

# Posterior Fossa Decompression for Chiari Malformation Indications

- Symptomatic CM-I (e.g. [occipital headaches](#), Valsalva-induced pain, [ataxia](#), sensory disturbances).
- Progressive [neurological deficits](#).
- Presence of [syringomyelia](#) or [brainstem](#) compression on MRI.
- Bulbar symptoms (e.g. [sleep apnea](#), [dysphagia](#)).

[Posterior fossa decompression](#) (PFD) for Chiari malformation type I (CM-I) is indicated in patients with symptomatic hindbrain herniation. The decision to operate is based on clinical presentation, radiological findings, and disease progression.

## Indications for Surgery: Symptomatic Chiari Malformation Type I

Debilitating headaches, typically occipital, exacerbated by Valsalva maneuvers (e.g., coughing, straining). Cervicomedullary compression symptoms, including dizziness, dysphagia, dysarthria, sleep apnea, and lower cranial nerve dysfunction. Myelopathic symptoms, such as weakness, spasticity, and balance issues. Chiari Malformation with Syringomyelia

Progressive neurological deficits (e.g., limb weakness, sensory disturbances, bladder dysfunction). Expanding syrinx on serial imaging, even in the absence of severe symptoms. Progression of Symptoms Despite Conservative Management

Worsening clinical picture despite observation. Failure of medical management (e.g., NSAIDs for headaches, physical therapy). Severe CSF Flow Obstruction on Cine MRI

Evidence of impaired cerebrospinal fluid (CSF) dynamics at the foramen magnum. Abnormal or absent posterior subarachnoid space flow. Relative and Contraindications: Asymptomatic CM-I → Usually observed with periodic imaging. Mild symptoms with no progression → Conservative management preferred. Chiari malformation due to secondary causes (e.g., tumors, hydrocephalus) → Address underlying etiology first.

From:  
<https://neurosurgerywiki.com/wiki/> - Neurosurgery Wiki

Permanent link:  
[https://neurosurgerywiki.com/wiki/doku.php?id=posterior\\_fossa\\_decompression\\_for\\_chiari\\_malformation\\_indications](https://neurosurgerywiki.com/wiki/doku.php?id=posterior_fossa_decompression_for_chiari_malformation_indications)

Last update: 2025/07/03 10:08

