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Cerebral Palsy is the Effectiveness of the Use of Special Means in the Development of Children's Motor Skills

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Abstract: This article provides information on the most effective tools aimed at the development of cerebral palsy children's motor skills, and cerebral palsy is widely covered about the importance of curative physical education in increasing children's movement activity.

Keywords: neurological disorders, physical therapy, motor control, strengthen muscles, range of motion.

Introduction Cerebral palsy (CP) is a group of neurological disorders that affect movement, muscle tone, and motor skills. It is caused by abnormalities in brain development, often occurring before birth, during childbirth, or shortly after birth. Physical therapy (PT) plays a crucial role in the management and treatment of individuals with cerebral palsy, aiming to improve mobility, enhance motor control, and alleviate any associated complications.

Purpose of the study: It consists of developing a set of special exercises aimed at increasing the motor activity of children with cerebral palsy.

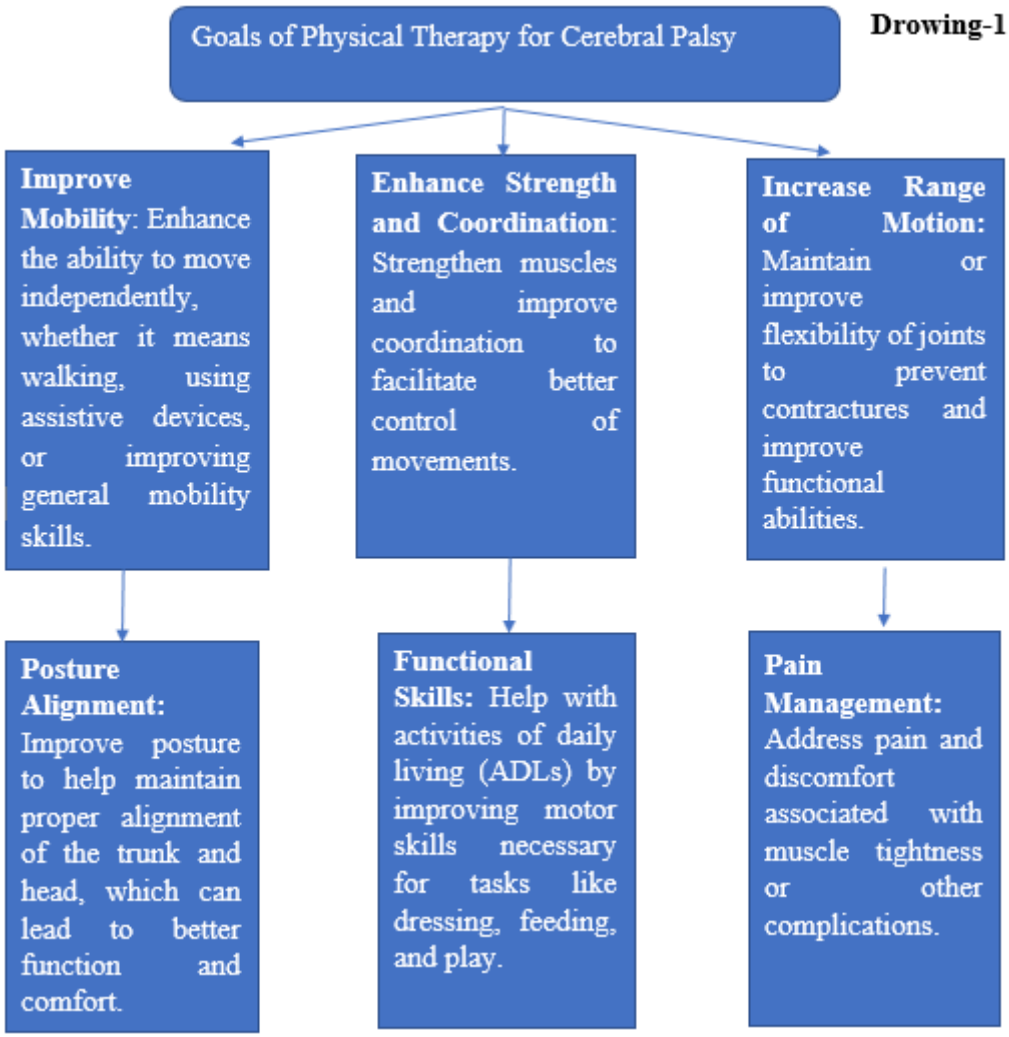
Objectives of the study:Cerebral palsy children's movement activity their age in order to determine to what extent it has developed in relation to the whole world application of the received GFM test.

Special exercises aimed at increasing the movement activity of children with cerebral palsy shape the cartateca.

