

REHABILITATION AFTER CORONAVIRUS COVID-19

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Abstract. *The coronavirus disease 2019 (COVID-19) epidemic is a public health emergency of international concern. During the initial phase of the COVID-19 outbreak in China, more than half of respondents rated the psychological impact as moderately severe, and about one third reported moderate to severe anxiety. In this regard, in addition to physiotherapeutic measures and exercise therapy, the complex of rehabilitation measures necessarily includes educational programs for training patients with the aim of their psychosocial adaptation.*

Keywords: *coronavirus, rehabilitation, post-Covid syndrome.*

Actuality: Coronavirus infection Covid-19 has become the most sudden and inexplicable global illness in recent years. The emergence of COVID-19 and its spread around the world has posed challenges for healthcare professionals related to the rapid diagnosis of infection caused by the new coronavirus, the provision of specialized medical care, rehabilitation and secondary prevention. Today, when doctors identified the weaknesses of the virus, when treatment methods were selected and the invented medicine began to be actively used, doctors began to talk about the special need for rehabilitation for patients who had suffered from the disease. Despite the powerful development of technology in the world in the last decade, there is no single unique technology for the rehabilitation of the consequences of coronavirus infection, just as there is no secret pill for quick recovery. The consequences of coronavirus are quite varied, and therefore the rehabilitation program is selected individually by a doctor with successful clinical experience in treating patients with COVID-19 in a hospital setting. [1,3,6]

Despite the wide variability in the clinical manifestations of post-Covid syndrome, all cases are characterized by impaired immune response, and therefore rehabilitation after coronavirus is necessary for everyone.

The purpose of study. Determining the significance of undergoing rehabilitation for patients with the COVID-19 virus.

The consequences of this virus can be very different - from sleep disturbances and depression to stroke and pulmonary fibrosis. At the same time, we do not yet know the long-term manifestations that may occur in a year, five or ten years. Recovery needs to begin as early as possible - even with mechanical ventilation, since pulmonary fibrosis that appears after the disease does not develop back. This is a slow irreversible process of replacing pulmonary, alveolar tissue with dense, connective tissue. Clinically, it manifests itself as progressive shortness of breath.

Rehabilitation after a mild form of coronavirus. Young people who have had a mild form of coronavirus require preventive observation by a therapist and pulmonologist, because the long-term consequences of the new infection have not yet been studied enough. A lot of noise has been made when some young, healthy people suddenly died several weeks or even months after being discharged from Covid.

In patients after an infection, focal infiltrative changes in the lungs persist for some time, and shortness of breath is observed when walking. If you let the recovery process take its course and rush back to work, then there is a risk of developing pulmonary fibrosis. This is a slow irreversible process of replacing pulmonary, alveolar tissue with dense, connective tissue as a result of inflammation of the alveolar wall. Clinically, it manifests itself as progressive shortness of breath.

Rehabilitation after moderate or severe form of coronavirus. Patients who have suffered moderate and severe forms of coronavirus pneumonia urgently need thorough examinations by specialized specialists. As a rule, the disease occurs in moderate and severe form in people suffering from chronic diseases of the lungs, blood, heart and blood vessels, liver and kidneys. Complications include decompensation of organ functions, the development of irreversible changes in the heart muscle, myocarditis, arrhythmias, heart attacks, strokes with paresis of the limbs and speech disorders [2,4].

The use of breathing simulators – stress spirometers. The device creates pressure during exhalation, which promotes the opening of the alveoli, as well as light vibration, which stimulates the discharge of sputum. Using a spirometer, you can control the speed and volume of air, monitor the result and increase the load. Exercise spirometers can be used at home, but be sure to discuss your self-treatment plans with your doctor. Breathing exercises, including long exhalation and deep breathing, which are useful for restoring lung function. Classes in the pool. Swimming helps train the diaphragm and many auxiliary respiratory muscles weakened by disease: water pressure forces these muscles to work more actively, and the respiratory apparatus and general endurance are restored faster. Many patients who have recovered from coronavirus complain of constant fatigue. But this is not only due to a decrease in lung volume and poor resistance to physical activity. Scientists have found that many patients who have suffered from various forms of pneumonia experience chronic fatigue after illness. That is, fatigue, despite the fact that chronic fatigue syndrome is not in the International Classification of Diseases, and not all experts generally recognize its existence, there is a connection with pneumonia.

