

## IFN- $\gamma$ STATUS IN PATIENTS WITH SARS-CoV-2 AND TYPE 2 DIABETES

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### Cost:

Against the background of the COVID-19 pandemic, all countries have recorded an increase in the number of deaths. Special groups of patients were distinguished in which the death rate significantly exceeded the average statistical indicator. One such group includes patients with diabetes mellitus (DM). Numerous studies conducted in different countries have demonstrated a higher risk of infection with COVID-19 in patients with QD, as well as a more severe course of the disease and a higher mortality rate.

**Purpose:** to study the status of IFN- $\gamma$  in patients with SARS-CoV-2 and type 2 diabetes.

**Material and methods:** 103 patients hospitalized with SARS-COV-2 pneumonia in the Bukhara Regional Infectious Diseases Hospital, which was converted into a Covid-center, were involved in the study. Of all those hospitalized with SARS-COV-2 pneumonia against the background of type 2 diabetes, 35 patients with severe pneumonia (group 1) and 33 patients with moderate severity (group 2) made up. The comparison group (group 3) consisted of 35 patients with SARS-CoV-2 pneumonia who were not infected with DM. The control group consisted of 30 healthy people of a suitable age.

**Results:** Analysis of the level of INF- $\gamma$  showed a decrease in INF- $\gamma$  synthesis by 1.5 times ( $r < 0.05$ ) in patients of group 1, by 1.79 times ( $r < 0.01$ ) in patients of group 2, 1.6 in patients of group 3 times ( $r < 0.05$ ), showed a decrease. The results of studies on the concentration of INF- $\gamma$  in the blood of patients showed a decrease in the synthesis of INF- $\gamma$  in patients, regardless of the presence of type 2 diabetes and the severity of SARS-CoV-2 pneumonia. It should be noted that in the study, a deeper decrease in INF-  $\gamma$  was found in the blood of patients with moderate severity of



SARS-CoV-2 pneumonia on the background of type 2 DM. The minimum level of INF-  $\gamma$  was 21.2 pg/ml, and the maximum level was 101,34.

**Conclusion:** Based on this, such a large difference in the results of the study indicates that the state of interferon synthesis is related to the duration of the main disease and the presence of other chronic diseases.

