Endovascular treatment of acute posterior circulation ischemic stroke—outcomes of a single centre 14 months experience

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Abstract

Background and Objectives: Posterior circulation strokes account for 15-20% of all ischemic strokes and are associated with high disability. Variable and ill-defined symptoms may delay the diagnosis and increase morbimortality. Early recanalization seems to be associated with better clinical outcomes; however, the best management is still uncertain. Experience with stent retrievers is limited and this technique is usually combined with other therapies. In this study, we analyzed the imaging and clinical outcome after treatment with mechanical thrombectomy.

Methods: Since our center became part of the metropolitan emergency service for stroke (January 2016), more than 130 patients were admitted in the department of interventional neuroradiology. Of these, 10 had acute posterior circulation ischemic stroke and underwent endovascular mechanical thrombectomy. Clinical and angiographic data were collected. Success of the thrombectomy was defined as Thrombolysis in Cerebral Infarction (TICI) > 2, and good clinical outcome as a value in the modified Rankin Scale (mRS) < 3.

Results: The median age of the patients was 70.7 ± 8.86; mean National Institutes of Health Stroke Scale (NIHSS) on admission was 23.1 ± 5.7. Recanalization was successful (TICI > 2) in 7 of 10 patients (70). At 3 months, 40% of the patients had mRS < 3 (good and moderate clinical outcome), 40% had mRS 4-5 (poor clinical outcome), and 20% had mRS = 6 (dead).

Conclusion: Mechanical thrombectomy of acute ischemic stroke of the posterior cerebral circulation was found to be associated with high successful recanalization. We also observed favorable clinical outcome in an important percentage of patients.

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