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ABSTRACT BOOK

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P1-032 Correlation of IL-6 with other parameters of inflammation and clinical data in patients infected with SARS-Cov-2 virus

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Backgound:
IL-6 is a pro-inflammatory cytokine that plays a role in many immune reactions, is the main initiator of the cytokine storm, and is a negative prognostic marker in inflammation. In this paper, serum IL-6 and other pro-inflammatory parameters including C reactive protein (CRP), procalcitonin (PCT) were analyzed in patients infected with the SARS-Cov-2 virus. The study was conducted in 134 persons affected by Covid-19 in the adult population, including both sexes.

Methods: CRP, PCT, IL-6 were analyzed in serum using standard kits on a UniCel DCX-800 biochemical analyzer (Beckman Coulter) for clinical diagnostics. Hematological and other biochemical parameters were determined by routine analysis. All patients had a confirmed diagnosis of viral infection using a rapid throat and nose swab test or a positive result using the PCR test for SARS-Cov2 virus, which were a condition for hospitalization.

Results:
The results showed that statistically significant correlation was found between CRP and IL-6 variables ($p < 0.001$; Spearman's rho correlation coefficient was 0.531). Also, statistically significant results were found for PCT and IL-6 ($p < 0.001$; Spearman's rho correlation coefficient was 0.285). In addition, IL-6 was correlated with blood count values, neutrophil lymphocyte ratio, D dimer, clinical data as well as respiratory parameters that included peripheral oxygen saturation (SpO2), partial pressure of oxygen in arterial blood (PaO2) and hemoglobine level. IL-6 also showed significant differences in treatment outcomes over time.

Conclusion: Based on the obtained results, it was shown that the determination of IL-6 can be useful for monitoring the outcome of patients in real clinical conditions. We recommend measuring this cytokine in other infections as well.