In Reply to “A suggestion to the article “Acute cerebellar edema after traumatic brain injury in a child. a case report””

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Dear Editor

We would like to thank Bin et al. for their thoughtful and valuable comments [1]. On our recently published case report [2].

While the final causative reason for the development of the cerebellar edema in this patient remains unclear, you are suggesting a very reasonable pathomechanism for the child's deterioration. Performing a bifrontal decompressive craniectomy might have prevented central herniation and possibly sinus venous obstruction and thus congestive cerebellar edema. However, when comparing the computer tomography (CT) images before and after the child's deterioration, the most noticeable change was the impressive cerebellar swelling leading to a packed posterior fossa. In addition, in our experience, supratentorial swelling leading to central herniation usually does not cause such a grave swelling of the cerebellum as seen in our case. Therefore, the cerebellar swelling was believed to be the main reason leading to the clinical aggravation, and putting the child's brainstem at risk of permanent injury. At this stage, the only therapy providing immediate pressure relief to the brainstem was a suboccipital craniectomy. It is arguable whether a concurrent bifrontal decompression should have been performed in order to

relieve the brainstem from the supratentorial pressure, as suggested by Bin et al. Whether performing solely a bifrontal decompressive craniectomy without a suboccipital decompression would have been sufficient remains ambiguous. At the time we assessed the images and the clinical situation differently, and therefore, the patient was treated accordingly.

Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states there is no conflict of interest.

References

1. Bin W, Tianmin YA (2020) Suggestion to the article “Acute cerebellar edema after traumatic brain injury in a child. a case report”. *Childs Nerv Syst*. <https://doi.org/10.1007/s00381-020-04555-0>
2. Hejrati N, Guzman R & Soleman J (2020) Acute cerebellar edema after traumatic brain injury in a child. a case report. *Childs Nerv Syst* 36:847–851. <https://doi.org/10.1007/s00381-019-04418-3>

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