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TREATMENT OF CONTRACTURES IN SPASTIC FORMS OF CEREBRAL PALSY IN CHILDREN.

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The purpose of the study: To ensure the formation of acceptable movement skills in children with cerebral palsy by improving the diagnosis and applying staged plaster dressings to the lower extremities.
Materials and methods: This work is based on the study of the results of treatment of 35 patients aged 1 year to 5 years with a spastic form of cerebral palsy of the lower extremities, who received outpatient and inpatient treatment in the clinic of the Tashkent Pediatric Medical Institute for the period 2016 - 2018 years. When collecting the material, we used the following clinical research methods: complaints, anamnesis morbi and anamnesis vitae, general orthopedic examination and electroneuromyography (ENMG).
Results and discussions: The study determined that if treatment is started before the age of 2 years, then 41% of children manage to get good results. With the age of the child, these results decrease. Treatment of spastic forms of cerebral palsy should be early, systematic, differentiated and comprehensive. A significant role in this disease is played by phased plastering, especially to eliminate the shortening of the Achilles tendon. It is necessary to follow all the rules of treatment and rehabilitation in order to subsequently achieve the desired results.
Keywords: children**,** cerebral palsy, joint contracture, plaster cast therapy.

Cerebral palsy (CP) is a complex of movement disorders that occur due to brain damage in the perinatal period. About 3-50% of patients with cerebral palsy have problems with intelligence (Kariev G.M. et al..). Brain damage can also cause difficulty thinking, difficulty in mastering the language, shaky gait, lagging behind in mental and motor development. The disease occurs with a frequency of about 1.7-7 cases per thousand children under the age of one year.

The study of the etiology of the disease showed that it is almost impossible to single out any one of its causes. Often, the development of pathology causes a whole complex of adverse factors that affect the baby both during the mother's pregnancy and after birth. According to studies, about 80% of cases of the disease are associated with damage to the brain of a child during fetal development. But it must be remembered that it is not possible to determine the causes of the disease in every third case.

It is necessary to diagnose the disease at its early stage, since only in this case the patient will have a positive prognosis for further social adaptation. For a more detailed diagnosis of cerebral palsy, you will need to consult other specialists: a speech therapist, an ophthalmologist, an orthopedist, a psychiatrist, an epileptologist, an otolaryngologist. It is also extremely important to conduct a thorough differential diagnosis to distinguish cerebral palsy from other diseases with a similar clinical picture.

Cerebral palsy is an incurable disease. However, if you start a step-by-step complex treatment in a timely manner, you can prevent further aggravation of the disease, as well as improve the intellectual, motor and speech skills of the baby. In many ways, it is on the adequacy and completeness of rehabilitation of patients with cerebral palsy that the success of their further social adaptation depends. Stage-by-stage treatment can reduce the likelihood of skeletal deformity, contributes to the development of self-care skills in children, compensates for neurological deficits. Since each patient is diagnosed with a different degree of severity of the disease, the rehabilitation program is made individually. This takes into account factors such as the severity of brain lesions, the degree of intellectual disorder, the presence of epileptic seizures. The most difficult

rehabilitation treatment is to carry out with children with serious intellectual and cognitive impairments.

In the treatment of patients with cerebral palsy, special attention is paid to the elimination of motor disorders and the formation of a normal vertical position, the shortening of the Achilles tendon for the correct gait is also eliminated. For this, massage, exercise therapy, orthopedic and physiotherapeutic procedures are used. For example, to form the correct position of the baby's body, the neurologist and the teacher-defectologist select the most optimal hairstyles for him. At the same time, the trunk and limbs are fixed with the help of special devices. For example, to develop the skill to properly hold the head, rollers are used that are placed under the child's neck. In the most severe cases, the use of special plaster dressings is indicated.

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Results and discussions: Cerebral palsy includes a group of diseases that are caused by brain damage at the moment when it is actively formed. This disease affects the basic skills of the child, his coordination of movements, fixation of the body. Often, cerebral palsy is difficult to treat, and children with this disease need constant care. If you start treatment in a timely manner, then you can defeat the disease, however, is will not happen so quickly, and therefore patience should be exercised. The standard approach to treatment provides for a number of measures that can help keep the affected muscles of the body in the maximum, as far as possible**, tone.** In fact, from birth, cerebral palsy requires comprehensive treatment. Its main goal is to normalize physical development, walking skills, strengthen the body as a whole. It is important to connect massage, gymnastics, and orthopedic measures.

