

KEY WORDS

- ✓ Hemostasis
- ✓ Platelets
- ✓ Mononuclear cells
- ✓ Thromboelastogram
- ✓ Platelet-leukocyte aggregation

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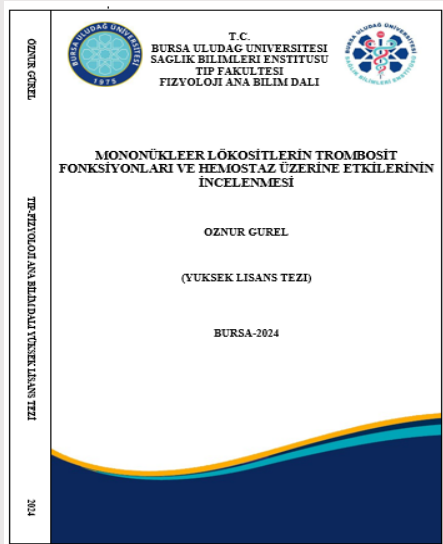
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INVESTIGATION OF THE EFFECTS OF MONONUCLEAR LEUKOCYTES ON PLATELET FUNCTIONS AND HEMOSTASIS

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THESIS ABSTRACT

Platelets establish heterotypic interactions with mononuclear cells during the hemostasis process. In our study, in order to evaluate the effect of mononuclear cells on the hemostasis process, thromboelastogram, in which the entire hemostasis system is observed, and optical aggregometer devices, in which platelet aggregation is monitored at the cell level, were used. Mononuclear cells were evaluated immediately after they were separated from the blood (hour 0) and 22 hours after they were kept unstimulated and stimulated with LPS. The effect of mononuclear cell groups added to platelet-rich plasma (PRP) on ADP and collagen-stimulated platelet aggregation and the effect of calcium addition on thromboelastogram parameters, where the normal coagulant state is restored, was investigated.

APPLICATION AREAS OF THE THESIS RESULTS

This study, which investigates the effects of mononuclear cells on hemostasis and platelet aggregation, provides significant contributions to the fields of physiology, hematology, and immunology.

ACADEMIC ACTIVITIES

- Kiliç, E., Özer, F., Gürel, Ö., & Sağdilek, E. (2023, September 6-9). The effects of SARS-CoV-2 spike protein subunit S1 on platelet aggregation, 5th International Biophysics Congress, İzmir Institute of Technology, İzmir, Turkey. This research has been supported by TUBITAK1001 project with the grant number 122Z772.
- Özer, F., Gürel, Ö., Sağdilek, E., & Kiliç, E. (2023, November 4-7). Investigation of the effects of SARS-CoV-2 spike protein S1 subunit on hemostasis by thromboelastogram. 48th National Physiology Congress, Sakarya, Turkey. This research has been supported by TUBITAK1001 project with the grant number 122Z772.
- 48th National Physiology Congress, Sakarya, Turkey
- TUBITAK Scholarship holder