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APPLICATION OF THE LATEST TECHNOLOGIES IN PHYSICAL REHABILITATION OF PATIENTS WITH CEREBROVASCULAR PATHOLOGY

Actuality of theme. Vascular diseases of the nervous system are one of the leading causes of permanent disability both in Ukraine and throughout the world. The lion's share in the structure of vascular diseases is occupied by cerebrovascular diseases (a group of brain diseases caused by pathological changes in cerebral vessels with impaired cerebral blood circulation). Patients with this pathology need not only medical support for optimal health, but also, to a greater extent, a complete change in lifestyle and giving up bad habits.

The purpose of the study is to highlight effective new technologies in physical rehabilitation, which are used for patients with cerebrovascular pathology.

Research results and their discussion. According to modern ideas, in the treatment of this contingent, along with drug therapy, classical and modern technologies of physical rehabilitation are used, which are subject to the general principles of restorative strategy and tactics aimed at preventing complications and relapses of the disease and social readaptation of patients.

Among the classical technologies of physical rehabilitation of patients of a neurological profile, including cerebrovascular pathology, the following are distinguished: therapeutic physical culture, massage, physiotherapy, occupational therapy, diet therapy, etc., their complex use allows to successfully restore motor functions, correct biochemical and physiological processes, improve the psychological state of patients and, in general, achieve a long-term remissions, improvement of blood circulation and work capacity.

Among the latest rehabilitation technologies, normobaric hypoxic-hypercapnic training, based on breathing air containing a certain percentage of carbon dioxide and a reduced amount of oxygen compared to atmospheric air, is fully justified. Compensatory hypoxic and hypercapnic stimulation of the

respiratory center, mediated by chemoreceptors, serves as the main mechanism that establishes the correspondence between the volume of pulmonary ventilation and the intensity of metabolic processes. The use of this method helps to restore disturbed homeostasis, metabolic processes, decrease the level of hypoxia, disorders of cerebral hemodynamics.

Due to the rapid development of the technical equipment of the rehabilitation process, methods using special devices are used at the modern stage. According to the literature, the following are considered particularly effective: technologies using robotics, EMG-triggered electrical stimulation of certain muscles with reduced integrated electrical activity, which helps to perform the movement in full.

Perfetta's technique is a series of cognitive exercises that improve the neurological organization of the brain. The main purpose of such exercises is the training of small fine-motor movements, clearly demarcated according to the principle from simple to complex.

At the current stage of the development of rehabilitology, it is quite wide the method of proprioceptive neuromuscular facilitation (PNF) is used, which uses "complex movements" in conditions of proprioceptive facilitation to activate the affected muscles. At the same time, based on the premise that by amplifying the signals from the proprioceptors, it is possible to improve the functional state of the motor centers, using certain schemes and types of exercises approaching natural movements.

Such technologies as audiovisual stimulation are known, in which the CNS is influenced by periodic pulses of light on the visual analyzer, aimed at neutralizing the destructive effect of stress and improving the adaptive function by increasing the efficiency of neuroendocrine centers of the brain.

Conclusions. The analysis of modern scientific and methodical literature shows that the use of physical methods of treatment actively influence the risk factors for complications of cerebrovascular pathology, providing the opportunity to use them in multidisciplinary primary prevention acute disorders of cerebral circulation.