

Another Chiari Type...0.5

Over the years there have been several proposals to add to or modify the current Chiari classification scheme. While there are many recognized problems with the current system, none of the new proposals have really gained enough traction to become well established. For example Chiari 1.5 was proposed when it became clear that some Chiari 1 patients had some features of Chiari II but without spina bifida (specifically the obex of the spinal cord being lower than the McRae line). However over time the usefulness of this additional classification came into question since the patients were still undergoing the same surgery as Chiari 1 and having similar outcomes. Another, more controversial example is Chiari 0 which refers to people with little to no herniation but Chiari like symptoms. The amount of publications on Chiari 0 has faded over time as more and more surgeons have moved away from a strict 5mm definition of Chiari 1. Now, a group from New York has proposed another Chiari type which they call Chiari 0.5. Their classification arose from their observation that among very young patients there was a subset with not as much downward herniation, but significant sideways “herniation”, even wrapping around the brainstem in some cases. In a recent paper, they presented their observations of this group (up to 5 years old) as compared to more traditional Chiari patients. Perhaps because of the small numbers involved they did not reach any statistical conclusions but did note that the Chiari 0.5 group exhibited more brainstem related symptoms such as trouble swallowing and apnea but fewer headaches than the more traditional group. It would be interesting to see how prevalent this type of sideways or ventral wrapping of the cerebellar tonsils is among different age groups and whether these types of patients respond differently to standard decompression surgery.

Source: Ventrolateral Tonsillar Position Defines Novel Chiari 0.5 Classification. Morgenstern PF, Tosi U, Uribe-Cardenas R, Greenfield JP. *World Neurosurg.* 2020 Apr;136:444-453
doi: 10.1016/j.wneu.2020.01.147.

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](#).