Myocardial salvage after reduced-dose thrombolysis combined with glycoprotein IIb/IIIa blockade versus thrombolysis alone in patients with acute myocardial infarction.

BACKGROUND: The aim of study was to examine the efficacy of reduced-dose alteplase plus abciximab versus alteplase alone by quantifying the amount of myocardium salvaged using myocardial scintigraphy. METHODS: This study analyzed 150 patients with acute myocardial infarction who received alteplase (69 patients) or reduced-dose alteplase plus abciximab (81 patients) in the setting of the Stent versus Thrombolysis for Ocluded Coronary Arteries in Patients with Acute Myocardial Infarction (STOPAMI) 1 and 2 trials. Salvage index (proportion of initial perfusion defect salvaged by reperfusion therapy), which was obtained by paired scintigraphic studies performed 7-14 days apart, was the primary endpoint of the study. One-year clinical follow-up was also done. RESULTS: Salvage index did not differ significantly among patients treated with reduced-dose alteplase plus abciximab (median, 0.41 [25th; 75th percentiles: 0.13; 0.58]) compared to patients who received alteplase (0.26 [0.09; 0.61], p = 0.30). Final infarct size was 16.0% [4.0; 31.0] of the left ventricle in the group with reduced-dose alteplase plus abciximab and 19.4% [7.9; 34.2] of left ventricle in the group with alteplase (p = 0.44). Within a time-to-admission interval of or = 2 hours, no such trend was observed between those who
received reduced-dose alteplase plus abciximab or alteplase (0.25 [0.08; 0.48] versus 0.22 [0.08; 0.46], p = 0.79). Major bleeding occurred in 4 patients (5.0%) in the group with reduced-dose alteplase plus abciximab versus 2 patients (3.0%) in the group with alteplase alone (p = 0.58).

CONCLUSION: When used as a general strategy in patients with acute myocardial infarction, adding abciximab to alteplase does not increase significantly the amount of salvaged myocardium as compared with alteplase alone. Combination therapy may offer advantages over thrombolytic agents alone if such therapy is applied within 2 hours from symptom onset; however these data need to be proven by studies of adequate power.