

ABSTRACT

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Title of diploma thesis: Changes in selected laboratory parameters in patients with complicated COVID-19

The aim of the diploma thesis is to write a research on the topic using available literary publications. Comparison of changes in selected laboratory markers in COVID-19 disease in hospitalized patients and patients with a mild course of the disease and then statistical evaluation of the obtained data.

The theoretical part contains a briefly description of the COVID-19 disease and its originator – SARS-CoV-2 virus. It deals with the description of the disease, transmission, pathogenesis and the course of the disease. Furthermore, risk factors for the serious course of the disease, its complications, clinical and laboratory diagnostics and finally treatment.

In the experimental part of the work, a statistical analysis of the measured data is performed. Comparable hematological and biochemical parameters include WBC, lympho #, NLR, Ret-He, ICIS score, sN # (abs), aIG # (abs), D-dimers, fibrinogen, CRP, PCT and myoglobin. A statistically significant difference was found for all selected parameters except WBC. Patients with severe disease had lower lympho # and Ret-He values. While the values of the remaining parameters sN # (abs), aIG # (abs), D-dimers, fibrinogen, CRP, PCT, myoglobin, ICIS score and NLR ratio were higher.

Keywords: COVID-19, SARS-CoV-2, laboratory markers, ICIS score