

Procedure for treating adults with severe stroke is also safe and effective for treating children, research shows

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A study presented at the Society of NeuroInterventional Surgery's (SNIS) [20th Annual Meeting](#) noted that mechanical thrombectomy, a

standard treatment for adults with a large vessel occlusion, a type of severe ischemic stroke, is also safe and effective for treating children. The results are also published in the *Journal of NeuroInterventional Surgery*.

A large vessel occlusion is caused by a blood clot that blocks a large vessel, cutting off significant blood flow to the brain. The faster that patients with this kind of stroke receive [mechanical thrombectomy](#), a minimally invasive procedure that uses a catheter to reopen blocked arteries in the brain, the better their chances of functional independence after recovery.

The authors of the study, "Comparing Outcomes After Thrombectomy for Acute Ischemic Stroke Due to Large-Vessel Occlusion: Children vs. Adults—A Systematic Review and Meta-Analysis," reviewed eight studies involving 192 children who received thrombectomy for stroke. They compared these children's post-thrombectomy improvements with those of adults with the same procedure.

Children experienced better outcomes than adults in many of the study's measures, including higher rates of good neurological outcomes after surgery (76.1% for children vs. 46% for adults), better rates of restored blood flow (88.5% vs. 72.3%), fewer major surgery complications (4.7% vs. 30.4%), and lower mortality rates (1% vs. 12.9%).

"Seeing that our best standard treatment for adults with severe stroke is also extremely effective for children is encouraging," said Matt Findlay, a medical student at the University of Utah School of Medicine. "It's very meaningful to know that we can safely use this time-tested, minimally invasive procedure to get children back to their families, recovering quickly, and thriving."

More information: M Findlay et al, O-048 Comparing outcomes after

thrombectomy for acute ischemic stroke due to large-vessel occlusion: children vs. adults—a systematic review and meta-analysis, *SNIS 20th annual meeting oral abstracts* (2023). [DOI: 10.1136/jnis-2023-SNIS.48](https://doi.org/10.1136/jnis-2023-SNIS.48)

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