Egamova Malika Tursunovna
PhD, assistant
Rasulov Jamshedlon Shavkat ugli
Faculty of Dentistry, 3rd year student

SURGICAL TREATMENT OF PATIENTS WITH CEREBRAL PALSY WITH SPASTICITY OF THE LIMBS

Resume. Rehabilitation of children with cerebral palsy requires several complex procedures. Complex drug therapy, massage, physiotherapy, traumatological and orthopedic correction, pedagogical and psychological rehabilitation, as well as kinesitherapy effectively help with this.

Purpose: The surgical method is used when all of the listed rehabilitation measures are ineffective.

Conclusion: surgical practice has been recognized as effective in the presence of tibial deformity in a patient with cerebral palsy.

Key words: surgical practice, orthopedic correction, rehabilitation measure, pedagogical rehabilitation, psychological rehabilitation.

Эгамова Малика Турсуновна
PhD
Расулов Жамшеджон Шавкатович
студент 3курс стом.факультета
Самаркандский Государственный Медицинский Университет, СамаркандУзбекистан

ХИРУРГИЧЕСКОЕ ЛЕЧЕНИЕ БОЛЬНЫХ ЦЕРЕБРАЛЬНЫМ ПАРАЛИЧОМ СО СПАСТИЧНОСТЬЮ КОНЕЧНОСТЕЙ

Резюме: Реабилитация детей с ДЦП требует проведения нескольких комплексных процедур. В этом эффективно помогают комплексная медикаментозная терапия, массаж, физиотерапия, травматолого-ортопедическая коррекция, педагогическая и психологическая реабилитация, а также кинезитерапия.

Цель: Хирургический метод применяют при неэффективности всех перечисленных реабилитационных мероприятий.

Заключение: хирургическая практика признана эффективной при наличии деформации голени у больного ДЦП.

Ключевые слова: хирургическая практика, ортопедическая коррекция, реабилитационное мероприятие, педагогическая реабилитация, психологическая реабилитация.

Surgical treatment is indicated, as a rule, in the presence of severe contractures and deformities that impede the development of static and locomotor skills; deformities occur during growth as a result of increased muscle tone in certain muscle groups, an imbalance between agonist-antagonist muscles and joint contraction. In this case, the gait is disrupted, the posture changes, and the function of the limbs suffers. Surgical operations are traumatic in themselves, and in some cases, they are accompanied by complications for those operated on in the form of bronchospasm, aspiration pneumonia, urinary retention, and sensitivity disorders.

Surgical treatment methods are indicated only in cases of severe spasticity and apply only to its resistant forms, after all conservative methods have failed. Selection for surgical treatment should always be made using a multidisciplinary approach, based on a thorough clinical and neurophysiological assessment. It must be remembered that in some cases the patient can carry out his physical activity only if there is a certain level of spasticity and its cancellation can actually lead to a worsening of the condition. Therefore, at the stage of choosing treatment tactics, it is very important to highlight the so- called functional spasticity, which helps maintain a certain level of daily activity of the patient and the pathological one, which is actually disabling. It is also important to separate muscle and joint contractures. When choosing, it is necessary to very clearly define the goals for a particular patient, which must be achieved during the upcoming surgical intervention, which may include increasing the quality of life and independence, improving limb function, and reducing the severity of orthopedic disorders. Approaches to surgical treatment of spasticity in cerebral palsy can be divided into several groups depending on the level of impact, the specific task and the method of solving it:

1. Neurosurgical treatment.
2. Orthopedic surgical treatment.

By method of influence:

1.Compression-distraction techniques.
2. Bone intra-articular operations.
3.Osteoplastic surgeries.

Each of these approaches has its advantages and disadvantages, but none solves the problem of spasticity completely. A significant number of different surgical

operations indicates that at the moment there is no one that would be universal and highly effective. Indications for surgical methods depend on the prevalence spasticity, clinical stage, ability to maintain motor activity, presence of fixed contractures. Surgical treatment strategies and goals vary depending on the degree of mobility impairment. Disappointing results from brain surgery prompted attempts to treat spasticity through dissection of portions of the spinal cord. Indications for selective dorsal rhizatomy is cerebral palsy with a low level of spasticity, with minimal or no athetosis, especially of the trunk, sufficient muscle strength, the presence of a formed attitude towards rehabilitation and strong motivation, preserved intelligence.

