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Hydrocephalus After Decompression Surgery

One type of surgical complication with Chiari that does not get a lot of attention, but has serious consequences for the patient, is CFS issues, either in the form of elevated pressure or hydrocephalus. The topic is further complicated by the fact that Chiari patients can have either of these before surgery, so there can be some question as to whether it is from surgery or was undiagnosed prior to surgery. However, a 2012 report from the UK found that 12 of 138 (8.7%) adults and children undergoing surgery had elevated intracranial pressure or hydrocephalus after surgery. Nine of the patients ended up requiring a VP shunt while three were successfully treated with external drainage for a period of time.

A 2016 study from Utah (Brockmeyer) found similar results. Over a ten year period, 22 out of 297 children undergoing Chiari surgery (7.4%) developed hydrocephalus after surgery and required some type of long-term CSF diversion. Currently it is not clear why this occurs but given the implications of having a shunt inserted, identifying who is at risk for this complication would be extremely valuable.

SOURCE: *Raised intracranial pressure and hydrocephalus following hindbrain decompression for Chiari I malformation: a case series and review of the literature. Zakaria R, Kandasamy J, Khan Y, Jenkinson MD, Hall SR, Brodbelt A, Pigott T, Mallucci CL. Br J Neurosurg. 2012 Aug;26(4):476-81*
Chiari-related hydrocephalus: assessment of clinical risk factors in a cohort of 297 consecutive patients. Guan J, Riva-Cambrin J, Brockmeyer DL. Neurosurg Focus. 2016 Nov;41(5):E2.
Smyth MD, Park TS, Limbrick DD. Neurosurgery. 2015 Aug;77(2):261-8

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