According to doctors, in this case, daily complication of routine activities - motor tasks, from ordinary walking to switching to a gym treadmill - will help to overcome fatigue. The main thing is to constantly monitor what you have achieved: walk more today than yesterday, focus on speed and distance, track them using a gadget.

At the same time, it is important to monitor your well-being - if shortness of breath appears during movement, it should completely go away within 2-3 minutes after stopping. Other measurements of health indicators during exercise should be done as prescribed by a doctor, for example, monitoring saturation, monitoring pulse and pressure - if you have hypertension or other heart problems.

In addition, during exercise, headaches, dizziness, nausea, and sweating may appear, and if this is the case, then you should contact a specialist to develop a recovery course.

Rehabilitation after coronavirus at home: rehabilitation of bedridden patients at home allows you to avoid the occurrence of bedsores, thrombosis, hypo- and muscle atonia, memory impairment and the development of depression. The patient is not only examined and selected for tablets, infusion, and nutritional therapy, but also changed position, helped to move, taught breathing exercises, and maintained live communication with him [1,3].

Conclusion. Thus, the development of the rehabilitation area provides great opportunities for improving the health of the population, increasing life expectancy, and most importantly, the economically and socially active period of life, maintaining working capacity and reducing disability. This requires not only the development and implementation of new organizational models of medical rehabilitation and sanatorium-resort treatment, but also the widespread use in medical practice of existing rehabilitation methods and programs, increasing the educational level of medical workers and graduates of medical educational institutions in the field of rehabilitation.

Rehabilitation after suffering from a virus is required for every person who has recovered from the disease, regardless of the severity of the disease experienced. Patients who have suffered moderate and severe forms of coronavirus pneumonia require mandatory comprehensive rehabilitation. But it is better not to rush into returning to work after an illness, according to rehabilitation experts.

REFERENCES

1. Справочник по профилактике и лечению COVID-19 Первая клиническая больница. Медицинский Факультет университета Чжэцзян. Справочник составлен на основании клинических данных и опыта Handbook of COVID-19 Prevention and Treatment).- 54с.
2. В.Н. Сергеев, «Обоснование использования метаболической терапии комплексных реабилитационных и профилактических программах». // Журнал «Вопросы питания», том №83 - №3 - 2014 год, стр. 124 - 125.
3. А.М. Ветитнев, Я. А. Войнова. Организация санаторно - курортной деятельности / Учебное пособие. - Москва -2014.
4. Сергеев В.Н., Роль лечебно-профилактического питания в комплексном санаторно-курортном лечении. Журнал «Вопросы питания» - Том №83 -№3 2014 год, стр.63-65.
5. China journal of Chinese material medica; 2020 Mar;45(6):1225-1231; Study on Treatment of "Cytokine Storm" by anti-2019-nCoV Prescriptions Based on Arachidonic Acid Metabolic Pathway; Yue Ren ¹, Mei-Cun Yao ², Xiao-Qian Huo ¹, Yu Gu ¹, Wei-Xing Zhu ³, Yan-Jiang Qiao ¹, Yan-Ling Zhang ¹.
6. International journal of infectious diseases: IJID: official publication of the International Society for Infectious diseases; 2020 Apr 1. doi: 10.1016/j.ijid.2020.03.071. Online ahead of print. Insight Into 2019 Novel Coronavirus - An Updated Intrim Review and Lessons From SARS-CoV and MERS- CoV; Mingxuan Xie ¹, Qiong Chen ².