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EFFECTIVENESS OF PARENTAL PARTICIPATION IN THE REHABILITATION OF PATIENTS WITH CEREBRAL PALSY

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Purpose *to develop available physical exercises that increase the effectiveness of therapy in patients with cerebral palsy. Objects and methods.42 patients with cerebral palsy with different forms were examined and rehabilitated. In the main group, classes at home were added to complex treatment. Results. The effectiveness of therapy by category: communication, movement, self- service, play activity, was more in the group were therapeutic exercise at was used. The conclusion. The need for further development of methods for the rehabilitation of children with disabilities is shown.*

Keywords: *Children`s cerebral palsy, exercise therapy, massage, exercise.*

ЭФФЕКТИВНОСТЬ УЧАСТИЯ РОДИТЕЛЕЙ В РЕАБИЛИТАЦИИ БОЛЬНЫХ ДЦП.

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Цель: *разработка доступных физических упражнений, которые повышают эффективность терапии у больных ДЦП. Объекты и методы. Произведено обследование и реабилитация 42 больных ДЦП с разными формами. В основной группе к комплексному лечению добавлены занятия в домашних условиях. Результаты. Результативность терапии по категориям: общение, передвижение, самообслуживание, игровая деятельность- была больше в группе, где применялись лечебная физкультура в домашних условиях.* ***Заключение.*** *Показана необходимость дальнейшей разработки методов реабилитации детей – инвалидов*

Ключевые слова: *детский церебральный паралич, лечебная физкультура, массаж, упражнение.*

Relevance. The fight against all forms of disability is an issue of national importance. One of the most severe forms of disability is disability associated with intrauterine and birth-related brain damage. Among childhood disabled people in this category, disabled people suffering from cerebral palsy stand out. The severity of disability due to cerebral palsy is due to the fact that, along with motor impairments, as a rule, there are also severe mental and speech disorders. About 20% of patients with cerebral palsy are unable to care for themselves and are unteachable. Thus, the issue of prevention and rehabilitation therapy of cerebral palsy outgrows the scope of a medical problem and acquires an increasingly social meaning: functions that ensure not only individual biological, but also labor, socially useful human activity suffer.

Treatment of children suffering from cerebral palsy is currently concentrated in specialized children's neurological departments, children's psychoneurological clinics, and specialized nurseries. Boarding schools and children's homes, specialized children's sanatoriums.

Purpose of the study: the goal of our work with cerebral palsy is to develop the ability to voluntarily inhibit movements, reduce muscle hypertonicity, improve coordination of movements, increase the range of motion in joints, as well as teach children everyday skills. The program is aimed at reducing primitive reflexes, increasing motor strength, developing the ability to maintain body balance, and performing rhythmic movements.

Material and research methods: 42 children from 2 to 9 years old took part in our study. We divided them into 2 groups. Both groups received standard treatment at the clinic. We took 22 children into the control group, and we continued therapeutic exercises at home. We carried out exercise therapy for cerebral palsy using the following methodology: regularity, systematicity and continuity of classes, individual approach, taking into account the stage and severity of the disease, as well as the age and mental development of the child. We taught mothers speech therapy massage. It consists of a massage of the facial and articulatory muscles, helps normalize muscle tone and stimulate motor sensations. The technique of this massage is as follows:

A) Smoothing. Smoothing the forehead from the middle to the temples, then from the eyebrows to the scalp, from the earlobes along the cheeks to the wings of the nose, along the upper lip, along the lower lip.

B) Relaxation of the tongue. We massage a point in the submandibular fossa and make vibrating movements at the corners of the jaw.

B) Relaxation of the oral muscles. Using gentle movements, massage the muscles of the forehead, cheeks, neck, lips and tongue. We stroke the nasolabial folds.

D) Relaxation of the neck muscles. We massage the neck and do passive head turns.

D) Acupressure for tongue hyperkinesis. We massage the lip area, the lower jaw area and points in the popliteal area.

Articulatory gymnastics uses passive exercises, including stretching the lips, gathering them into a tube, and lowering the lower lip. Therapeutic gymnastics for the first week should involve the necessary muscles, which will contribute to the correct distribution of muscle tone. In addition, we taught mothers mutual influence exercises to strengthen leading and antagonistic muscle groups, endurance exercises to maintain the efficiency of organ functioning, relaxation training to eliminate spasms, tension and cramps, walking training, and climbing exercises to improve balance. and motor strength.

Children under three years old were given exercises that help normalize the functioning of the vestibular apparatus. Such exercises include the following movements: lying on your back and on your stomach, raising your head, tilting your torso. We also included walking exercises in which you need to turn your head, raise your arms up, forward, and close your eyes. In order to reduce hypertonicity, acupressure and segmental massage were used. Those who have the opportunity included hydrokinesitherapy, which consists of swimming, gymnastics and water games. For spastic diplegia, exercises with continuous movement were used; for the astatic form, exercises were used for short periods with breaks between them. In the atonic form, special attention was paid to exercises to maintain balance. To get a great effect, we combined exercise therapy with massage.

