



Re: Letter to the editor: “Diagnostic capacity and interobserver variability in FIGO, ACOG, NICE and Chandrachud cardiotocographic guidelines to predict neonatal acidemia” The authors should reconsider their conclusions

Luis Mariano Esteban & Ricardo Savirón-Cornudella

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Re: Letter to the editor: “Diagnostic capacity and interobserver variability in FIGO, ACOG, NICE and Chandrahara cardiotocographic guidelines to predict neonatal acidemia” The authors should reconsider their conclusions

Recently, Morel et al. [1] published a letter to the editor reviewing a previously published article by Pozo et al. [2] on the diagnostic capacity and interobserver variability of the FIGO, ACOG, NICE, and Chandrahara cardiotocographic guidelines in predicting neonatal acidemia. The letter suggested that our findings should be reconsidered. One of the arguments presented is that, in our study, there are no records with a pH value below 7.00. However, this claim is inaccurate. The letter justifies this assertion by stating that the lower limit of the range is 7.00. Unfortunately, this reflects a misinterpretation, as in our study, the lower limit of the interquartile range is 7.05, meaning that 25% of the records fall below this value. It is surprising that this conceptual misunderstanding was not identified prior to publication, as it confuses the range—defined as the interval between the minimum and maximum values—with the interquartile range, which extends from the 25th to the 75th percentile.

Furthermore, it is debatable to claim that there is a universally agreed-upon cutoff of pH 7.00 for defining acidosis. In fact, several references support the use of a threshold of 7.10 [3–10] or even higher [11–13]. We acknowledge that the number of cases with a pH <7.00 in our study is limited; however, we employed the threshold of 7.10 because it is widely used in studies on the prediction of acidosis in fetal monitoring. Our goal is to detect acidosis before it becomes severe, which is more relevant in daily clinical practice.

Additionally, our predictive results using the AUC are consistent with other published studies that reference a pH cutoff of 7.00. The study cited in the letter to the editor also concludes that the highest specificity is achieved with the ACOG-NICHD guideline. Similarly, other studies that have used a cutoff of 7.10 have reported findings comparable to ours. For example, the work by Martí Gamboa et al. [1] evaluated the

diagnostic accuracy of the FIGO and 5-Tier classification systems in detecting neonatal acidemia, while the study by Cahill et al. [2] reported AUC values similar to ours for the ACOG-NICHD guideline. Moreover, the study by Santo et al. [3], despite using a pH cutoff of 7.05, concluded that the ACOG-NICHD guideline has the highest specificity, aligning with our results.

It is also important to clarify a fundamental misinterpretation in the letter: it incorrectly assumes that stating a guideline achieves the best validation implies that the differences with other guidelines are statistically significant. Nowhere in our article do we claim that the differences between the guidelines are statistically significant. In fact, one of the main conclusions of our study is the poor overall performance of all the evaluated guidelines and the urgent need to define new indices that achieve better classification. However, it is a clear observation that, in our study, the Chandrahara guideline demonstrated better performance than the others.

Finally, advancing knowledge in this field requires not only discussing methodologies and interpretations but also generating new evidence to compare the performance of fetal monitoring guidelines. Further studies with independent data would be valuable contributions to this ongoing discussion.

Author contributions

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ORCID

Luis Mariano Esteban  <http://orcid.org/0000-0002-3007-302X>
 Ricardo Savirón-Cornudella  <http://orcid.org/0000-0001-9585-0187>


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Luis Mariano Esteban 

Escuela Universitaria Politécnica de La Almunia, Institute for biocomputation and Physic of Complex systems, University of Zaragoza, Zaragoza, Spain

 lmeste@unizar.es

Ricardo Savirón-Cornudella 

Department of Obstetrics and Gynecology, Hospital Clínico San Carlos, Instituto de Investigación Sanitaria San Carlos (IdISSC), Universidad Complutense, Madrid, Spain

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