



Predictive performance of transcranial Doppler for PDPH

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To the Editor:

I read with interest the article by Mowafy and Abd Ellatif and would like to bring a few points for due consideration [1].

1. Sample size should be based on the primary aim. Instead of using a predefined sensitivity/specificity or area under the curve (AUC) of receiver operating characteristic (ROC) curve, the authors chose to find an undisclosed difference of mean of cerebral artery velocity [1, 2]. Moreover, the cited study does not report the values used by authors [1]. Thus, it is unclear whether their study was adequately powered to examine their primary aim.
2. The standard deviation (SD) of mean velocity and pulsatility index is very narrow compared to the difference between the means of the groups [1]. Previous study suggests some overlap of the dispersion of those two parameters between the groups [1, 3]. This peculiar dispersion may have led to a `significant` *p* value, very narrow AUC of ROC and a near ideal sensitivity and specificity.
3. The reported 95% Confidence Interval (CI) of AUC of ROC of PI is 1–1 [1]. It is extremely unlikely that the observed sample parameter will depict the population parameter with such outstanding confidence.

4. Sensitivity and specificity values observed in a sample are estimates for the corresponding population parameters. Thus, the authors are expected to report their CI.

Compliance with ethical standards

Conflict of interest None to declare.

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