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EFFECTIVENESS OF STREPTOKINASE AND PROPOFOL DRUGS IN PATIENTS WITH CORONAVIRUS DELTA STRAW (EXAMPLES FROM PRACTICE)

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Abstract:

Coronavirus infection Delta strain is now widespread in our republic, as well as in all countries of the world. It is no secret that the Delta strain infects many members today. Although the pathogenesis of coronavirus has not been fully studied, it has been found that it has tropism in all organs and tissues that contain cells that have the ACE-2 receptor. In the pathogenesis of the disease caused by the Delta strain, as a result of the chain action of cytokines along the vascular endothelium, coronavirus sepsis occurs and along with the respiratory system leads to damage to the central nervous system, digestive tract, kidneys, vascular wall. The Delta strain is a more aggressive strain than the previous COVID-19 strain, with complications of acute respiratory distress syndrome (ARDS), coronavirus septicemia and septic shock, sinus thrombosis, severe pneumonia, and death. In 2020, there was no abrupt increase in the amount of fibrinogen in the blood, the number of platelets in patients with COVID-19. In patients with the currently prevalent Delta strain, these figures are 2-2.5 times higher.

Keywords: Coronavirus, pneumonia, Coronavirus sepsis.

MATERIALS AND METHODS:

We followed 110 patients. We observed multispiral tomography of 75–86% of lung lesions in 40 of the follow-ups, 60–65% of lesions in 45, 50–55% of lesions in 15, and 10 in the control group.

Despite the use of the required amount of low molecular weight heparin (enoxiparin sodium) in patients with Delta strain under our supervision, high levels of fibrinogen, platelets in the blood were maintained. As a result, acute circulatory disorders, pulmonary artery thromboembolism, myocardial infarction, cerebral dysfunction due to trophic changes in the brain, numbness, increased intracranial pressure, seizures, cavernous sinus thrombosis were observed. Decreased oxygen saturation of the blood due to damage to the lung tissue, circulatory disturbances due to thickening of the blood, the formation of defective circulation, tissue necrosis (cavernous sinus thrombosis) due to the deepening of malnutrition in the tissues.

Despite the cessation of the "cytokine storm" in the patients under our supervision, an increase in the process of stagnation in the lungs was observed in the patient due to excessive blood transfusion, resulting in infiltrative tumor of the lung tissue. This resulted in respiratory failure, pulmonary heart failure, pulmonary artery thromboembolism, and eventual death in the patient.

In the general blood analysis of patients - a sharp increase in platelet count - 784 - 800 x 10^9, an increase in erythrocyte sedimentation rate to 60 mm / sec, an increase in fibrinogen in the coagulogram to 5.98-6.27 g / l, a decrease in aPPT-18 seconds, blood clotting time according to Sukharev a decrease of up to 45 seconds at the beginning and 1 minute at the end was observed.

