

LETTER TO THE EDITOR

Comments on the value of ECG changes in risk stratification of COVID-19 patients

Dear editor

We have read with great interest the article "The value of ECG changes in risk stratification of COVID-19 patients" by Bergamaschi et al. (2021). In this study, it was stated that ECG alterations at admission and follow-up period could help clinicians stratify the risk of major adverse events in COVID-19. The importance of serial ECG evaluations in hospitalized patients with COVID-19 is emphasized. Here, we would like to discuss about the results of this study.

Despite the importance of the role of ECG in the diagnosis of cardiovascular complications during COVID-19 disease, there is a lack of knowledge about ECG features and ECG changes during hospitalization due to COVID-19.

In a study which conducted by Angeli et al. (2020), included 50 patients who admitted to hospital with proven COVID-19 pneumonia. ECG was recorded at discharge and in case of worsening clinical conditions. The study showed that ECG abnormalities showed a late onset from hospitalization and initiation of COVID-19 symptoms. They reported that the meantime for development of ECG abnormalities was 20 and 30 days from admission and onset of symptoms, respectively, and that the majority of patients (54%) experienced ECG abnormalities just before the scheduled discharge and after 2 consecutive negative nasopharyngeal swabs. While Bergamaschi et al. examined the ECG records of the patients at admission and 7 days of hospitalization in their study, they did not provide information about the onset of symptoms and the time of diagnosis. We think that knowing the onset time of the patients' COVID-19 symptoms, the duration of hospitalization, the ECG features taken in case of clinical deterioration and before discharge, and severity of illness may be even more beneficial in terms of interpreting the results.

Also, concomitant treatments and potential drug interactions can cause ECG changes. In the present study, no information was given about antiretroviral drugs used in the treatment of COVID-19 and concomitant antiarrhythmic medications. However, Meriglier et al. emphasized that 17% of COVID-19 patients receiving hydroxychloroquine with lopinavir or darunavir had ECG abnormalities (Meriglier et al., 2021).

Nevertheless, this study is valuable in drawing attention to ECG monitoring in COVID-19 patients during their hospital stay. More

trials are needed that take into account the points we have mentioned about ECG features in COVID-19 patients.

KEYWORDS




Clinical, Clinical: Non-invasive techniques - T-wave alternans, Non-invasive techniques - electrocardiography

CONFLICT OF INTEREST

None.

AUTHOR CONTRIBUTIONS

Selda MURAT: writing the letter, Erdi Babayigit: literature review, Bulent GORENEK: Final editing.

Selda Murat MD¹ 
Erdi Babayigit MD² 
Bulent Gorennek MD¹ 

¹Department of Cardiology, Eskisehir Osmangazi University, Eskisehir, Turkey

²Cardiology Department, Kulu State Hospital, Kulu, Turkey

Correspondence

Selda Murat, MD, Department of Cardiology, Eskisehir City Hospital, Eskisehir 26080, Turkey.
Email: selda.eraslan@hotmail.com

ORCID

Selda Murat  <https://orcid.org/0000-0002-3935-0222>

Erdi Babayigit  <https://orcid.org/0000-0001-8663-8985>

Bulent Gorennek  <https://orcid.org/0000-0002-2745-5561>

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How to cite this article: Murat S, Babayigit E, Gorenek B. Comments on the value of ECG changes in risk stratification of COVID-19 patients. *Ann Noninvasive Electrocardiol.* 2021;26:e12841. <https://doi.org/10.1111/anec.12841>