

Endovascular Thrombectomy for Distal Occlusion with Disabling Neurological Deficit: a Case Report

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Background

The efficacy and safety of thrombectomy for distal medium vessel occlusion remain debated. Despite recent studies indicating no significant difference from conventional care, thrombectomy for distal occlusions may still be warranted, particularly if the occlusion is located in the dominant hemisphere and accompanied by severe impairments.



Case



Figure 1. CT Scan Admission



Figure 2. AP view pre-thrombectomy

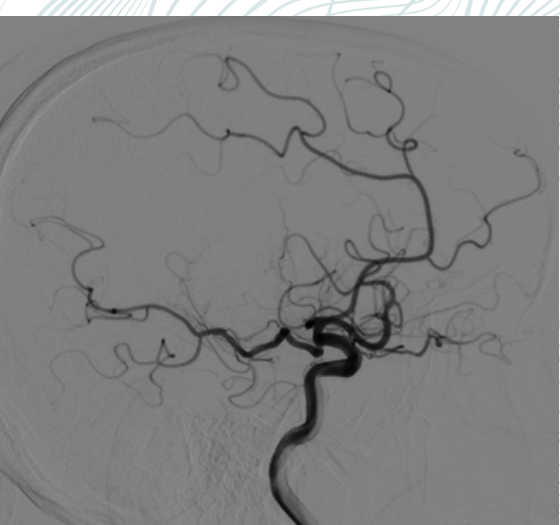


Figure 3. Lateral view pre-thrombectomy

A 64-year-old male presented at the emergency department with symptoms of inability to speak and right-sided hemiparesis that occurred within 5 hours of onset. The National Institutes of Health Stroke Scale (NIHSS) score on admission was 9.

Non-contrast head computed tomography (CT) revealed a hyperdense vessel sign in the left M2 inferior segment of the middle cerebral artery (MCA), without hemorrhage sign. The patient was transferred directly to an angio-suite and prepared for endovascular thrombectomy. Digital subtraction angiography demonstrated distal occlusion of the left middle cerebral artery.

Endovascular thrombectomy was performed using a stent-retriever with the first pass, and the angiogram showed good recanalization (mTICI 3) of the distal MCA segments.

The patient regained comprehension of speech and recovery of right-side hemiparesis (NIHSS score 1) within two days. CT scan evaluation showed no further infarction or signs of bleeding.

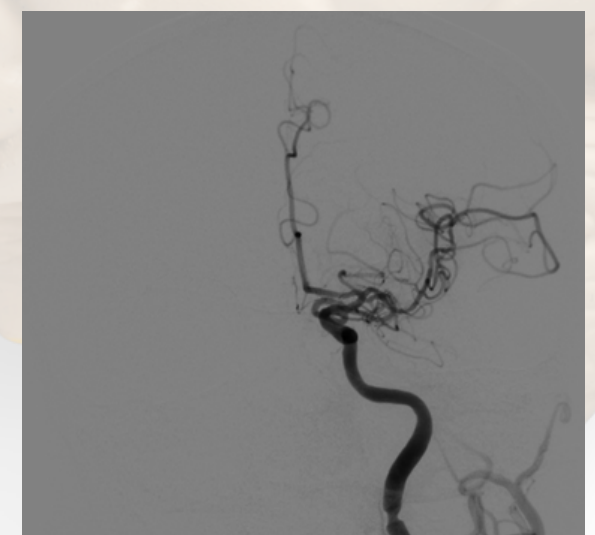


Figure 4. AP view post-thrombectomy

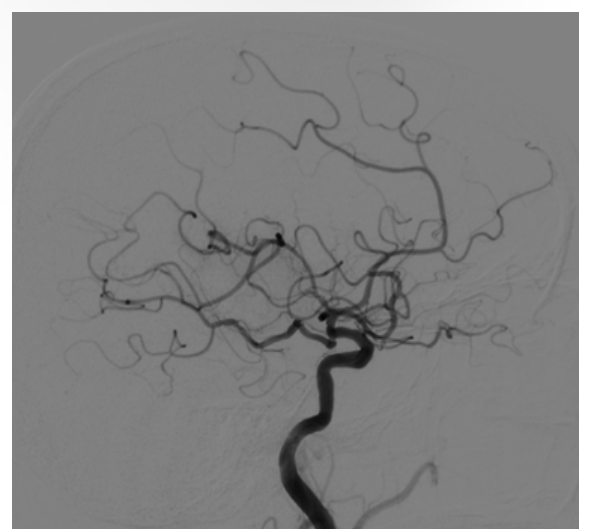


Figure 5. Lateral view post-thrombectomy



Figure 6. CT Scan 24 H



Conclusion

Thrombectomy for distal occlusion may be considered reasonable in selective cases. Additional study is required to evaluate the efficacy of thrombectomy in distal occlusions, taking into account optimal patient selection and the most suitable devices

References

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