Contraindications include weakness of the trunk and lower extremity muscles, anti-gravity muscles, hemiplegia, rigidity, dystonia, athetosis, ataxia, severe fixed contractures, fixed spinal deformities or spinal synostoses. After selective dorsal rhizotomy surgery, complications may occur in the form of hypersensitivity to light in the feet and legs, muscle spasms, flexion position and excessive pronation of the foot, weakness of the trunk and lower extremity muscles, imbalance, bowel or bladder dysfunction. Three prospective A randomized clinical trial was conducted to evaluate selective dorsal rhizotomy for the treatment of spasticity in cerebral palsy.

One of the numerous techniques developed to treat spasticity was spinal cord stimulation. It has been used not only for demyelinating diseases, but also for spinal cord injuries. It has been used not only for demyelinating diseases, but also for spinal cord injuries and cerebral palsy. The goal of selective stimulation of thick fibers was to inhibit the activity of thin nociceptive fibers and thereby reduce the nociceptive flow at the level of the spinal cord. Chronic intrathecal administration of baclofen – a method of treating spasticity, which occupies an intermediate position between surgical and conservative methods. The purpose of the operation is to deliver baclofen to the site of its direct action - to the area of the spinal cord with molecular receptors for GABA - agonists, in the superficial layer of the dorsal horns. This leads to a decrease in the hyperactivity of spinal strech reflexes at the presynaptic level. Surgical intrathecal administration of baclofen and dorsal radicular neurotomy in the area of the root entry, it is important to remember that this is a destructive and irreversible technique. Changes in muscle tone due to dorsal root neurotomy in the root entry zone is absolute and depends on the topography of the nerve.

The effectiveness of orthopedic surgical treatment increases significantly with a certain level of development of motor skills and preserved intelligence. One of the conditions for orthopedic surgical operations is also the absence of pronounced extrapyramidal disorders. Before performing an operation, it is necessary to conduct a thorough analysis of the child’s functional characteristics and capabilities, accurately determine the main cause of the pathological posture and the purpose of the

intervention, select a method of surgical intervention, having previously assessed its effectiveness, and determine the sequence of interventions.

Theoretically, by postoperative changes in tension in the intrafusal muscle fibers, the stimulus for further contraction is reduced, which in theory should lead to a decrease in spasticity. However, in practice, spasticity changeable and unpredictable. Changes in spasticity after muscle and tendon surgery may also be associated with changes in the length- tension relationship or even a decrease in pain, and in addition, a decrease in afferent sensory flow due to improved stability of the subluxating joint.

In order to eliminate flexion contracture in The knee joint uses the transfer of the tendon to the distal femur. To eliminate various contractures in the area of the hip joint, myotomy of the hip flexors, tenotomy of the adductor muscles, tenotomy of moving the internal rotators of the hip back, transfer of the internal flexors of the leg to the external condyle of the femur are performed.

To correct equinus deformity of the ankle joint, achilloplasty is performed, the heel foot is corrected with a subtalar three-joint arthrodesis.

Conclusions. One of the mechanisms for the development of equinos deformity of the feet in children with cerebral palsy is myofascial pain syndrome, the structural expression of which is the trigger zone with its own specific functional and morphological characteristics. Ultrastructural paralysis is based on vacuole -fatty degeneration of the contractile apparatus of muscle fibers. The defeat is accompanied by generalized apoptosis of muscle fibers and cells. Changes in the shape and direction of fibers, contracture damage and myocytolysis are recorded in myofibrils, which go beyond the scope of adaptive shifts. All patients with cerebral palsy have a suprasegmental level of damage on the myogram; some patients also have a segmental level of damage with reliably recorded pathology at the level of spinal cord motor neurons and pathways. Indicators of needle myography of trigger zones of the gastrocnemius muscle confirm damage to skeletal muscles in children with cerebral palsy in the form of scar degeneration. The surgical method of selective myofasciotomy of the triceps surae muscle in children with foot deformities is pathogenetically substantiated, minimally traumatic, and significantly improves treatment results. A developed algorithm for a diagnostic and treatment complex, including non-invasive diagnostic methods and a new method of surgical treatment of foot deformities in children with cerebral palsy. In children with cerebral palsy, pain plays an important role in the formation of foot deformities, the structural manifestation of which is the trigger zone. Therefore, it is necessary to conduct additional palpation examination of the lower leg muscles in order to identify them and determine their location and activity.

