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Conflict in troponin levels in COVID-19 patients

Özge Turgay Yıldırım ^{a,*}, Göknur Yıldız ^b, Selim Yıldırım ^{c,d}

^a Department of Cardiology, Eskisehir City Hospital, Eskisehir, Turkey

^b Eskisehir City Hospital, Department of Emergency Medicine, Eskisehir, Turkey

- ^c Anadolu University, Faculty of Economics and Administrative Sciences, Department of Economics, Eskisehir, Turkey
- ^d Eskisehir Technical University, Graduate School of Sciences, Statistics Department, Eskisehir, Turkey

We read the article by Çınar et al. [1] entitled "Prognostic significance of cardiac troponin level in Covid-19 patients without known cardiovascular risk factors" with great interest. Troponin measurement appears to be a misleading biomarker that incorrectly guides physicians to cardiac diagnosis in the period of COVID-19 [2]. First of all, we would like to thank the authors for addressing the non-cardiac importance of this biomarker [1].

COVID-19 has been in constant debate since its emergence in Wuhan Province, China in 2019, and it seems to remain on our agenda for a while [3,4]. The fact that SARS-CoV-2 disrupts not only the respiratory tract but various systems and this multisystemic involvement requires us to make a multidisciplinary evaluation of COVID-19 patients [5–9]. Since SARS-CoV-2 increases the risk of thrombosis, it comes to mind that it may cause cardiac effects in patients. Although the relationship of this disease with myocardial infarction is still unclear, the question of whether the patient has a myocardial infarction is constantly raised for every patient with high troponin levels [2].

This study shows to physicians who follow COVID-19 patients that we should follow patients with high troponin levels more closely. These patients have a higher risk of mortality. Another important point of this study is that patients with cardiovascular risk factors were excluded from the study. Although these patients were not included in the study, troponin values were found to be 89.6 ± 66.0 in the non-survivor group and 6.2 ± 9.6 in the survivor group. The difference between troponin levels in patient groups is remarkable [1].

The guidelines do not have a common recommendation for approaching myocardial infarction in COVID-19 patients if the patient is not ST elevation myocardial infarction. There is no clear answer to the question of what the troponin value is in COVID-19 patients, we should consider a non ST elevation myocardial infarction (NSTEMI). It is not clear what kind of medical treatment we should apply to these patients, let alone whether to make an intervention or not. Because this high troponin level may be secondary to infection, independent of vascular occlusion, or it may be due to a blockage at the level of large or small vessels [2,10]. If we consider COVID-19 patients with high troponin levels as NSTEMI, antiischemic medical therapy should definitely be initiated in these patients. These patients can also be followed up conservatively. This decision can be determined based on the patient's clinic and symptoms [2]. I have a question to the authors on this subject. I wonder if antiischemic therapy was initiated in patients with high

troponin levels, especially in patients with high levels such as in the non-survivor group, or how the diagnosis of myocardial infarction was ruled out.

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Declaration of competing interest

The authors declare that they have no conflict of interest.

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