Time To Reperfusion And Effect Of Intra-arterial Treatment In The Mr Clean Trial.

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**Background**

MR CLEAN was a randomized controlled trial of intra-arterial treatment (IAT) versus standard care in patients with acute ischemic stroke patients with a proximal intracranial anterior circulation occlusion who could be treated within 6 hours. Intervention resulted in a shift in the modified Rankin Scale (mRS) distribution, with 14% (95% CI: 6%-21%) more patients being independent. In the present study we examine the interaction of treatment effect with time from onset to reperfusion (TOR)

**Methods**

All 500 trial patients were included in this analysis. TOR was defined as time to mTICI 2b or 3 or end of procedure. We imputed TOR in the control group based on time to randomization. Clinical characteristics were examined by treatment allocation for each tertile of TOR. In the analysis, we used multiple ordinal logistic regression analysis to estimate the effect of treatment as an adjusted common odds ratio and to test for interaction of TOR with treatment effect. We also computed the absolute effect of treatment (risk difference, RD) on reaching independence (mRS 0-2)

**Results**

Baseline characteristics did not differ between tertiles. The overall adjusted common odds ratio was 1.67 (95% CI: 1.21-2.30). The absolute effect of treatment was largest in patients with TOR less than 5 hours, and approached unity in the third tertile, beyond 6 hours (Table). The interaction between TOR and treatment effect was statistically significant (P; 0.009).

**Conclusion**

Patients with reperfusion after 6 hours likely do not benefit from intra-arterial treatment. The effect of treatment is stronger and chances of reaching independence are better when patients reach reperfusion earlier.

**Disclosure**
