

Comment of the “Letter Regarding the Article ‘Fractional anisotropy in patients with disproportionately enlarged subarachnoid space hydrocephalus’”

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Dear Editor,

I would like to comment the “Letter Regarding the Article ‘Fractional anisotropy in patients with disproportionately enlarged subarachnoid space hydrocephalus’”. I am glad that our study raised the discussion about normal pressure hydrocephalus (NPH), especially disproportionately enlarged subarachnoid space hydrocephalus (DESH). The pathophysiology of NPH is not clearly understood and every discussion is important.

We did not conclude that the compression of the cerebral white matter is the main pathophysiology of DESH. This conclusion would be too simplistic. Our deduction is that patients with DESH are affected by the white matter compression more severely than patients without DESH. Our conclusion

is based on the difference between FA (marker of white matter bundle compression) in PLIC. After the shunt surgery, FA in PLIC in both groups decreases. In the non-DESH group, FA reached almost the values of the healthy controls. In the DESH group, FA values were still higher, but patients in the DESH group responded to shunt surgery better. We do not have any explanation for this discrepancy and it is a topic for future research and discussions. Respecting the limits of our study, we tried to avoid generalized conclusions concerning pathophysiology of DESH or iNPH, but still we can say that our study supports the importance of DESH evaluation in the diagnostic algorithm of iNPH.

Sincerely,

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