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CLINICAL OUTCOMES OF MANUAL ASPIRATION THROMBECTOMY IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION: AN UPDATED META-ANALYSIS

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Pharmacotherapy and Complex Coronary Interventions
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Presentation Number: 2103-283

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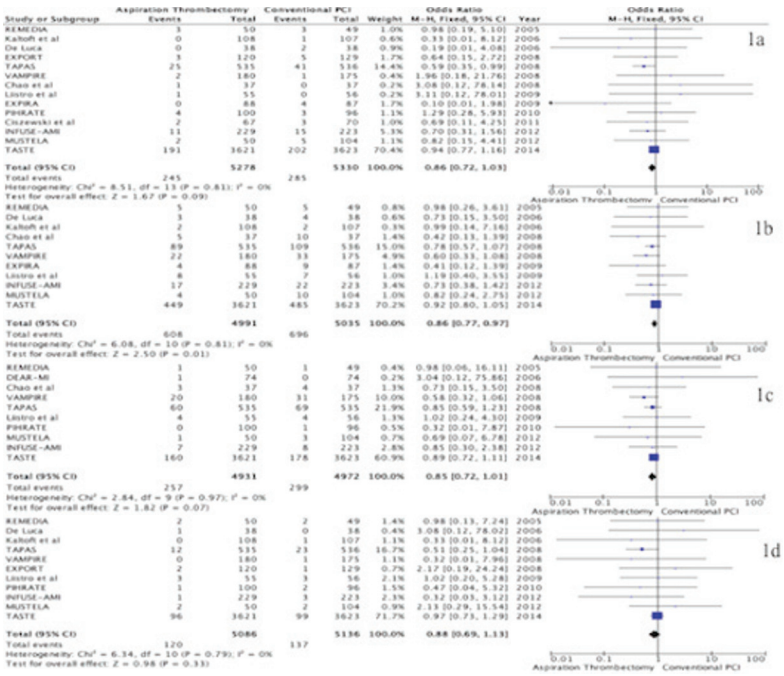
Background: Recent trials on aspiration thrombectomy (AT) use in patients with ST-segment elevation myocardial infarction did not show any significant benefit. This meta-analysis was designed to systematically evaluate prospective randomized trials and assess the effects of AT on all-cause mortality, major cardiovascular events (MACE), target vessel revascularization and myocardial reinfarction.

Methods: We conducted an EMBASE and MEDLINE search for all studies in which patients were randomized to treatment with aspiration thombectomy plus primary percutanous coronary intervention (PCI) versus PCI alone. We identified 15 prospective randomized trials which enrolled 5,404 controls that underwent conventional PCI and 5,352 patients that underwent PCI with AT with an average follow up duration of 5.5 months.

Results: A significant reduction in MACE with AT was noted (figure:1a). However AT did not significantly reduce all-cause mortality (figure:1b), target-vessel revascularization (figure:1c) or myocardial infarction (figure:1d).



Conclusion: The results of this large meta-analysis of 10,756 patients suggest that adjunctive AT to PCI may be associated with modest benefits related to MACE reduction.