

Response to Letter to the Editor: “Reproducibility of flow and velocity parameters in intracranial arteries measured with phase-contrast magnetic resonance imaging; a methodological issue”

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Dear Sir,

Thank you for the opportunity to respond to the comments on our article [1]. As Dr Sabour pointed out in the Letter to the Editor, the correct method when evaluating reproducibility using intra-class correlation coefficient (ICC) in our study is to calculate ICC for single measurements and not for mean of measurements. We used ICC1 (single rater, absolute agreement; calculated as ICC (1,1) described by Shrout and Fleiss [2]).

As we used a method for testing repeatability for single measurements, we believe that our conclusion is valid, i.e., reproducibility for 2D phase-contrast magnetic resonance imaging (PC-MRI) measured flow and velocity parameters is overall quite low, but higher for middle

cerebral artery than for posterior cerebral artery and anterior cerebral artery.

Compliance with ethical standards

Conflict of interest We declare that we have no conflict of interest.

References

1. Correia de Verdier M, Wikstrom J (2016) Normal ranges and test-retest reproducibility of flow and velocity parameters in intracranial arteries measured with phase-contrast magnetic resonance imaging. *Neuroradiology* 58(5):521–531. doi:10.1007/s00234-016-1661-6
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