VITAMIN D LEVELS VALUES IN MILITARY PATIENTS WITH POST-COVID CARDIOLOGICAL SYNDROMES

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The aim of the study: to study the level of vitamin D in peripheral blood in patients with cardiac post-Covid syndromes.

Materials and methods. Clinical examination of patients was carried out at the bases of the Military Medical Academy (Military Hospital). The study included 170 patients with cardiac post-Covid syndromes (average age 42±4.2 years), which developed 2-3 weeks after suffering from COVID-19 at various stages, pneumonia with lung damage. Lung involvement up to 70% was noted in 12 (7.0%), lung involvement up to 40% in 45 (26.5%) and lung involvement up to 15% in 58 (34.0%) patients. And in 55 (32.3%) patients there was no lung damage. The diagnosis of COVID-19 was confirmed by PCR. Patients who had no previous pathology of the cardiovascular system. The control group consisted of 35 practically healthy patients. Of these, n=164 (80%) men with an average age of 43±2.8 years and n=41 (20%) women with an average age of 40±2.0. Of the total number of patients examined, 35 developed chronic fibrinous pericarditis (CFP) (average age 40±2.8 years), 57 had arterial hypertension combined with dyslipidemia (average age 38±2.3 years), and 65 had chronic persistent myoendocarditis (CPME) (average age 28±3.4 years) and 18 with chronic heart failure (CHF) (average age 48±3.2 years). In patients, vitamin D was determined in the peripheral blood using the ICL method. The control group consisted of 35 practically healthy patients.

Results and discussion. In patients with pericarditis, the level of vitamin D was 28.2±2.5 ng/ml, in patients with arterial hypertension combined with dyslipidemia - 11.5±2.0 ng/ml, in patients with arterial hypertension combined with CHF - 13.90 ±3.0 ng/ml, with chronic persistent myoendocarditis -11.1±2.8 ng/ml, vitamin D values in the control group were 38.0±3.2 ng/ml.

The level of vitamin D in the blood serum of patients with post-Covid cardiac syndromes in patients with CPME compared to the control group was

3.2 times lower ($p<0.001$), and in patients with CHF it was 2.8 times lower ($p<0.001$), in patients with arterial hypertension combined with dyslipidemia was 2.2 times lower ($p <0.001$).

Thus, the greatest decrease in vitamin D levels occurs with CPME, and the least - with CFP.

Conclusion: in patients with cardiac post-Covid cardiac syndromes, there is a significant decrease in the level of vitamin D in the peripheral blood, which requires the administration of vitamin D in order to correct the level of vitamin D.