

عنوان مقاله:

Leukocytes Parameters, CRP, and Ferritin in Iranian Patients with COVID-19 Infection; A Cross-sectional Study

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نویسندگان:

Gevik Karpian - *Department of Biochemistry, Medical Laboratory, Tehran, Iran*

Vahhab Piranfar - *Research and Development Department, Farnam Inc, Thornhill, Canada*

Isar Yahyavi - *Department of Molecular, Medical laboratory, Tehran, Iran*

Teni Sepanian - *Department of Biochemistry, Medical Laboratory, Tehran, Iran*

Tadeh Sepanian - *Department of Biochemistry, Medical Laboratory, Tehran, Iran*

Samaneh Alizadeh - *Department of Hematology, Medical Laboratory, Tehran, Iran*

Arefeh Chandhal - *Department of Phlebotomy, Medical laboratory, Tehran, Iran*

خلاصه مقاله:

Background and Objective: Coronavirus disease known as COVID-19 pandemic is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is affecting over 200 countries all over the world. This study was aimed to identify simple and swiftly available laboratory biomarkers to help facilitate effectual triage to categorize suspected COVID-19 patients. **Materials and Methods:** According to a standard protocol, we collected clinical, etiological, and laboratory data of 140 patients who underwent diagnostic tests at Medical Laboratory Group, Tehran, Iran, from October 1 to November 28, 2020, based on PCR testing for SARS-CoV-2 infection. Leukocyte parameters, C-reactive protein (CRP) and ferritin levels were measured in patients with positive PCR COVID-19 test. **Results:** 140 patients with COVID-19 infection were included in the study. The median age in women was 41.5 (23-60) years and 45.3 (22-68) years in men. Based on RT-PCR result, there were significant differences for neutrophil, lymphocyte, and monocyte counts. Overall, 72.8% of patients had monocyte count more than $11 \times 10^9 /L$. The mean neutrophil lymphocyte ratio (NLR) for women was 2.8 (SD: 1.8) and 2.6 (SD: 1.7) for men. Only in 15 patients (10.7%) with respiratory symptoms, CRP level was more than 5 mg/L. **Conclusion:** We found a significant increase in monocyte count. Lymphopenia was also observed. In patients with respiratory symptoms, CRP was significantly higher than the normal reference range.

کلمات کلیدی:

Acute respiratory distress syndrome, Coronavirus, Cytokine release syndrome, Lymphopenia, Real Time PCR, Severe acute respiratory syndrome, سندرم دیسترس حاد تنفسی، ویروس کرونا، سندرم رهش سیتوکین، لنفوپنی، PCR Real Time، سندرم حاد تنفسی

