

SINGLE CENTER EXPERIENCE WITH CATHETER BASED TREATMENT IN ISCHEMIC STROKE

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BACKGROUND

Several randomized trials have indicated a benefit from endovascular therapy in selected ischemic stroke patients.

OBJECTIVES

We present our initial experience of endovascular treatment (EVT) in patients with acute ischemic stroke (AIS).

METHODS

During last 3 years we performed EVT of 18 consecutive AIS patients National Institutes of Health Stroke Scale 13.6 ± 4.8 at presentation. The following EVT methods were applied: (A) mechanical thromb aspiration with Penumbra system (PS) alone in 4 patients; (B) combination of PS thromb aspiration plus balloon angioplasty (PTA) in 4 patients; (C) combination of wire recanalization, PTA and supraselective fibrinolysis with low dose t-PA in 4 patients, and (D) supraselective intra-arterial fibrinolysis alone in 5 patients. Stenting of the extracranial ICA and consecutive distal balloon PTA or PS thrombectomy in MCA was performed in other 2 patients. The target occluded arteries were: middle cerebral artery (MCA), extracranial internal carotid, pericalosal artery, basilar artery, vertebral artery and 2 patients with ACA/MCA occlusion.

RESULTS

The mean symptom onset-to-reperfusion time was 252 ± 116 min. Post-interventional TICI 2b-3 flow was achieved in 72.2%. In subgroups the results was respectively: A-75%, B-25%, C-80%, D-100%. No optimal recanalization ($TICI \leq 2$) had 4 patients. We observe one patient with inhospital mortality, 2 patients with malignant MCA infarct and two patients developed nonfatal intracerebral hemorrhage. Modified Rankin Scale score 0-2 (at 90 days) was observed in 9 patients.

CONCLUSION

Our initial experience with EVT of AIS is encouraging, with a relatively moderate to high rate of successful angiographic recanalization and good clinical results.