References

1.Усманходжаева А. А., Матмуродов Р. Ж., Эгамова М. Т. Развитие физиологические движения у детей с детским церебральным параличом //ЖУРНАЛ НЕВРОЛОГИИ И НЕЙРОХИРУРГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2020. – Т. 1. – №. 1.,,,

2. Xudoykulova, F. V., & Kalonov, S. S. (2023). Jigarning surunkali noinfektsion kasalliklarida fitoterapiyaning ahamiyati. Science and Education, 4(6), 139-150.
Egamova M. T. et al. Game Method of Rehabilitation of Children with Infantile Cerebral Paralysis //Indian Journal of Forensic Medicine & Toxicology. – 2020. – Т. 14. – №. 4. – С. 7979-7983.

3.Эгамова М. Т. РОЛЬ ФИЗИЧЕСКОЙ КУЛЬТУРЫ ДЛЯ ДЕТЕЙ С ЦЕРЕБРАЛЬНЫМ ПАРАЛИЧОМ В ДОМАШНИХ УСЛОВИЯХ //Современные вопросы психологии и образования в контексте работы с различными категориями детей и молодежи: психолого-педагогические аспекты творческой самореализации. – 2019. – С. 82-87.

4.. Xudoykulova, F. V., & Kalonov, S. S. (2023). Jigarning noalkogol yog'xastaligining dolzarb muammolari. Science and Education, 4(6), 301-315.

5.Эгамова М., Мавлянова З., Бурханова Г. Применение лечебной физкультуры при детских церебральных параличах в домашних условиях //Журнал вестник врача. – 2018. – Т. 1. – №. 2. – С. 114-117.

6.Эгамова М. Т. соавт. Игровой метод реабилитации детей с детским церебральным параличом //Индийский журнал судебной медицины и токсикологии. – 2020. – Т. 14. – №. 4. – С. 7979-7983.

Matmurodov R., Egamova M. Evaluation of clinical aspects of rehabilitation of children with cerebral palsy //Journal of the Neurological Sciences. – 2023. – Т. 455.

7..Камалова, Ё. А., & Джуманов, Ж. А. (2020). Значение лечебной гимнастики в комплексе методов физической реабилитации больных остеохондрозом поясничного отдела позвоночника. *вестник науки и образования*, (23-3 (101)), 66-70.

8.Tursunovna E. M. et al. INTEGRATED MECHANISM OF REHABILITATION OF CHILDREN WITH CHILDHOOD CEREBRAL PALSY IN CLINICAL AND POST-CLINICAL CONDITIONS //Academia Science Repository. – 2023. – Т. 4. – №. 5. – С. 331-334.

9.Матмуродов Р. Ж., Эгамова М. Т. ФИЗИЧЕСКАЯ РЕАБИЛИТАЦИЯ ДЕТЕЙ С ПОСЛЕДСТВИЯМИ ДЦП //Оздоровительная физическая культура молодежи: актуальные

проблемы и перспективы: материалы IV Междунар. науч.–практ. конф.(Минск-Ташкент, 28 мая 2020 г.)./под ред.: АС Ванда.–Минск: БГМУ, 2020.–309 с.–ISBN 978-985-21-0540-8. – С. 304.

10.Matmurodov R., Egamova M. New approaches to the early recovery of children with various forms of cerebral palsy //Journal of the Neurological Sciences. – 2019. – Т. 405. – С. 356.

11.Tursunovna E. M., Shavkatovicn R. J. PHYSICAL REHABILITATION FOR CEREBRAL PALSY //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2023. – Т. 8. – №. 3.