8th INTERNATIONAL CONFERENCE ON

GLOBAL HEALTHCARE

May 10, 2022 | Webinar

Predictive value of platelet to lymphocyte ratio and neutrophil to lymphocyte ratio in evaluating both lung involvement and severity of patients with Coronavirus disease 2019

Yusuf Aksu

Yunus Emre State Hospital, Turkey

Background and Aim: To investigate the relationship of the Neutrophil Lymphocyte Ratio (NLR) and the Platelet Lymphocyte Ratio (PLR) with lung involvement and Total Lung Severity Score (TLSS) in Computed Tomography in patients with COVID-19 and to evaluate their clinical usability.

Methods: Our study is a retrospective study involving 215 COVID-19 patients diagnosed with real time polymerase chain reaction (RT-PCR) in the nose and throat samples between March 10, 2020 and June 1, 2020. Basic laboratory, clinical features and imaging data of patients were obtained by examining the file and archive records of our hospital. According to the findings of lung computed tomography (CT) scan at the time of diagnosis among COVID-19 patients, 2 groups were formed. 131 patients with COVID-19 pneumonia were included in the first group, and 84 patients without COVID-19 pneumonia were included in the second group.

Results: The mean age of the COVID-19 patients was 44.6 ± 16.0 (range: 18.0–83.0); 102 (47.4%) of the patients were women and 113 (52.6%) were men. Lung involvement was detected in the CT of 131 (60.9%) patients; lung involvement was not detected in the CT of 84 (39.1%) patients. The NLR was 2.22 (11.15) and the PLR was 142.77 (387.10) in the patients with COVID-19 pneumonia. The NLR was 1.88 (7.47) and the PLR was 130.65 (203.6 8) in the patients without COVID-19 pneumonia. The differences in the NLR and the PLR were determined to be statistically significant between the two groups ($p = 0.001$, $p = 0.005$, respectively) . A positive correlation was observed between NLR and PLR and TLSS ($r = 0.225$, $p = 0.010$, $r = 0.244$, $p = 0.005$, respectively).

Conclusion: This study showed that the NLR and PLR values can be two inflammatory markers that can be used to evaluate lung involvement and disease severity in COVID-19 patients.

Recent Publications

1. The Relationship Between Splenomegaly And Lung Involvement Patterns And Severity Score In COVID-19 Pneumonia

2. Renal Artery Resistive Index and Estimated Glomeruler Filtration Rate in Patients with Non-alcoholic Fatty Liver Disease Adress for Corresponds and Reprints

3. Evaluation Of Clinical Findings With MRI Venography In Patients With Idiopatic Intracranial Hypertension

Biography

Yusuf Aksu working as a specialist doctor at Yunus Emre State Hospital, Turkey.

dryusufaksu@hotmail.com