

MECHANICAL THROMBECTOMY IN STROKE PATIENTS: A SINGLE CENTER CASE SERIES.

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Introduction

According to WHO, globally, 70% of strokes and 87% of both stroke-related deaths and disability occur in low-and middle-income countries. The stroke incidence in low-and middle-income countries has more than doubled. Despite progress in prevention and treatment, stroke is still a devastating problem.

Keywords

Stroke, thrombectomy, thrombaspation, stent-retriever.

Purpose

As mechanical thrombectomy is the gold standart in acute stroke treatment in eligible patients. The scope of this study is to share the results of a series of cases that underwent reperfusion therapy in the angiographic suite of Institute of Neurology and Neurosurgery „D. Gherman”.

Material and methods

The study represents a series of patients who underwent mechanical thrombectomy for the treatment of acute stroke. Methods include Stent retrievers and thrombaspation devices. The results were classified based on TICI and mRS scores.



Figure 1. Preoperative DSA Angiography. Stop contrast agent at the MCA emergence. Frontal and Lateral views.

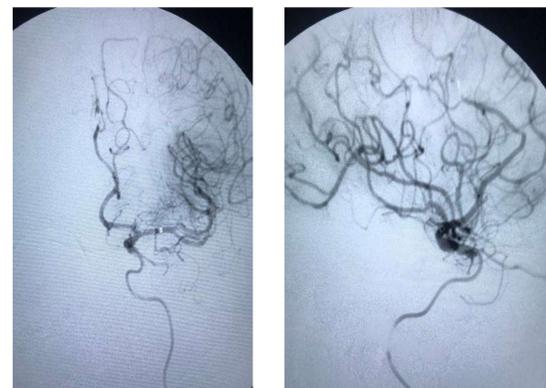
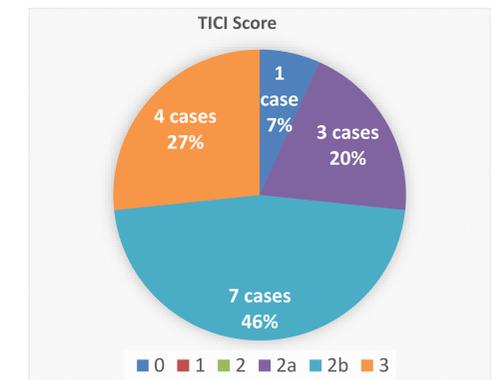


Figure 2. Postoperative DSA Angiography. MCA filling after mechanical thrombectomy. Anterior and Lateral views.

Results

Score	Description	Number of patients
0	No reperfusion	1
1	Penetration with minimal perfusion	
2	Partial perfusion	
2a	Only partial filling (2/3) of the entire vascular territory is visualized	3
2b	Complete filling of all of the expected vascular territory is visualized, but filling is slower than normal	7
3	Complete perfusion	4

Table 1. Reperfusion results by Thrombolysis in Cerebral Infarction (TICI) Score



Score	Description	mRS 12 h	mRS discharge
mRS 1	No significant disability, despite symptoms; able to perform all usual activities	8	7
mRS 2	Slight disability; unable to perform all previous activities but able to look after own affairs without assistance	4	3
mRS 3	Moderate disability; requires some help, but able to walk without assistance	3	3
mRS 4	Moderately severe disability; unable to walk without assistance		
mRS 5	Severe disability; bedridden, requires constant nursing care.		
mRS 6	Death		2

Table 2. Clinical outcome results by Modified Rankin Disability Score at 12 hours after the procedure and hospital discharge.

Conclusions

Limited number of thrombectomies were performed due to the lack of systematization of patient referral to the specialized institutions in Moldova and is a key point that needs attention. Also, more practice to the surgeon, will allow better outcomes for the patients.