" practice use of thrombus aspiration before stent implantation in STEMI pts undergoing PPCI was not associated with a better outcome at 30 days, and did not affect infarct size.