

## Chiari Surgery Helps But Doesn't Cure Sleep Disordered Breathing

Sleep apnea is very common in pediatric Chiari and now a small study from Canada has found that decompression surgery helps but doesn't always cure it. The researchers identified 15 Chiari children who had undergone formal sleep testing both before and after surgery. The group represented a range of obstructive, central, and mixed apnea of different severities. The children were on the young side with an average age of 6 and there were slightly more boys than girls. The severity of sleep apnea is measured by counting the number of episodes per hour, the apnea-hypopnea index (AHI). The Chiari surgery resulted in a dramatic drop of nearly 2/3 in the average AHI (17.5 to 6.1) for the group. Obstructive apnea resolved completely in 3 of the children but persisted in another 3. Similarly, central apnea resolved in 5 but persisted in 4. In total 7 of the children, or nearly half, still required some type of positive airway pressure to sleep at night.

**Source:** The efficacy of neurosurgical intervention on sleep-disordered breathing in pediatric patients with Chiari malformation type I. Voutsas G, St-Laurent A, Hutchinson C, Amin R, Drake J, Narang I. J Neurosurg Pediatr. 2021 Apr 23:1-9.

*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 [www.conquerchiari.org](http://www.conquerchiari.org)*