AANS/CNS Joint Cerebrovascular Annual Meeting Los Angeles, California February 15-16, 2016 Rate of Reocclusion and Recurrent Stroke After Mechanical Thrombectomy Muaz Qayyum; Ameet V. Chitale MD; Badih Daou MD; Daniel Benito; Pascal Jabbour MD; Robert H. Rosenwasser MD, FACS, FAHA; Stavropoula I. Tjoumakaris MD

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Introduction

Mechanical thrombectomy has become a widely utilized tool for the management of acute ischemic stroke allowing for an increase in the therapeutic window, increased rates of vessel recanalization and significant improvement in clinical outcome. The rates of of vessel reocclusion and recurrent stroke following mechanical thrombectomy remain unknown in stroke patients.

Methods

Two hundred and forty five patients who presented with acute ischemic stroke and underwent treatment with mechanical thrombectomy (Solitaire/Pneumbra/Trevo/Merci) were identified retrospectively. Baseline patient characteristics and imaging data were recorded. Modified Rankin scale (MRS) score at the latest follow-up was determined along with determination of the rate of reoclussion and recurrent stroke during follow-up.

Results

The mean patient age was 64.4 years. 50.9% of patients received tPA prior to mechanical thrombectomy. The mean NIHSS score on arrival was found to be 15.73. The mean follow-up duration was 148 days. The vessel reocclusion rate was found to be 6.9% (17/245). The rate of recurrent stroke after thrombectomy was 11.02% (27/245). 8 patients (3.3%) had recurrent stroke in the same vascular territory. 19 patients (7.75%) had an embolic stroke following intervention. Mean time from initial stroke to recurrent stroke was 14.8 days. Mean MRS at the latest follow-up was 2.

Conclusions

The rate of recurrent vascular reocclusion and recurrent stroke following mechanical thrombectomy is low and occurs early following the intervention.

Learning Objectives

To determine the rate of reocclusion and recurrent stroke after treatment of acute ischemic stroke with mechanical thrombectomy.

References

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