Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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The author responds: Mean platelet volume may be an indicator of death in patients with Covid 19 pneumonia

Reply to the letter to the editor

We appreciate the comments in the letter to the editor entiteled "Relationship of platelet counts, platelet volumes, and Curb-65 scores in the prognosis of COVID-19 patients on our original article entiteled "Mean platelet volume may not be a mortality marker in patients with COVID-19 pneumonia" published in The American Journal of Emergency Medicine in the year2022 [1].

Complete blood count (CBC) tests with automated haematology analysers are one of the most commonly ordered tests in clinical laboratories. Modern haematology analysers in routine diagnostic use, which measure platelet indices (PIs), use impedance counting or optical light scatter counting techniques. The measurement principle influences the results, and the results from different analysers are not comparable [2].

Patient group had complete blood count measured within 60 min of collection, on venous blood sample taken into tripotassium EDTA, using a Mindray cell counter. Platelet volume methodology involved the direct measurement of platelet size from the whole blood (Impedance,). An automatic blood counter (BC-6000) was used to obtain complete blood count of the patients and samples were stored at room temperature.

The analysis, drawn from 24 studies of over 6000 subjects, supports the hypothesis that elevated MPV is a cardiovascular risk factor - that it is associated with adverse cardiovascular events [3].

The MPV/platelet count (PC) ratio has been proposed as a predictor of long-term mortality after non-STelevation myocardial infarction [4].

A decrease in the PLT increases MPV. Güçlü et al. found that a 1-unit increase in MPV between the first and third days of hospitalization secondary to COVID-19 increased mortality by 1.76 times. In addition to lung capacity, the MPV value could be used as an auxiliary marker for predicting mortality in COVID-19 patients [5]. An increase in MPV is also related to worse prognoses in patients with chronic inflammatory disease, severe pneumonia, and septic shock [6]. In patients with severe CAP, an increase in MPV after hospitalization was found to predict mortality [7]. In this study, the MPV value was a significant predictor of 28-day mortality in COVID-19 pneumonia patients.

CRediT authorship contribution statement

Yeşim Işler: Conceptualization, Resources, Methodology, Writing - review, Editing.

Halil Kaya: Conceptualization, Resources, Methodology, Writing - review & editing.

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