Letter to the Editor

Selcan Sinaci*, Ozlem Moraloglu Tekin and Dilek Sahin

Response to the concern that the baseline change in CTG traces does not reflect the impact of maternal COVID-19

<https://doi.org/10.1515/jpm-2021-0583>

Received November 8, 2021; accepted November 11, 2021;

published online November 25, 2021

Keywords: baseline; cardiotocography (CTG); COVID-19; pregnancy.

To the Editor,

We would like to thank the authors Pathum Sookaromdee and Viroj Wiwanitkit [1] for their interest in our article [2]. The authors expressed their concerns that the baseline change observed in the cardiotocography (CTG) traces in our report might not reflect the effect of COVID-19. However, in the mentioned previous study, CTG traces were recorded twice, but the day of initial and second recording were not specified in that study [3]. In our hospital, at the study period all symptomatic (such as fever, cough, dyspnea, sore pain head, sore throat) pregnant women were hospitalized for close follow-up as soon as the detection of the COVID-19 positivity. Therefore, the patients included in our study consisted of patients who were hospitalized as soon as they were diagnosed. Although, all pregnant women participated in the study were symptomatic, in terms of COVID-19 severity, 173 mothers (83.2%) were in the mild category, while 14 (6.7%) were in the severe category. SARS-CoV2 replication is seen in the first five days and is approximately maximum on day 3. Also, clinical and laboratory indicators related to cytokine storm are likely to be seen on day 3–5 [4].

For this reason, in our study CTG traces at initial day of admission were compared with the third day of positivity. This design in the study is similar to previous study, which suggested that the change in CTG is associated with maternal cytokine storm [3]. In conclusion, we can claim that COVID-19 can cause changes that can be observed in CTG.

Research funding: None declared.

Author contributions: All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Competing interests: Authors state not conflict of interest.

Informed consent: Not applicable.

Ethical approval: Not applicable.

References

1. Sookaromdee P, Wiwanitkit V. COVID-19 infected pregnant women and cardiotocographic features. *J Perinat Med* 2022;50:230.
2. Sinaci S, Ocal DF, Ozden Tokalioglu E, Halici Ozturk F, Aydin Senel S, Keskin LH, et al. Cardiotocographic features in COVID-19 infected pregnant women. *J Perinat Med* 2022;50:46–55.
3. Gracia-Perez-Bonfils A, Martinez-Perez O, Llurba E, Chandraran E. Fetal heart rate changes on the cardiotocograph trace secondary to maternal COVID-19 infection. *Eur J Obstet Gynecol Reprod Biol* 2020;252:286–93.
4. Cantini F, Goletti D, Petrone L, Najafi Fard S, Niccoli L, Foti R. Immune therapy, or antiviral therapy, or both for COVID-19: a systematic review. *Drugs* 2020;80:1929–46.

***Corresponding author: Selcan Sinaci**, Department of Obstetrics and Gynecology, Ministry of Health, Ankara City Hospital, 1604th Street, No. 9, Cankaya, Ankara, Turkey, E-mail: selcansinaci@gmail.com. <https://orcid.org/0000-0003-3118-4036>

Ozlem Moraloglu Tekin and Dilek Sahin, Department of Obstetrics and Gynecology, Ministry of Health, Ankara City Hospital, Ankara, Turkey; and University of Health Sciences, Ankara City Hospital, Ankara, Turkey