Specificity of resuscitation and rehabilitation procedures in patients with covid-19

1 Irgashev I.E., 2 Farmonov X.A.

EMAIL :

ABSTRACT: Currently, the world community is faced with a new infectious disease that has not only medical, but also enormous socio-economic significance - the COVID-19 pandemic. (coronavirus disease 2019). The article discusses brief etiopathogenetic aspects of the new coronavirus infection. The role of some of the factors contributing to the development of nephro- and cerebrovascular disorders in COVID-19 is discussed. Results of work on coronavirus infection summarized foreign researchers.

KEYWORDS: COVID-19 pandemic, SARS-CoV-2, rehabilitation, recommendations.

INTRODUCTION

Patients with novel coronavirus infection (COVID-19) may need rehabilitation. The conditions of the epidemic caused by SARS-CoV-2 require a revision of approaches to the rehabilitation of patients with other pathologies. It is necessary to develop clinical guidelines for the provision of rehabilitation assistance to patients with COVID-19 and other diseases during a pandemic. The expert group analyzed data from current reviews on rehabilitation for COVID-19, as well as previously conducted research on rehabilitation for intensive care syndrome and acute respiratory distress syndrome of a non-coronavirus nature, based on which the main positions for clinical guidelines were developed. The article discusses the main rehabilitation problems in patients with COVID-19, in particular, structural and functional disorders leading to restrictions on self-care, mobility, everyday life, communication, interpersonal relationships, professional activities and determining the need for care. (4) General recommendations are given for organizing medical rehabilitation in a pandemic at all three stages, including the issues of patient routing and ensuring the infectious safety of medical personnel and patients. The necessary components of an individual rehabilitation program for patients with COVID-19 at all stages of rehabilitation, including examination of patients, correction of nutritional deficiency, restoration of respiratory function, exercise tolerance, muscle strength, self-control and training in new conditions of
movement, as well as restoration of disorders of the psycho-emotional state and cognitive functions, independence in daily life. Medical rehabilitation during the COVID-19 epidemic should include all components of rehabilitation assistance and help optimize vital functions, prevent complications and improve the quality of life of patients.

At the moment, there is a situation in the world in which reliable professional information on the provision of medical care, especially rehabilitation, to patients with COVID-19 (CoronaVi rus Disease - a coronavirus disease that arose in 2019) is not enough, since this disease is new. The traditional method of obtaining the necessary information by drawing on data from previously performed scientific studies has proved ineffective, since the experience of treating patients with a new coronavirus infection is measured in only a few months. Given the unusual situation of the pandemic itself and the peculiarities of the pathogenesis of the disease caused by SARS-CoV-2 (Severe Acute Respiratory Syndrome-related COronaVirus 2, severe acute respiratory syndrome associated with coronavirus 2), the routine use of generally accepted developments may be unsafe or ineffective. Reports from organizations and clinics that are currently providing assistance for patients with COVID-19 and already have initial experience in providing rehabilitation assistance to these patients come to the fore in the development of recommendations. A timely revision of the recommendations is required, and a huge responsibility in this work falls on the professional associations of rehabilitation therapists [1].

This review is based on reports from clinics currently involved in the rehabilitation of patients with COVID-19, as well as on the results of previous clinical studies on the rehabilitation of patients with intensive care after-effects syndrome and acute respiratory distress syndrome in adults of non-coronavirus etiology. A syndromic approach to the use of means and methods of physical and rehabilitation medicine is also considered.

The spectrum of rehabilitation problems in patients with the new coronavirus infection COVID-19

Significant demand for COVID-19 care and rehabilitation is projected to follow a surge in hospitalizations for COVID-19 patients. Professor D. Grabowski in his publication compares difficult patients with COVID-19 with septic patients and suggests that up to 30% of hospitalized patients will need care on the basis of a medical institution and up to 20% - in medical support at home [2].

Data from China suggests that 6% of patients in general and 71% of patients with severe COVID-19 required mechanical ventilation (ALV). The average length of hospital stay was 12 days, but patients with severe disease were in intensive care units for 2-4 weeks [3, 4]. They had complications in the form of acute respiratory distress syndrome, syndrome of the consequences of intensive care, pneumothorax, acute damage to the kidneys, heart, liver, nutritional deficiency, decreased physical tolerance, respiratory failure (dyspnea, breathing, decreased oxygen saturation) [4, 5]. In addition to the already known and generally recognized symptoms, other clinical manifestations and complications developed that required rehabilitation [5-11], in particular:

- syndrome of posterior reversible encephalopathy;
- polyneuromyopathy and polyneuropathy of critical conditions (after acute respiratory distress syndrome in adults and syndrome of the consequences of intensive care);
- myopathy;
- contractures of the ankle joints;
- bedsores;
• hyposmia, hypogeusia;
• ataxia;
• violation of consciousness;
• epileptic syndrome;
• development of acute disorders of cerebral circulation (ACVA) due to hypercoagulability syndrome.

In addition, a wide range of cognitive impairments and mental disorders have been reported in the COVID-19 patient population [6, 12]:
• mood changes (depression);
• anxiety disorder (60% of all mental disorders) and suicidal ideation;
• delirium;
• organic hallucinosis (visual and auditory hallucinations);
• behavioral disorders;
• persecution mania;
• space-time disorientation;
• hypomanic disorder, etc.

When choosing methods of psychological diagnostics and psychological correction, it makes sense to rely on the data and experience previously obtained on the epidemics of SARS-CoV (Severe Acute Respiratory Syndrome-related coronavirus - severe acute respiratory syndrome associated with coronavirus) and MERS-CoV (Middle East Respiratory Syndrome - Middle East respiratory syndrome) [15]. When caring for patients with COVID-19, it should be borne in mind that they may initially suffer from mental illness, such as schizophrenia, autism, postpartum depression, alcohol or drug addiction, depression, etc. Patients should continue the treatment and rehabilitation they received earlier without interruption, this will ensure the safety of staff and support the behavioral status of patients [13].

References:


