

# Physical Therapy for Cerebral Paralysis in Children

Teresa Sanz Krithi\*

Department of Encephalopathy, Cincinnati Children's Hospital Medical Center, Cincinnati, USA

## DESCRIPTION

Cerebral paralysis is an illness that disturbs movement and muscle tone or posture. It's initiated by damage that happens to the developing brain, most frequently before birth. Cerebral palsy is common among boys than girls. Most kids with cerebral paralysis have spastic cerebral paralysis. This means that their muscles are stiff, so their movements can be difficult.

Most cerebral paralysis is associated to brain damage that occurred before or during birth and it is called congenital cerebral paralysis.

The following factors can increase the risk for congenital cerebral paralysis.

- Children who are born too small
- Children who are born too early
- Child who is a twin or other multiple birth
- Mother who has infection during pregnancy
- Having kernicterus (a brain damage that can occur when severe newborn jaundice goes untreated).

## Symptoms and Signs

Symptoms and signs appear during early stages or preschool years. In general, cerebral paralysis causes impaired movements which are associated with exaggerated reflexes, floppiness or spasticity (abnormal muscle tightness due to prolonged muscle contraction) of the limbs and trunk, abnormal posture, instinctive movements, unsteady walking [1].

Cerebral palsy people can have problems swallowing and also have eye muscle imbalance, in which eyes can't focus on same object. The cause of cerebral paralysis and its effect on individual is different. Some children with cerebral paralysis can walk freely; while others need support. Some children have intellectual incapacities, but others do not. Epilepsy, deafness or blindness also might be present. Cerebral palsy is a lifetime disorder. There is no cure, but treatments can help to fight with disabilities.

Symptoms of cerebral paralysis can vary from one to other. Cerebral palsy effects causes to whole body, or it might be

limited to one or two limbs, or one part of the body. Generally, symptoms may also include problems with coordination and movement, eating and speech, development also.

Other problems may also include:

- Stiff muscles and exaggerated reflexes (spasticity), the most common disorder
- Differences in muscle tone, like being too stiff or too soft
- Stiff muscles with regular reflexes (rigidity)
- Lack of stability and muscle organization (ataxia)
- Tremors or jerky involuntary movements
- Difficulty in speaking
- Difficulty with chewing or eating
- Excessive drooling or problems with swallowing
- Trouble in sitting up or crawling
- Learning problems
- Intellectual disabilities
- Hindered growth, resulting in lesser size than would be expected

Damage to the brain can contribute to other nervous problems, such as:

- Seizures (epilepsy)
- Difficulty in hearing
- Difficulties with vision and unusual eye movements
- Abnormal touch or pain sensations
- Bladder and bowel difficulties, including constipation and urinary problem
- Mental health conditions, like emotional disorders and behavioral problems.

## Treatment

Cerebral palsy caused by brain disorder doesn't change with time, so the symptoms commonly don't worsen initially. However, as the child gets older, few symptoms might become sever or lesser apparent. If cerebral paralysis is not treated then muscle shortening and muscle inflexibility can worsen. A child who has cerebral paralysis may need one or several types of treatment dependent on how severe the symptoms are and what parts of the body is affected. The treatment differs from child to

**Correspondence to:** Krithi Teresa Sanz, Department of pediatrics and Encephalopathy , Cincinnati Children's Hospital Medical Center, Cincinnati, USA, E-mail: ktsa123sanz@gmail.com

**Received:** 03-Jan-2022, Manuscript No. LDAPR-22-15816; **Editor assigned:** 05-Jan-2022, PreQC No. LDAPR-22-15816 (PQ); **Reviewed:** 19-Jan-2022, QC No. LDAPR-22-15816; **Revised:** 24-Jan-2022, Manuscript No. LDAPR-22-15816 (R); **Published:** 07- Feb-2022, DOI:10.35248/2385-4529.22.09.021.

**Citation:** Krithit TS (2022) Physical Therapy for Cerebral Paralysis in Children. Adv Pediatr Res. 9: 021.

**Copyright:** © 2022 Krithi TS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

adult, depending on each one's exact needs. Although the early damage of cerebral paralysis in the brain cannot be reversed, former and aggressive treatments will help to expand function and alterations for the child's nervous system and musculoskeletal system [2].

**Physical therapy and rehabilitation:** A child with cerebral paralysis frequently starts with these therapies at first few years of being diagnosed. Physical therapy is one of the most significant parts of treatment. It includes exercises and activities that can uphold or increase muscle strength, balance, and movement. A physical therapist supports the child to learn skills such as sitting, walking, or using a wheelchair [3].

**Orthotic devices:** Splints, braces, and casts can be positioned on the affected limbs and can improve movement and balance. Wheelchairs, powered scooters and rolling walkers are the other devices that can help with posture.

**Assistive devices and technologies:** These contain different computer-based communication technologies, Velcro-fastened shoes, or sticks, which can help make daily life easier.

**Surgery:** A child may essential to surgery if symptoms are severe. For example, surgery can lengthen rigid, firmly contracted muscles. A surgeon can also place arms or legs in better positions or correct or improve an abnormally curved position.

## CONCLUSION

It's mainly important to get a prompt analysis for the disorder. Concern doctor about of loss of awareness of surroundings or of

unusual body posture or muscle tone, impaired coordination, swallowing difficulties, eye muscle inequality, or other developing issues [4].

The main treatment selections for cerebral paralysis are medication, therapy, and surgery. The aim of cerebral paralysis treatment in children is to relieve pain, and maximize independence to reach a long, strong life.

Cerebral palsy treatment for a child is not only focusing on correcting their physical incapacities. There are also common and emotional phases of living a more fulfilling life that should be measured when selecting cerebral paralysis treatment.

## REFERENCE

1. Tronnes H, Wilcox A J, Lie R T. Risk of cerebral paralysis in relation to pregnancy disorders and preterm birth: a national cohort study. *Dev Med Child Neurol.* 2014;56: 779-785.
2. McIntyre S, Morgan C, Walker K. Cerebral palsy--don't delay. *Dev Disabil Res Rev.* 2011;17: 114-129.
3. Zhao M, Dai H, Deng Y. SGA as a risk factor for cerebral paralysis in moderate to late preterm infants: a system review and meta-analysis. *Sci Rep.* 2016;6: 38853.
4. Christiaanse ME, Mabe B, Russell G, Simeone TL, Fortunato J, Rubin B . Neuromuscular electrical stimulation is no more effective than usual care for the treatment of primary dysphagia in children. *Pediatr Pulmonol.* 2011; 46: 559-565.