

Post-Thrombectomy Management of ELVO

1. Patients undergoing stroke thrombectomy are more likely to regain functional independence if they receive post-procedure inpatient care in a designated stroke unit with access to a coordinated multidisciplinary team. This benefit applies to patients irrespective of age, sex, or stroke severity. (Class I, level of evidence B)
2. Of the various levels of stroke care, comprehensive stroke centers or the local equivalent are most likely to provide post-procedural care that is specific of the needs of patients after ELVO treatment. Stroke units should therefore be prioritized for ELVO post-procedural care disposition. (Class I, level of evidence B)
3. Sustaining ischemic penumbral tissue through hemodynamic support should be considered in patients with unsuccessful or partially successful recanalization. Induced hypertension and patient positioning are likely to be most helpful, although optimized protocols remain to be determined. Collateral support should continue for at least 24 hours before attempts to wean. (Class IIb, level of evidence B)
4. Postoperative imaging to monitor for post-thrombectomy hemorrhage is appropriate and useful. (Class IIb, level of evidence C)
5. Post-reperfusion blood pressure management should take into account the patient's baseline blood pressure ranges, balancing reperfusion needs against the risk of hemorrhage. (Class IIb, level of evidence C)
6. Reversal of tPA can and should be considered in post-thrombectomy patients experiencing significant bleeding complications from tPA. (Class IIB, level of evidence C)
7. Clinical and imaging data should be utilized to identify patients at high risk for malignant cerebral or cerebellar edema. (Class I, level of evidence B)
8. Regular frequent neurological examinations to follow the patient's level of arousal, pupillary findings, and motor responses must be monitored in patients at risk of malignant cerebral or cerebellar edema. (Class I, level of evidence C)
9. Early imaging findings that demonstrate significant tissue involvement within the first 6 hours predict significant cerebral edema. These include MCA hypodensity in one-third of the MCA territory, diffusion weighted imaging volume >80 mL, or midline shift. (Class 1, level of evidence B)
10. Intracranial pressure monitoring has no defined role in ELVO. (Class III, level of evidence C)
11. Hyperosmolar agents may benefit patients with cerebral edema following large volume stroke. (Class IIa, level of evidence C)
12. Hyperventilation has short term benefit on acute herniation; it should be used as a bridging therapy just prior to definitive surgical management. (Class III, level of evidence B)
13. Prophylactic hyperventilation is not recommended. (Class III, level of evidence B). Hypothermia and use of other neuroprotectant strategies may be beneficial, but data are insufficient to support clinical use in adults after large vessel stroke. (Class III, level of evidence C)

14. Decompressive craniectomy with dural expansion should be considered in all patients <60 years of age with large volume infarctions who decompensate, or who are at imminent risk of decompensation despite medical management. (Class I, level of evidence B)
15. Decompressive craniectomy may be considered in patients >60 years of age, however the mortality benefit may not be accompanied by functional recovery. (Class IIb, level of evidence C)
16. External ventricular drain placement and suboccipital craniectomy with dural expansion should be pursued for patients with cerebellar stroke who deteriorate or are at imminent risk of decompensation despite medical management. (Class I, level of evidence B)
17. Family should be informed that despite decompressive craniectomy up to half of survivors will remain severely disabled. In contrast, following suboccipital craniectomy the majority of patients make a favorable neurologic recovery. (Class IIb, level of evidence C)
18. Closure devices are useful in the appropriate clinical context, with similar complication rates. There is a modest advantage of immediate hemostasis that may allow for faster patient mobilization post-procedure. (Class I, level of evidence C)
19. Significant complications can develop acutely or subacutely at the access site, with investigations and interventions that may be urgently or emergently needed. Appropriate and standardized monitoring strategies should be used to detect these complications in the post-procedural setting. (Class I, level of evidence C)
20. All patients admitted with acute stroke should have an initial assessment by multidisciplinary rehabilitation professionals (physical, occupational, and speech therapy) as soon as possible after admission, preferably within the first 24–36 hours. (Class II, level of evidence B)
21. Due to impact on outcome, every effort should be made to establish aggressive rehabilitation placement for this patient population. (Class II, level of evidence B)
22. Ninety-day outcome assessment after thrombectomy is a reasonable and appropriate standard follow-up. (Class II, level of evidence C)

[REFERENCE LINK:](#)

Leslie-Mazwi T et al. "Post-Thrombectomy Management of the ELVO patient. Guidelines from the Society for Neurointerventional Surgery." *J NeuroIntervent Surg.* 2017. [Epub ahead of print].

Last updated by Justin F. Fraser, MD
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