

90122**The role of NT-proBNP in patients discharged after COVID-19 pneumonia**

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Aims: The long-term health effects after SARS-CoV-2 infection remain poorly understood. The aim of our study was to define the cardiac disorders in the early postCOVID period.

Methods and results: Was observed 85 patients (40 (47,1%) men, 45 (52,9%) women, average age – 44,2 (39,3; 47,1)) on 48,3 (45,0; 56,2) days after the onset of the first symptoms of COVID-19. The main group were divided into 3 subgroups: 1 – 39 patients after moderate COVID-19 pneumonia, 2 – 36 patients after severe COVID-19 pneumonia, 3 – 10 patients after critical COVID-19 pneumonia. The subgroups were comparable in gender and age. All patients before COVID-19 were virtually healthy and had no history of cardiovascular disease, including arrhythmias. All patients underwent general clinical methods of examination, determination of SpO₂, echocardiography and measured NT-proBNP concentration in serum. In 100% patients was the level of SpO₂ more than 95% (average 97,5 (96,3; 98,8)%) and preserved left ventricular ejection fraction (LVEF) (average 62,3 (60,2; 74,3)%). In patients after moderate COVID-19 pneumonia, the level of NT-proBNP was significantly lower (79,4 (59,9; 75,3) pg/ml) than in patients after severe (145,0 (66,9; 170,9) pg/ml) and critical (149,7 (79,3; 138,5) pg/ml) COVID-19 pneumonia ($p < 0,01$). But concentration NT-proBNP in patients after severe and critical COVID-19 pneumonia didn't differ significantly ($p > 0,05$).

Conclusions: Patients after severe and critical COVID-19 pneumonia are at risk for developing cardiac disorders in the early postCOVID period. Determining the level of NT-proBNP, and not just performing echocardiography, after discharged in such patients will help to customize the most appropriate therapeutic strategies.