

How Patients Cope With Post-op Pain

For most people with Chiari malformation, the decision to undergo decompression surgery is made with the hope of reducing headaches, relieving neurological symptoms, and improving quality of life. However, the days and weeks immediately following surgery can be among the most challenging parts of the entire treatment process. Severe headaches, neck pain, muscle spasms, and pressure sensations are common, yet relatively little research has focused on how these symptoms are managed or how they affect recovery.

A recently published multicenter study helps shed light on this issue by examining postoperative pain management following Chiari decompression. While the study is small, it highlights an important reality that many patients and clinicians have long recognized, recovering from Chiari surgery can be difficult and painful.

The researchers reviewed the medical records of 27 adults who underwent Chiari decompression at four medical centers. Rather than evaluating whether surgery successfully relieved Chiari symptoms over the long term, the investigators focused specifically on the immediate postoperative period. They examined which pain medications patients received, how long they remained hospitalized, whether they returned to the emergency department after discharge, and how often additional imaging or surgery was required.

They found a large amount of variability in postoperative pain management. Every patient received opioid medications, but beyond that there was little consistency, with additional medications including acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), muscle relaxants, and more. There was no standardized approach to managing pain after Chiari decompression, with treatment largely depending on the preferences of individual surgeon or hospital.

The researchers also found that recovery frequently required additional medical care after patients left the hospital. Eleven of the 27 patients (41%) visited an emergency department within 60 days of surgery, most commonly because of persistent headaches or pressure-related symptoms. Many of these patients underwent CT or MRI scans to determine whether a postoperative complication had developed. Ultimately, only two patients were found to have cerebrospinal fluid (CSF) leaks requiring additional surgery, meaning that most emergency visits were related to postoperative symptoms rather than complication requiring additional intervention.

Although high, this finding supports previous research demonstrating that post-surgical ER visits are common for Chiari patients with headaches being the most cited reason. Although the early use of NSAIDs did result in lower reported pain scores, it did not translate into shorter hospital stays, reduced opioid use, or fewer emergency department visits.

Over the past two decades, many surgical specialties have adopted Enhanced Recovery After Surgery (ERAS) protocols, which combine evidence-based approaches to pain management, early mobilization, patient education, and postoperative care into coordinated recovery pathways. These protocols have been shown to reduce complications, shorten hospital stays, and improve patient satisfaction across a wide range of surgical procedures. Although ERAS principles have begun to expand into neurosurgery, procedure-specific pathways for Chiari decompression remain poorly developed. Chiari patients would likely benefit from a more structured approach to postoperative recovery. Better patient education regarding what to expect, standardized multimodal pain management strategies, clearly defined follow-up plans, and guidance regarding when emergency evaluation is truly necessary could potentially improve the recovery experience while reducing unnecessary emergency department visits.

Although small in size, this study highlights an important area of Chiari care which is lacking in both established standards and clinical focus.

Source: Kreul TG, Krall TD, Cowley S, et al. Postoperative Pain and Healthcare Utilization Following Chiari Malformation Decompression: A Multicenter Retrospective Cohort Study. *Cureus*. 2026;18(5):e109886.



<https://www.conquerchiari.org/donate>

Conquer Chiari's research updates highlight and summarize interesting publications from the medical literature while providing background and context. The summaries do contain some medical terminology and assume a general understanding of Chiari. Introductory information and many more research articles can be found in the [Conquer Chiari Library](#).

Conquer Chiari is a 501(c)(3) public charity dedicated to improving the experiences and outcomes of Chiari patients through education, awareness and research.