Mechanical thrombectomy is effective in m2 occlusions: yes

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Current guidelines for acute ischemic strong treatment adopt a powerful recommendation for mechanical thrombectomy (MT) in carefully selected patients with emergent large-vessel occlusions (ELVO). The recommendation derives from the 5 recently published randomized trials that primarily investigated patients with proximal large-artery occlusions. However, these trials recruited also 94 patients with M2-segment middle cerebral artery occlusions, including 51 that received MT. A recent meta-analysis of the individual patient data from the 5 trials showed a trend for a better outcome with MT in M2 occlusions [OR 1.28 (95% CI:0.51-3.21)]. Another retrospective cohort study of 522 patients, including 288 treated with MT, disclosed a 3 times greater probability for good outcome in the interventional group, despite the control group having received more often intravenous thrombolysis (iv-tPA). A review of 83 patients with M2 occlusions from the IMS-III trial showed that outcome did not differ between M2-trunk and M1 segment, provided that both are successfully reperfused. The latest AHA/ASA guidelines outline that although there is limited data, patients with M2 or M3 occlusions could also be treated with MT (Class IIb; Level of Evidence C). Moreover, it is true that the differentiation between M1 and M2 segments is not always straightforward and some patients treated for M1 actually harbored M2 occlusions. Finally, cases with M2 occlusions and clear contraindications for iv-tPA, constitute a patient group with considerable neurological deficit that could potentially be reversed with successful recanalization. Thus, stroke physicians should not restrain from performing MT in carefully selected patients with M2 occlusions.