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## Selection Criteria for Posterior Circulation Stroke and Functional Outcome Following Mechanical Thrombectomy

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## *Selection Criteria for Posterior Circulation Stroke and Functional Outcome Following Mechanical Thrombectomy*

*Objective.* 20% of all acute ischemic strokes (AIS) are caused by posterior circulation strokes, which carry an intensified mortality touching 95%. Early recanalization improves outcome as shown by several reports; however, safety, patient selection, and prognostic factors remain lacking. An investigation of the safety and prognostic factors for posterior circulation mechanical thrombectomy (MT) was performed.

*Methods.* A retrospective review of patients presenting with posterior circulation AIS, who underwent MT between 2010 and 2018.

*Results.* Of 443 patients who underwent MT for AIS, 83 patients had posterior circulation strokes. 95% of procedures were conducted under general anesthesia. The median NIHSS upon admission was 19.1. Half of the patients underwent MT 8 hours from symptom onset, and half required a salvage contact thrombus aspiration after a stent retriever trial with an average of two passes for successful recanalization. The time to achieve revascularization was 61.6 minutes. Mortality rate was 28%, and modified Rankin Scale (mRS) < 2 at three months was seen in 40.1% of surviving patients. A higher functional outcome trend (mRS<2) was seen in patients who underwent MT within 8 hours of symptom onset. The overall complication rate was 28%. Regression analysis showed that stroke subtype, baseline NIHSS, and posterior circulation Alberta Stroke Program Early CT Score (pc-ASPECTS) before thrombectomy were independent predictive factors of positive clinical outcomes.

*Conclusions.* MT is an effective intervention for posterior circulation strokes, and long-term functional independence relies upon proper patient selection. Baseline NIHSS and pc-ASPECTS are independent predictive factors.