

## Headaches Predict Longer Hospital Stay For Kids

Researchers from Yale University have found that Chiari children with headaches may be at risk for extended hospital stays after decompression surgery. Previous research has identified several factors that can influence length of stay (LOS) after Chiari surgery, such as surgical technique and complications. Building on this, the Yale researchers used a national inpatient database to look at what additional factors might play a role. Specifically, they searched for Chiari related surgical decompressions for kids between 6-18 years of age for the year 2012. From this, they found 1592 cases which had information on demographics, clinical findings, surgical procedure, and hospital LOS. Next they split the data into two groups based on LOS greater or less than 4 days (4 days was around the 75<sup>th</sup> percentile). Interestingly, when they compared the two groups based on LOS, they found that the age, gender, race, income, insurance type, and hospital type were all similar. Also surprisingly, type of surgery and the number of complications were also not statistically different between the groups. However, headaches as a symptom, obstructive hydrocephalus, and fluid/electrolyte disorders were all risk factors for an extended hospital stay. It is not clear why children with headaches before surgery might be in the hospital longer and detailed information on headache type and severity was not available. It is also not clear how to interpret the lack of a relationship for demographic factors which have been found previously to affect LOS (such as family income). It could be a result of how extended LOS was defined in this study, but unfortunately the authors did not really address this. Rather the authors point out that this study shows that pre-surgical symptoms may play a role in how long patients are in the hospital.

**Source:** Pre-operative headaches and obstructive hydrocephalus predict an extended length of stay following suboccipital decompression for pediatric Chiari I malformation. Elsamadicy AA, Koo AB, David WB, Kundishora AJ, Hong CS, Sarkozy M, Kahle KT, DiLuna M. Childs Nerv Syst. 2020 Jun 9. doi: 10.1007/s00381-020-04688-2. Online ahead of print. PMID: 32519127

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