Research results and discussion:Cerebral palsy (CP), various negative brain damage in the early stages of ontogenesis under the influence of factors group of non-progressive neurological syndromes resulting from a combined, severely disabled disease, children's neurological disability includes 25-30%. Currently, most researchers are in 37-70% of cases the main cause of cerebral palsy occurs during the period of intrauterine development of the fetus pathology and severe childbirth are believed to be the result of this Cause . Brain there are a number of leading causes that lead to the appearance of paralysis. The first reason is hereditary genetic factors. In the genetic apparatus of parents all existing disorders are manifested in the form of cerebral palsy in a child may be. This is the oxygen factor, the child's brain is characterized by a lack of oxygen. Both various vascular diseases and blood during pregnancy or childbirth appears as a result of departures. The third reason is that the factor is contagious, i.e. is microbial. In the first days and first weeks of a child's life or in the months of diseases such as meningitis, encephalitis, meningoencephalitis, arachnoiditis presence, high fever, severe general condition of the child, infectious disease it is represented by the identification of specific microbes. Of labor management aggressive methods hypoxic-traumatic to the brain of newborns injures. Vital that

ensures the functioning of the central nervous system neurological, which can normalize the state of organs and systems minimization of diseases is a guarantee.

Drowing-1



Drowing 1 gives information about cerebral palsy of physical exercise illuminates the positive effect on children's body as well as the important importance of children in increasing motor activity.

Key Components of Physical Therapy

Assessment and Evaluation:

- A thorough assessment by a physical therapist (PT) to understand the individual's capabilities, limitations, and specific needs.
- Evaluation of muscle tone, strength, range of motion, balance, and functional skills.

Customized Treatment Plans:

- Development of individualized treatment plans based on assessment findings.
- Setting realistic goals collaboratively with the patient and their family.

Therapeutic Exercises:

- Stretching exercises to improve flexibility and reduce spasticity.
- Strengthening exercises to enhance muscle capacity.
- Balance and coordination activities to improve overall stability.

Mobility Training:

- Teaching and training in the use of assistive devices such as walkers, crutches, or wheelchairs when necessary.
- Gait training to improve walking patterns and efficiency.

Neuromuscular Reeducation:

- Techniques aimed at retraining the brain and body to improve control of movement.
- Utilizing various tactile, proprioceptive, and vestibular inputs to enhance motor skills.

Functional Activities:

- Engaging in play and functional activities that promote motor skills and social interaction.
- Using games and fun activities to motivate and encourage participation.

Education and Support for Families:

- Educating families on exercises and activities to be done at home.
- Supporting families with resources and strategies for managing daily living challenges.

Outcomes and Expectations:Long-term Benefits: While CP is a lifelong condition, physical therapy can significantly improve functioning and quality of life. Many individuals make continual gains throughout childhood and into adulthood.Family involvement engaging family members in the therapy process can help reinforce skills learned during sessions and ensure that the home environment supports the therapy goals.Coordinated care collaboration with other professionals such as occupational therapists, speech therapists, and physicians enables comprehensive care that addresses all aspects of an individual's health and well-being.

The Gross Motor Function Classification System (GMFCS) is a standardized tool used to categorize the gross motor function of individuals with cerebral palsy (CP). It helps clinicians, caregivers, and researchers understand the severity of motor impairment and plan appropriate interventions and supports.

The GMFCS is divided into five levels, ranging from Level I to Level V:

Level I: Children can walk without limitations. They may have difficulties with more advanced gross motor skills, such as running and jumping.

Level II: Children can walk but may have limitations in outdoor activities and long distances. They might need assistance in certain situations and may use assistive devices in some cases.

Level III: Children can walk using a hand-held mobility device in most indoor settings but may have limitations outdoors and in community settings. They typically require assistance for walking longer distances.

Level IV: Children are not able to walk independently and may require a wheelchair for mobility. They can perform some movements but have significant limitations in their ability to move freely.

Level V: Children have the most severe limitations in mobility. They are unable to maintain head and neck control independently and are dependent on others for mobility and care.

Table-1. Result of th

F.N: Abdullayev.K year of brith:07.05.2021 Diagnosis: CP dyskinetic		
Test items	**Test results**	
	Percentage	**Target area**
A- rolling and crawling	**34/67%**	+
B- sitting position	**22/33%**	+
C-kneeling, standing position	**4/10%**	
D- standing position	**8/21%**	
E-walking, running, jumping position	**0/0%**	
Total score:	**67+33+10+21+0=131/5=26%**	
Target area	**67+33=100/2=50%**	
Assessment results: The assessment results show that the level of development of the general motor function of the examined patient was determined to be 26% higher than the result of 100% for his age. Also, areas A and B were selected as target areas. The goal is to develop a special exercise program aimed at developing the child's rolling, crawling and sitting function.		
Recommendations for home practice: Use special exercises aimed at developing the child's rolling, crawling, and sitting functions.		

