Response on: predictive performance of transcranial Doppler for post-dural puncture headache

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Received: 20 July 2019 / Accepted: 24 August 2019 / Published online: 4 September 2019
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To the Editor:

We would like to thank you for your interest in our paper and for taking the time to express your concerns.

Our study is a prospective observational study investigating the predictability of transcranial Doppler (TCD) on the incidence of post-dural puncture headache (PDPH) after cesarean delivery aiming to help in the prevention of this common complication.

In terms of sample size calculation, we chose mean velocity (MV) as one of the two main parameters measured in our study. So, we depended on it in sample size calculation because it is a novel concept and studies assessing cerebral blood flow changes in PDPH patients are scarce and a pre-determined value of sensitivity or specificity from previous published studies is not available as up to our knowledge our study is the first one to evaluate cerebral blood flow mean velocity and pulsatility index as predictors of PDPH. We thought this is acceptable.

We agree that the cited study does not report the values used as there was a mistake in the citation and the correct

citation is Nowaczewska et al. study which is number 12 in the reference list.

A second concern was the results presented. We also agree that the factors associated with the sample size calculation and the research setting for our study, affected the results and this limit the generalizability of the data reported in our paper to other populations. Yet, to be transparent, we presented the results with a quest for further large-scale studies to validate our results and to improve this new TCD application.

In summary, the authors have raised a potential of using TCD parameters as predictors of PDPH in high-risk patients. We believe that our results support this hypothesis and we recommend a large-scale study as mandatory to verify our results.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This reply refers to the article available at <https://doi.org/10.1007/s00540-019-02677-7>.

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