

## SIGNIFICANCE OF D-DIMER AND FERRITIN INDICATORS IN PATIENTS WITH VARIOUS SEVERITY LEVELS OF COVID-19.

<sup>1</sup> Gadayev A.G., <sup>2</sup> Safarova G.A.

<sup>1</sup> Tashkent Medical Academy

<sup>2</sup> Bukhara State Medical Institute named after Abu Ali ibn Sino

**Introduction.** Although most patients who have had COVID-19 recover and return to their initial state, some of them still have persistent health problems, and this process is called post-acute COVID syndrome or long COVID. The World Health Organization defines long COVID as the continuation of disease symptoms for three months or more after the initial infection and the occurrence of new symptoms in the absence of other causes. The opinion of experts from the aforementioned reputable organization has been confirmed by a number of other observations.

Sometimes persistent symptoms can be observed even after a minimally symptomatic infection. Fatigue, shortness of breath, chest tightness, cough, joint pain, headache, and cognitive dysfunction belong to this group of symptoms. According to observers, long COVID is observed in 10-30% of patients and lasts for more than a year.

**Objective of the study.** To assess D-dimer and fibrinogen indicators based on the results of laboratory and instrumental studies of 400 patients with COVID-19 without comorbidities during the acute period of the disease.

**Materials and methods.** It is known that COVID-19 infection causes severe inflammatory processes in the body. Some studies have reported that several indicators, including D-dimer and ferritin levels, remain elevated for a long time in patients who have experienced severe forms of the disease. Taking this into account, we conducted a comparative study of these indicators in patients under our observation.

**Results.** The average age of the observed patients was  $32.7 \pm 2.15$ ,  $34.7 \pm 2.05$ , and  $34.5 \pm 2.9$  years in the respective groups, with no significant difference noted between them ( $p > 0.05$ ).

In patients with mild COVID-19, the D-dimer level was  $325.4 \pm 40.5$  ng/ml, while in moderate and severe cases it was  $367.2 \pm 42.5$  ng/ml and  $445.6 \pm 50.2$  ng/ml, respectively. When comparing the obtained results, a significant difference was found between the first and third groups ( $p < 0.05$ ). Ferritin levels in blood serum were  $460.2 \pm 38.1$ ,  $482.6 \pm 44.3$ , and  $587.7 \pm 47.2$  ng/ml, respectively, between the groups. When comparing them, a significant difference was also noted between the first and third groups ( $p < 0.05$ ).

The significantly higher D-dimer and ferritin levels in the third group confirm that these patients require long-term monitoring. The obtained results are consistent with the findings of observations conducted by some authors.

**Conclusion.** The obtained results demonstrate that monitoring D-dimer and ferritin indicators in patients who have experienced severe COVID-19 infection is of significant practical importance.