A significant role in this disease is played by phased plastering.

It is also called gradual plastering or plastering in several stages. In fact, this technique is a system of therapeutic massage and fixation of its results. It all starts with the fact that the doctor works first, for example, with the foot. He kneads it, tries to bring the foot to a position that is more correct than the existing position. In addition, the use of force, during this procedure, is absolutely excluded. If it is still possible to change the position of the foot for the better at least a little, then it is immediately fixed with a plaster boot. Usually, a plaster cast is applied, starting from the foot and ending above the knee. After some time, the boot is removed and be sure that the specialists again work with the foot to eliminate the deformation of the foot due to the shortening of the Achilles tendon. They achieve an even more correct position, in comparison with the previous time, and again apply a bandage of plaster. And so gradually in several steps (stages) measures are carried out at the same place.

The majority of patients are represented mainly by boys - 22 (63%). According to our data, the ratio between boys and girls was 1.7 : 1 (according to the literature is 1.3: 1).

Table -1.

Distribution of patients by sex and age

Floor	Age				Altogether:	
	1-2 years		3-5 years			
	Abs	%	Abs	%	Abs	%
Girls	6	17	7	20	13	37
Boys	12	34	10	29	22	63
Total:	18	51	17	49	35	100

The distribution of admitted patients at the place of residence shows that there were more patients from rural areas. The distribution of patients at the place of residence is presented in (Table-2).

Table -2.

Distribution of patients by place of residence

Place of residence	Girls		Boys		Altogether	
	Abs	%	Abs	%	Abs	%
City	1	3	4	12	5	15
Village	12	34	18	51	30	85
Total:	13	37	22	63	35	100

From the above data it follows that there were more patients from rural areas due to the location of the clinic and the insufficient qualification of medical personnel in orthopedic pathology.

When interviewing patients, the most common cause of cerebral palsy was prematurity and severe childbirth, which accounted for 54%. The distribution of patients due to occurrence is presented in.

From the diagram due to the occurrence of cerebral palsy, it follows that most often it was accompanied by low body weight and prematurity of the fetus (63%), the second place (23%) was confidently taken by difficult childbirth (protracted, rapid and the use of cesarean section). The difference in sex was not noted only in the group of patients with a burdened history of maternal pregnancy.

hen examining 35 patients, 95 joints of the lower extremities (hip, knee and ankle) were involved in the process. The bilateral process affected 21 patients (42 joints), the left side prevailed more often (8).

