

The number of endovascular thrombectomy attempt is related to clinical outcomes in large artery occlusion in patients with acute ischemic stroke

E. Kim, J. Seo, H. Jung

Neurology, Inje University Paik Hospital, South Korea

Purpose: It is not well known how many attempts for recanalization it would be advisable. We evaluated the relationship of the number of EVT attempt and clinical outcome. **Materials and Methods:** Patients who treated with EVT for large artery occlusion in anterior circulation and within 24 hours from last seen normal time were included. Age, sex, comorbidities, admission NIHSS score, modified Thrombolysis in Cerebral Ischemia score, time intervals from the puncture to recanalization, number of EVT attempt and three months modified Rankin Scale score were analyzed. **Results:** 207 patients receiving EVT for AIS in January 2012 to September 2017 were included. Successful recanalization was achieved in 156 (75.3%) after EVT. As the number of EVT attempt increased, the rate of favorable outcome (mRS 0-2) was significantly lowered. The clinical outcome of patients with 1 to 3 EVT attempt was more favorable than patients without successful recanalization, the clinical outcome of patients with more than 4 EVT attempt was not better. **Conclusions:** This study showed that an increased number of EVT attempt to achieve a good recanalization is related with worse outcomes. Even though successful recanalization is necessary to have good clinical outcomes, more than 4 EVT attempt could be futile.