

Study Analyzes Chiari Headaches & Treatment Outcomes

Although Valsalva, or cough related, headaches are considered the signature symptom of Chiari, many patients understand that headaches come in a wide variety. In recent years, clinicians and researchers have begun to divide Chiari headaches into what they call ‘typical’ (sub-occipital, straining headaches) and ‘atypical’ (migraine, cluster headaches, tension-type headaches, and trigeminal neuralgia).

In a study of studies, also known as a meta-analysis, investigators in China analyzed 21 reports to compare the frequency and outcomes of typical versus atypical headaches in a large sample of adult and pediatric Chiari patients.

Out of 1,913 total Chiari patients, 78% reported headaches: 48% suffered from typical headaches, 29% from atypical, and 23% from both. From the atypical group, eight studies had an average migraine incidence of 31% and 8% had tension-type headaches.

Eighteen studies were then analyzed to measure successful treatment outcomes for the typical group. Of those who had conservative treatment, 69% had an improvement in their headaches, while those who underwent bone only decompression surgery saw an 88% and 92% improvement when the dura was opened. Comparatively in the atypical group, the study methodologies were more varied and so the outcomes were difficult to combine. Three conservative treatments studies had approximately 66% improvement while successful surgical intervention varied between 61% and 81% across twenty-three research papers.

From this, the researchers concluded typical headaches respond better to surgical treatment compared to conservative measures and also respond better to surgery than atypical headaches. In fact, for atypical headaches there was not a significant difference in the improvement between the conservative and surgery groups for those with atypical headache.

Notably, the International Classification of Headache Disorders (ICHD) was used to categorize headaches in six of the twenty-one research papers and the percentage of atypical headaches significantly increased when this categorization was used. In the future, it would be useful to see the ICHD utilized more in Chiari research so that the variety of headaches experienced by Chiari patients are properly differentiated. Furthermore, it’s important for patients to understand that just because headaches are called atypical for these purposes, it does NOT mean they are not related to Chiari.

Source: Yunsen He, Mengjun Zhang, Caiquan Huang, Xiaohong Qin, Zhou Zhang, Yishuang Wang, Lili Guo, Qiang Zheng, Mingbin Bao, Ye Tao, and Bo Wu. *Cephalalgia* 2023 43:1

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](#).