

# Cerebellar infarction treatment

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The management of acute cerebellar infarction or hemorrhage often requires difficult and prompt decisions by treating neurologists, and certain easily identifiable clinical and imaging findings may assist in appropriate patient triage and timely neurosurgical intervention <sup>1)</sup>

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Space-occupying brain edema is a frequent and one of the most dreaded complications in ischemic [cerebellar stroke](#). Because the tight [posterior fossa](#) provides little compensating space, any space-occupying lesion can lead to life-threatening complications through [brainstem compression](#) or compression of the [fourth ventricle](#) and subsequent [hydrocephalus](#), both of which may portend [transtentorial herniation](#)/transforaminal herniation. Patients with large cerebellar infarcts should be treated and monitored very early on in an experienced stroke unit or (neuro)intensive care unit. The general treatment of ischemic cerebellar infarction does not differ from that of supratentorial ischemic strokes. Treatment strategies for space-occupying edema include pharmacological antiedema and intracranial pressure-lowering therapies, ventricular drainage by means of an extraventricular drain, and suboccipital decompressive surgery, with or without resection of necrotic tissue. Timely escalation of treatment is crucial and should be guided by clinical and neuroradiological rationales. Patients in a coma after hydrocephalus and/or local brainstem compression may also benefit from more aggressive surgical treatment, as long as the conditions are reversible. Contrary to the general belief that outcome in survivors of space-occupying cerebellar stroke is usually good, recent studies suggest that for many of these patients, the long-term outcome is not good. In particular, advanced age and additional brainstem infarction seem to be predictors for poor outcomes. Further trials are necessary to investigate these findings systematically and provide better selection criteria to help guide decisions about surgical therapies, which should always be carried out in close cooperation among neurointensive care physicians, neurologists, and neurosurgeons <sup>2)</sup>.

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Cerebellar strokes after day one develop progressive edema and subsequent herniation and are critical conditions that warrant immediate, specialized [neurointensive care](#) and often [neurosurgical intervention](#).

cerebellar infarctions are treated largely like other [ischemic strokes](#). Patients with acute events

having a clear time of onset within 4.5 hours may be candidates for [thrombolysis](#) with [recombinant tissue plasminogen activator](#) (rtPA). However, given the difficulty of diagnosing posterior infarcts, this is often not possible. As with other strokes, thrombectomy can be an option. Since structures in the posterior circulation may have greater white matter content and collateral flow, they are thought to have a stronger tolerance to ischemia and hypoxia than those in the forebrain. Especially in larger basilar artery occlusion, thrombectomy is often considered outside of the usual 6 hour time window, and posterior infarcts are considered amenable to even delayed reperfusion therapy.

Brain imaging showing a large difference or “mismatch” between the volume of brain infarcted and the area of decreased perfusion or a high degree of collateral circulation may prompt more emergent thrombectomy. When reperfusion is not an option, aspirin therapy and possibly another antiplatelet agent such as clopidogrel are indicated, with the possible addition of anticoagulation therapy in patients with embolic events. Reactive cerebral edema typically worsens over 3 to 4 days after the initial infarct and if causing worsening neurological symptoms, mandates admission to a neurologic intensive care setting for monitoring. Underlying preventable causes of the infarct are usually investigated during admission. Cardiac monitoring can demonstrate atrial fibrillation or other arrhythmias, echocardiography can reveal a patent foramen ovale or ventricular dysfunction, and blood testing can reveal diabetes mellitus or hyperlipidemia.

So, it is very important to admit these patients to ICU and monitor them very closely. The earliest symptoms are severe headache, altered mental status, vomiting, and drowsiness. Large strokes with significant cerebral edema, especially if the intracranial pressure is elevated, often require extraventricular drains, ventriculostomy, or decompressive sub-occipital craniotomy. Neurosurgical removal of infarcted tissue or hematoma is also occasionally necessary. In these cases, rapidly reversible agents such as intravenous heparin should be used. In the acute setting, mannitol, hypertonic saline, or hyperventilation can also be helpful to temporarily reduce intracranial pressure

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## Cerebellar infarction Surgery

see [Cerebellar infarction Surgery](#).

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Jensen MB, St Louis EK. Management of acute cerebellar stroke. Arch Neurol. 2005 Apr;62(4):537-44. doi: 10.1001/archneur.62.4.537. PMID: 15824250.

2)

Neugebauer H, Witsch J, Zweckberger K, Jüttler E. Space-occupying cerebellar infarction: complications, treatment, and outcome. Neurosurg Focus. 2013 May;34(5):E8. doi: 10.3171/2013.2.FOCUS12363. PMID: 23634927.

3)

Ioannides K, Tadi P, Naqvi IA. cerebellar infarction. 2021 Jul 8. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. PMID: 29261863.

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