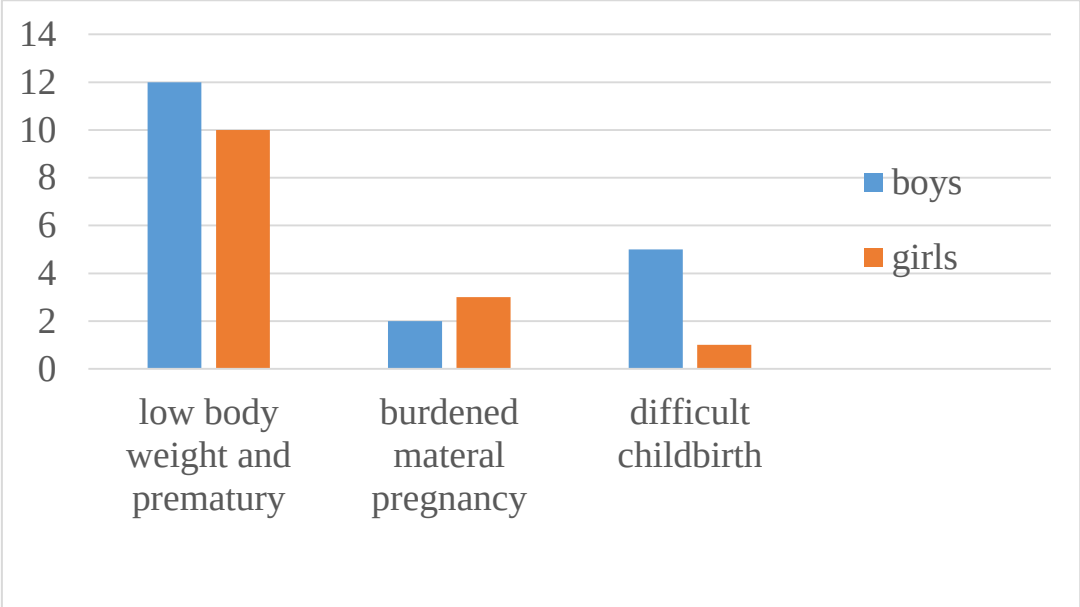

Fig-1. **Distribution of patients due to cerebral palsy**

In our work, we referred to the data of the literature [2, 4], with the division of the spastic process in the joints of the limbs by degrees of severity. The distribution of patients by localization of the joints and the degree of damage is presented in (Table-3.).

Table -3.

Distribution of patients by localization of the joints of the lower extremities with cerebral palsy with degrees of damage

Level / Degree	Hip	Knee	Ankle joint
	Abs	Abs	Abs
Easy	4 (7*)	13 (14*)	13 (15*)
Average	10 (20*)	12 (24*)	12 (23*)
Grind	9 (17*)	10 (19*)	9 (16*)

Note: *- marked number of joints

Based on the data of the table, it follows that the distal parts of the lower limb (knee and ankle joints) were most often involved in the spastic process -69.

Thus, the frequency of the spastic form of cerebral palsy occurs more often in boys almost 2 times (63%), against 37% of girls. The basis of the disease were generic causes on the part of the child: low body weight, prematurity; on the part of the mother - difficult childbirth. In the spastic process, all the joints of the lower extremities were involved mainly from 2 sides (60%). Of the joints of the lower extremities, the knee suffered the most (39%), less hip (21%). The severity of the spastic process was moderate (38%).Through the above technique, good results are achieved with patients whose age is from 2 to 3 weeks to 2 years. In such cases, 60-80% of patients recover speech and motor functions, they are able to serve themselves, subsequently receive education, take part in social life and work. Such rehabilitated people can create a family and have healthy offspring. In fairness, it should be noted that it is very difficult to identify cerebral palsy at such an early stage. Therefore, parents should remember that even a slight deviation in development requires examination and consultation with a doctor. There can be no trifles here. Unfortunately, muscle damage very quickly leads to the appearance of deformities and contractures. Correction of pathological postures with the help of stage plastering is most often used in cases of contractures in the joints. This is exactly the case where the treatment is the situation itself. The correct posture of the affected limb reduces the excitability of tendons and muscles, also reduces the flow of unhealthy impulses.

Plastering is used when there are no dystrophic changes in the musculoskeletal system, its soft tissues. This is a prerequisite. The plaster is replaced every 10, in extreme cases, 12 days. In general, the patient should not stay in a plaster bandage for more than 2-3 months. If there is a need for long-term treatment, then the limb, as a rule, is fixed by means of a plaster splint. This method leaves the possibility of conducting a course of physiotherapy and massage. Only after that, it is possible to resume plastering. It is important that a child in plaster casts has a properly installed head and torso. Their asymmetrical position is accompanied by soreness. Usually, after treatment with plaster, babies wear tutors, as they feel painful. Gradually, children learn to be without tutors, wearing them only at night.

Treatment with the help of staged plaster dressings is most effective for pathology in the knee joints and ankle joint. But, somewhere, after six months, a relapse is possible. That is why a short repeated course of plastering is advisable (up to 3 stages). With sufficiently pronounced contractures, it is recommended to carry out 3, or even 4 courses of stage plastering for 2 or 3 years.

Findings

In this work, the prevalence and approaches to the treatment of cerebral palsy were studied. If treatment is started before the age of 2 years, then 41% of children manage to get good results. With the age of the child, these results decrease. Treatment of spastic forms of cerebral palsy should be early, systematic, differentiated and comprehensive. A significant role in this disease is played by phased plastering, especially to eliminate the shortening of the Achilles tendon. It is necessary to

follow all the rules of treatment and rehabilitation in order to subsequently achieve the desired results.

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