

REPERFUSION THERAPY FOR ACUTE ISCHEMIC STROKE: OUR EXPERIENCE AT SAN GERARDO HOSPITAL

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Background: Acute ischemic stroke is an important cause of mortality and morbidity. Proximal occlusion of the major intracranial arteries accounts for more than one third of acute anterior circulation stroke. Recent trials have shown that in this subset of patients mechanical thrombectomy with retrievable stents on top of intravenous alteplase, is beneficial in terms of functional independence in daily life.

Materials and Methods:

Variable	Intervention (N=12)
Age-yr (median)	58.7
Female sex - no (%)	5 (41.7)
Medical history - no (%)	
Hypertension	66.7
Diabetes mellitus	33.3
Atrial fibrillation	25
Smoking	58.3
Median baseline NIHSS score :	18.5
Location of occlusion on CTA – no (%)	
Ipsilateral cervical carotid occlusion	0
ICA + M1 ± M2 MCA segment	33.3
M1 or M2 MCA segment alone	66.7
Median time from	
Stroke onset to hospital arrival (min)	63.9
Stroke onset to start of alteplase (min)	104.3
Stroke onset to groin puncture (min)	176.2
Treatment with alteplase - no (%)	7 (58.3)

Patients were adult (no upper age limit) with acute ischemic stroke with moderate to severe neurological deficits, had imaging confirmed occlusion of the intracranial internal carotid artery, the first segment of the middle cerebral artery or both, had received intravenous t-PA within 4,5 hours after symptom onset. Pre stroke MRS was between 0 and 1 in all patients. All patients underwent clinical assessment at baseline, after 24 hours and at discharge. All patients underwent baseline noncontrast CT to exclude patients with infarct core, baseline CTA to identify the occlusion site, a 24 hours noncontrast CT to exclude periprocedural complications and a 4 day non contrast CT for evaluation of final infarct core. The neurointerventionist used available thrombectomy devices to achieve reperfusion.

Results and Conclusion:

Between February 2015 and June 2016 a total of 12 patients underwent endovascular treatment. Primary outcome was the increase in functional independence in daily life by 3 months. This was estimated by the Score on the Modified Ranking Scale at 90 days: in 5 patients mRS was between 1 and 3. In 1 patient was 4 and in 5 patients was between 5 and 6. Median baseline NIHSS was 18.5. NIHSS at discharge was 10 in average.

Despite the small sample dimension, our results are equivalent, if compared with recent trials, in term of improved reperfusion and early neurologic recovery, not yet in term of functional outcome.

