

Peripheral Blood Smears in COVID-19: A Response

COVID-19'da Periferik Kan Yaymaları

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To the Editor,

We thank Mungmunpantip and Wiwanitkit for their comment on our publication on peripheral blood smears in coronavirus disease-19 (COVID-19) and we would like to reply.

In our experience of patients with COVID-19 admitted to the Cheikh Khalifa International University Hospital, we found 30.3% of severe cases with a 57.9% comorbidity rate and 23.3% rate of other diseases, but no cases of parasitic infection or allergic manifestations during hospital admission [1]. Consistent with the current evidence, asthma and allergic comorbidities do not seem to increase the risk for poor outcomes in cases of COVID-19 [2]. However, many publications report the diagnostic and prognostic value of eosinopenia in COVID-19 infection [3,4]. The pathophysiology for eosinopenia may be multifactorial, including inhibition of eosinophil egress from the bone marrow, blockade of eosinophilopoiesis, reduced expression of chemokine receptors/adhesion factors, and/or direct eosinophil apoptosis induced by type 1 interferons released during the acute infection [2]. The role of eosinophils remains unclear, but this does not exclude their impact on blood cell morphology. Regarding neutrophil lineages, Zini et al. [5] made a similar observation about dysmorphic granulocytes.

COVID-19 causes inflammatory and thrombotic complications, which can lead to both quantitative and qualitative hematologic abnormalities. Studies remain limited and we need a large number of cases to analyze the changes in blood cell morphology during COVID-19.

Keywords: Blood cells, COVID-19, Infectious diseases

Anahtar Sözcükler: Kan hücreleri, COVID-19, Bulaşıcı hastalıklar

Ethics

Ethics Committee Approval: Our study was supported with the approval of the Academic Ethics Committee of Mohammed VI University.

Informed Consent: Informed consent was obtained from the patients included in the study.

Financial Disclosure: The authors declared that this study received no financial support.

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Turkish Journal of Hematology, Published by Galenos Publishing House



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Received/Geliş tarihi: December 2, 2020
Accepted/Kabul tarihi: December 7, 2020

DOI: 10.4274/tjh.galenos.2020.2020.0723