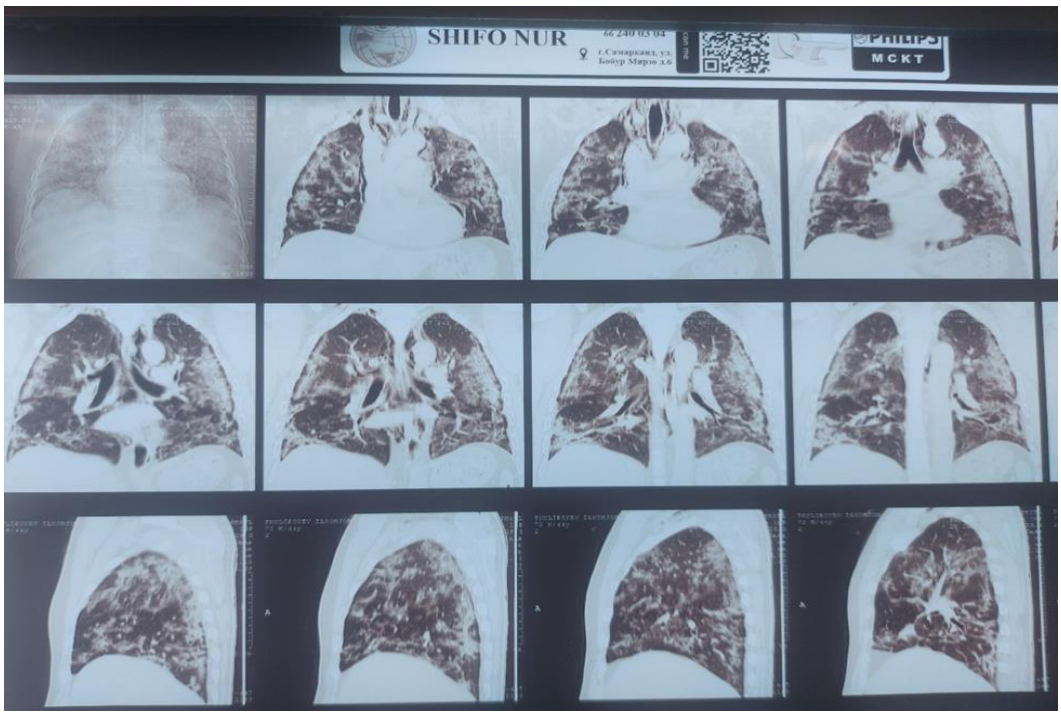
Table №1

Changes in the coagulogram of patients with coronavirus infection before and after administration of streptokinase						
Damage to the lungs degree of friction	Changes in the coagulogram (before streptokinase)			Changes in the coagulogram (after streptokinase)		
	Fibrinogen	Activated particle thromboplastin time	prothrombin ratio	Fibrinogen	Activated particle thromboplastin time	prothrombin ratio
75-86% гача	6.44 г/л	16 сек.	149	4.42	27	124
60-65%	6.21	19 сек.	148	4.91	26	115
50-55%	5.84	20 сек.	127	4.21	27	110

From the table above we can see significant changes in the coagulogram after the use of the drug streptokinase. It should also be noted that there was little change in PTR in the patients under observation. Reduction of clinical signs after a single course of streptokinase in patients; decreased respiratory failure, increased oxygen saturation, decreased risk of thromboembolism, normalization of laboratory parameters, ie platelet counts and fibrinogen levels, aPTT levels, as well as improvement of pathological changes in the lungs.

Patient A.R 39 years. Diagnosis: Coronavirus infection (covid-19 PChR positive) Outpatient bilateral pneumonia. (Lung damage 84-86%) Grade 2 respiratory failure. Before treatment

After treatment



Patient T.I. 32 years Diagnosis: Coronavirus infection (covid-19 PChR positive) Outpatient bilateral pneumonia. (Lung damage 75%) Grade 2 respiratory failure. Before treatment.

After treatment

In addition to the usual clinical signs, neurological changes were also observed in these patients. Patients showed symptoms of depression, restlessness, insomnia, dizziness and encephalopathy, increased agitation, convulsions. In this case, when sibazon-1.0 ml was administered for sedation and sleep improvement, side effects such as increased agitation, aggression, increased insomnia, as well as decreased oxygen saturation and increased symptoms of respiratory failure, increased heart rate and worsening of the patient's condition were observed.

In the treatment of such patients, we transferred the patient to a continuously controlled sleep mode using propofol-10 mg, resulting in loss of agitation, increased oxygen saturation, decreased respiratory failure symptoms, and some normalization of heart rate. Significant improvement and recovery was observed in the general condition of patients in the most severe condition with total damage to the lungs.

As mentioned above, given that in the case of defective circulation in the body, systemic thickening of the blood occurs throughout the blood vessel, we have achieved good results in our practice by administering heparin by infusomat throughout the day instead of using it every 6 hours.

CONCLUSION:

It should be noted that the treatment of patients with Delta strain should be approached individually, depending on the patient's condition, taking into account the damage and functional disorders in other organs in it. At the same time reducing the body's need for oxygen as a result of prolonged sleep with heavy drugs propofol-10 mg. It turns out that hypoxia of the brain and vital organs can be prevented. The use of streptokinase in patients at high risk of thromboembolism in blood tests may prevent thromboembolism.

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