



## DEBATE

# How low should we go? Can we perform EVT in patients with LVO and low NIHSS? Cons

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### Abstract

Six randomised controlled trials (RCT) demonstrated superiority of endovascular thrombectomy (EVT) to intravenous tissue plasminogen activator (IV-tPA) alone for acute ischemic stroke caused by an anterior circulation large vessel occlusion (LVO). But most trials excluded patients with low National Institutes of Health Stroke Scale (NIHSS) score. Guidelines give a Class II-b level of evidence for EVT with NIHSS $\leq$ 6. Although it might be reasonable, the benefits are uncertain and effectiveness not established.

Minor-mild stroke is not a benign condition and when there is a LVO the risks of early neurological deterioration and bad outcome are higher.

Several studies have reported that reperfusion with MT strongly impacts the functional outcome among minor-mild stroke patients with LVO. But some of these studies lack control groups undergoing best medical treatment (BMT).

Even though the complication rate in EVT is low, the clinical benefit has to outperform the cost and risks. And there are

non-negligible risks of haemorrhage, vasospasm, stroke to distal/other territory, air-emboli or puncture complications.

We can perform EVT in patients with LVO and low NIHSS! But do we need to? Should we do it outside a RCT?

A multicentre-cohort-study comparing urgent MT associated with BMT versus BMT first and MT if worsening occurs, achieved excellent and favourable outcomes at 3 months in similar proportions. Another observational-multicentre-study in 170 patients with NIHSS $\leq$ 4 showed that BMT alone led to a 77% of excellent outcome. A systematic-review/meta-analysis from 2018, to determine if MT can benefit patients with LVO and mild stroke, included 5 studies with a total of 413 cases. When compared with BMT without tPA, MT and BMT with tPA were associated with improved outcome. However, there was no significant difference between MT and BMT with tPA.

All these questions should prompt a RCT of primary versus deterioration-driven/rescue MT versus BMT including thrombolysis in patients with minor stroke and LVO.

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