

Letter to the Editor

Two cases of persistent falcine and occipital sinuses

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To the Editor

A clear knowledge of cerebrospinal fluid (CSF) pathways is still lacking [1,2]. The results of the article, entitled “Two cases of persistent falcine and occipital sinuses” by Inui et al. [3] and recently published in *Brain & Development* (2020), indicate some important clues in better understanding of the pathophysiology of the disorders which can be associated with disturbances of the CSF circulation. As the authors stated, an acquired Chiari I malformation can be associated with a pressure gradient across the cranial and spinal compartments. The dural vessels can also be a source for fluid formation augmenting the fluid produced by the choroid plexus [2].

However, the statement that the occipital sinus usually closes by 2 years of age and is seen incidentally in only 8.6% of adults is flawed, and such an assumption may lead to unexpected life-threatening bleeding in the surgery of posterior cranial fossa pathologies. An open occipital sinus exists in the majority of adults, and a study on cadavers found that there were an occipital sinus in 93.4% of a total of 30 cases [4]. In another study in adult cadavers, an occipital sinus was found in 129 out of 200 cases (64.5%) [5]. Furthermore, multiple occipital sinuses can be seen in 10–22.5% of cases [4,5]. Therefore, in suboccipital craniotomies neurosurgeons must tailor dural incisions to avoid injury to the occipital sinus, which has anatomical variations, including an oblique trajectory and multiple occipital sinuses.

Disclosures

The author reports no conflict of interest.

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