Table 2. Special exercises for the development of motor skills in children with cerebral palsy.

№		Definition of exercises		
1	Stretching Exercises	**Neck Stretches**: Gently tilt the head side to side and forward/backward to improve neck flexibility.	**Arm and Shoulder Stretches**: Reach arms overhead and across the body to stretch shoulder muscles.	**Leg Stretches**: Sit with legs extended and reach toward toes to stretch hamstrings; hold each stretch for 10-15 seconds.
2	Strengthening Exercises	**Wall Push-Ups: Stand** a few feet away from a wall, place hands on the wall and do push-ups against it to strengthen upper body.	**Seated Leg Lifts:** While sitting, lift one leg at a time to strengthen hip flexors and quadriceps.	**Resistance Band Exercises**: Use resistance bands for arm and leg exercises to develop strength; e.g., seated rows or leg extensions.
3	Balance and Coordination Activities	**Balance Beam Walking:** Use a low balance beam or a line on the floor to practice walking in a straight line.	**Single-leg Stands:** Stand on one leg for a few seconds to improve balance; hold onto a stable surface if needed.	**Ball Tossing:** Toss a lightweight ball back and forth to improve hand-eye coordination; start with larger balls for easier catching.
4	Gross Motor Activities	**Crawling and Rolling**: Encourage crawling on hands and knees or rolling from side to side for core strength and mobility.	**Obstacle Course**: Set up an obstacle course with pillows, cones, or soft toys for children to navigate over, under, and around.	**Jumping**: Use a trampoline or mini-trampoline to practice jumping; it can help develop leg strength and coordination.
5	Fine Motor Activities	**Play Dough or Clay**: Manipulating play dough or clay can improve hand strength and dexterity; rolling, squishing, and pinching can help.	**Cutting and Pasting**: Using safety scissors to cut paper and gluing pieces together promotes hand-eye coordination.	**Board Games or Puzzles**: Games that require moving pieces or completing puzzles can enhance fine motor skills.
6	Chairs and Tables Exercises	**Sitting Balance**: Practice sitting up straight while reaching for toys or objects placed at varying distances.	**Standing Up**: Encourage the child to stand up from a seated position on a sturdy chair, using armrests if needed.	

The second drawing above shows special exercises aimed at increasing the movement activity of children with cerebral palsy. Improving motor function in children with cerebral palsy (CP) through exercise is important for enhancing their overall mobility, strength, and coordination. However, it's crucial to tailor exercises to the child's specific abilities, needs, and limitations. Always consult with a healthcare professional, physical therapist, or occupational therapist before starting any exercise program. Here are some exercise examples that can help improve motor function in children with CP.

Conclusion

Physical therapy is a fundamental aspect of the management of cerebral palsy, providing targeted interventions that help individuals maximize their potential and improve their quality of life. Early intervention, a proactive approach to therapy, and continuous support from qualified professionals can lead to significant benefits for individuals with CP and their families. Regular assessment, adjustment of treatment plans, and a focus on functional goals are essential components of successful physical therapy for cerebral palsy**.**

Used literature

1. Graham HK, Rosenbaum P, Paneth N, Dan B, Lin JP, Damiano DL, Becher JG, Gaebler-Spira D, Colver A, Reddihough DS, Crompton KE, Lieber RL. Cerebral palsy. Nat Rev Dis Primers. 2016 Jan 07;2:15082. [PMC free article] [PubMed]
2. Park TS, Dobbs MB, Cho J. Evidence Supporting Selective Dorsal Rhizotomy for Treatment of Spastic Cerebral Palsy. Cureus. 2018 Oct 19;10(10):e3466. [PMC free article] [PubMed
3. Tkachenko Ye.S., Goleva O.P., Sherbakov D.V., Xaliqova A.R.: Detskiy serebralniy paralich/ Statiya postupila v redaktsiyu 8.04.2019 y
4. Martin Gough and Adam Shortland: The musculoskeletal system in children with cerebral palsy / **Publication date:** 09/02/2022 **ISBN:** 9781911612537 **Pages:** 192
5. Verschuren O, Peterson MD, Balemans AC, Hurvitz EA. Exercise and physical activity recommendations for people with cerebral palsy. Dev Med Child Neurol. 2016 Aug;58(8):798-808. [PMC free article] [PubMed]
6. Р.С.Саламов, М.Х.Миржамолов. Jismoniy imkoniyati cheklangan o‘quvchilarning sport mashg‘ulotlariga moslashishi. (o‘quv qo‘llanma)Toshkent – 2013
7. Ташев М.R: Методика обучения адаптивным спортивным играм (бочча) Учебное пособие/285 b
8. Светличная Н.К. Основы адаптивного физического воспитания детей Методическое пособие Ташкент 2014