Classic massage was carried out in courses, 10-15 sessions and a 5-day break. It was performed to reduce muscle spasms and tone relaxed muscles. For this, various techniques were used: comb-shaped, forceps-shaped and concentric stroking in case of spasm, kneading and tapping in case of muscle atony. This massage was started when the child’s seizures disappeared. Acupressure relaxation massage was used as an addition to exercise therapy and other types of massage. There are no contraindications to it; you can do it every day only with occasional breaks. The massage technique was taught to the parents of a sick child so that they practiced it every day for months. Rehabilitation activities were carried out constantly, focusing on what brings the maximum effect. Only in this case can you count on sustainable results. As we know, the treatment of cerebral palsy is complex, long-term and is aimed at movement, restoration of impaired movements, restoration of impaired functions, which is achieved by the tireless work of parents. Having explained all this to the parents, we worked together with the sick children. Daily physical therapy and massage helped the babies develop normally. The beginning of physical therapy classes brought positive changes: the child’s emotional state improved, muscle contractures decreased. In the initial stage of cerebral palsy, positional treatment was carried out after a relaxing massage and relaxation exercises. In order to give the body a physiologically correct position, a special roller with sand and tires with a soft inner lining were used. Children can remain in such positions for 2 hours, then rest for 1-2 hours, and the splints are applied again. At older ages, a position with maximum approximation of muscle attachment points was used. Pose lying on your back: place a

bolster (pillow) under your head so that your head is almost lowered to your chest. Bend your arms at the elbows or cross them over your chest. The hip and knee joints should be bent (place a bolster under the knees), the angle of flexion is selected individually. Place the top on a support, spread your hips freely. The pose made it possible to inhibit hyperkinesis and reduce the influence of the cervical-tonic asymmetric reflex. In order to relax the muscles of the upper limb, the child lies on his back, the head is located strictly along the midline, the arm and leg on one side are fixed with sandbags. The free arm is bent at the elbow, the forearms are fixed by the mother. The mother holds the child's hand until the increased muscle tone weakens, after which she shakes the hand, the child alternating with passive movements in the wrist joint (flexion, extension, abduction, adduction, rotation). Using acupressure, carried out in parallel, active flexion and extension can be stimulated brushes At the end of the exercise, the forearm and hand are shaken and placed in the middle position with fixation with shreds or rollers with sand. For the lower extremities, the child was placed on his back, head in the middle position, arms fixed, legs bent so that they touched the abdomen. The mother, holding the lower legs in the upper third of the anterior surface, produces abductions in the hip joints. Then, fixing one leg, he makes circular movements with leg extension. For the muscles of the torso and neck - lying on your back, head in the middle position. The mother, supporting the child's body on both sides, gently rocks the body from side to side, making sure that the child does not offer resistance. Then the mother, holding the baby's head, rocks it freely, alternating rocking with head turns.

Results: After standard treatment, those children who did physical therapy at home were able to develop muscle strength by performing exercises with gradually increasing intensity. Therapeutic physical education for cerebral palsy taught the child to use his body and coordinate motor signals to the muscles depending on his individual characteristics, since the innate motor reflexes that all other people use have failed. Regular training made it possible to combat improper muscle tone, which worked especially effectively in the case of paresis. After exercise therapy in children with cerebral palsy, the nervous system was partially restored, which in the child is still quite flexible and, to some extent, capable of changing, recovering and even being rebuilt under external influence. The earlier the physical therapy complex began and the better, more responsible, and more intense the classes were, the more the child was able to compensate for his physical disability and quickly learned not only to use his body or care for himself, but also was able to live an active life to one degree or another. the life of first a teenager, and then a young man. The presence of parents raised the morale of children, made them more resilient, try harder, or consoled them during particularly exhausting exercises. Swimming was a universal method that could be performed not only in a pool but also in a regular bath. Physical therapy is very beneficial for children with cerebral palsy. They made it possible to at least double the child’s condition, and also made him able to survive in the world and even work. The

earlier the classes started, the more effective they were, but, nevertheless, it is never too late to start them. The possibility of learning and social adaptation largely depends on the completeness of compensation and the degree of mental impairment. Children with spastic diplegia could learn to take care of themselves, and could master a number of work skills to write. Children with the skiperkinetic form had a favorable prognosis for learning and social adaptation. Children with atonic-astatic cerebral palsy must be treated for a long time. After our course, they also showed good changes. Using a planned set of exercises aimed at developing sensations, we could improve the condition of the motor sphere of a child with a defect in the nervous system. In the first group, all these listed results were not revealed. Since motor functions are different for each cerebral palsy phoria, for spastic dplegia we prescribed relatively easy-to-learn exercises that require continuous movement. And with the astatic form, short-term exercises, which make it possible to rest more often between exercises. The atonic form presented several other problems. Children with this form of paralysis especially suffered during balance exercises. The variety and novelty of the exercise sessions were updated and repeated to consolidate the achieved successes. On the one hand, there is no treatment that makes it possible to restore the damaged brain. However, if you work according to a scientifically based program, then the nervous system, which is in an intact state, can perform all its functions. Physical education programs play a leading role in the comprehensive rehabilitation of children with cerebral palsy. We carefully analyzed the characteristics of the motor environment of each patient with cerebral palsy and created a program that makes it possible to stimulate motor functions. When compiling sets of exercises, we were attentive to patients with cerebral palsy (spastic diplegia or in the atonic form), since the exercises they perform require more activity than involuntary muscle movements.

Conclusions: And so, cerebral palsy is an incurable disease, but physical therapy at home can alleviate its consequences and syndromes. At the same time, using medications will further improve the child’s condition. All these exercises with the mother play a huge role in the patient’s adaptation to external conditions. The physiotherapy exercises we offer at home are the most effective, easy to perform and have given very good results compared to the previous group. Those children who studied at home, at least a little, learned self-care. In hypertonicity, the tone decreased, on the contrary, hypotonicity increased. This means that not only in hospitals and sanatoriums, but also at home, if parents deal with children with cerebral palsy, then the results will be much greater.

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