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In This Article, The Opinions of Our Country's and Foreign Scientists Are Mentioned About the Causes of Cerebral Palsy in Children and its Harmfulness to Life

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Abstract:

In this article, the opinions of our and foreign scientists about cerebral palsy in children are mentioned.

Keywords: cerebral palsy, hypertension, spasticity, cp, scoliosis, dislocation, spastic diplegia, spastic quadriplegia, spastic hemiplegia.

Cerebral palsy overview

Cerebral palsy, the most common physical disability in children, is caused by brain damage before birth or during infancy. People with cerebral palsy may have neurological and musculoskeletal problems that affect posture, sensory perception, communication, movement, and other functions.

Cerebral palsy: what you need to know

Brain damage before, during, or after birth can cause cerebral palsy.

Symptoms of cerebral palsy are usually first noticed in infants and young children.

Almost half of children with cerebral palsy develop hypertonia (excessive muscle tension) or spasticity (excessive muscle tension with increased tendon reflexes).

There is currently no cure for cerebral palsy, but treatment can manage neurological, orthopedic, and related medical conditions.

What is cerebral palsy?

Cerebral palsy (CP) is a condition that affects movement and muscle tone. In most cases, the exact cause is unknown, but the disorder occurs when there is abnormal development or damage to areas in the brain that control motor function. CP develops in three out of every 1,000 live births.

What causes cerebral palsy?

Different types of injuries can damage the parts of the brain that control motor skills, including:

Preterm birth: leading cause in the United States

Head injuries, including shaken baby syndrome

Brain or spinal cord infections

Blockage of oxygen flow to the brain, e.g. B. in sinking experiments

Events that block blood flow to the brain, such as: B. Stroke

Improper nutrition

Absorption of heavy metals

What are the symptoms of cerebral palsy?

Children with CP usually show signs of motor delay before the age of two. Often, CP is not officially diagnosed until age 2 or 3. Babies with cerebral palsy are often slow to achieve developmental milestones, such as: B. learning to roll over, sit up, crawl, or walk. They may also exhibit certain reflexes that usually go away in early childhood.

Symptoms of CP can be similar to other conditions. Although each child has a unique form of the defect, there are some common signs.

You may notice that your child shows excessive reflexes or sluggishness in the body or limbs. Another symptom is spasticity, which may manifest as tremors or stiffness in the trunk, arms, or legs, or clenched fists. Uncontrollable movements and abnormal gait may also be part of the picture.

Children with CP may have additional problems, including:

seizures

Vision, hearing and/or speech problems

Learning disabilities and behavioral problems

Intellectual or developmental disabilities

Breathing problems

Problems with the gastrointestinal tract and nutrition

Bowel and bladder problems

Bone abnormalities, including scoliosis (lateral curvature and rotation of the bones in the back) and hip dysplasia (dislocation)

What are the different types of cerebral palsy?

Cerebral palsy is classified according to which part of the body is affected. Spasticity of CP can be manifested in three ways:

Spastic diplegia affects the legs more than the arms. This type is more likely to affect premature babies born before 32 weeks.

Spastic quadriplegia affects more or less all four limbs. Full-term or premature babies with CP may have this type.

Spastic hemiplegia affects one side of the body and can occur in children with one or more hemorrhages in the ventricles of the brain.

Treatment of cerebral palsy

There is no cure for CP, but there are many treatments that can help manage the problems associated with the condition.

Baclofen- Baclofen is a muscle relaxant that can be given directly into the cerebrospinal fluid in the spine through a baclofen pump surgically placed in the abdomen.

Therapeutic Electrical Stimulation (TES) - TES is a type of electrical stimulation that increases blood flow to weakened muscles.

Selective Dorsal Rhizotomy (SDR) - Selective dorsal rhizotomy is a surgical procedure that involves cutting a portion of the lumbar and sacral sensory nerve fibers that originate from the muscles and enter the spinal cord. Surgery can reduce spasticity when combined with intensive postoperative physical therapy.

Orthopedic problems associated with cerebral palsy

Hip dysplasia

Hip dysplasia is a hip deformity that occurs in one or both hips in children with underlying neuromuscular disorders such as CP. Increased or decreased muscle tone may cause the femoral head to protrude from the acetabulum and require additional treatment, such as: B. proximal femoral osteotomy or acetabular osteotomy.

Neuromuscular scoliosis

Neuromuscular scoliosis is a condition of the spine associated with an underlying neuromuscular condition, such as: B. cerebral palsy, muscular dystrophy, or spinal cord injury. The underlying disease usually causes changes in the muscles, so they cannot support the spine adequately. This leads to curvature of the spine. The usual appearance is an abnormal S- or C-shaped curvature. The spine can also be rotated, creating a multidimensional curve. Curvature can be progressive, especially with growth spurts. Treatment may include braces or spinal fusion surgery.

Talipes Equinovarus foot (club foot)

Club feet are common in children with CP. Due to the imbalance in the muscles, the deformity can make it difficult to lift weights. Surgical procedures that your doctor may recommend include splitting the anterior tibial tendon or osteotomy of the talus.

Neuromuscular flat foot

This is a foot deformity due to the underlying neuromuscular disorder. Abnormalities of the muscles in the feet result in flat feet with little or no arch. This condition often occurs in children with hypotension or low muscle tone. Braces or orthotics can support the arch and relieve pain, or surgery may be recommended to correct the problem.

Walking on toes

Toe walking is a condition in children with underlying neuromuscular disorders that causes high tone or tension in the child's ankles and can cause them to walk on their toes or feet. Physiotherapy can be helpful, as can a series of plaster casts that gradually reposition the foot and ankle, and if these approaches fail, your doctor may recommend surgical lengthening of the Achilles tendon or gastrocnemius.

Leg length inequality

Leg length inequality is a difference in the length of the child's lower extremities (legs). A difference in height can be seen in children with hemiplegic CP. If the length of the leg deviates slightly, it can be useful to raise the shoe. If the differences are more pronounced, surgical treatment may be recommended to shorten the longer leg and make the leg more balanced as your child grows.

Torsional distortions

Some children with CP develop internal or external sprains in the bones of the lower extremities, including internal tibial sprains. In excess, it can affect the gait pattern. A surgical procedure called a rotational osteotomy can correct the deformity.

Muscle contracture

In children with neuromuscular diseases, it can increase muscle tone, which causes muscle contraction and prevents it from stretching properly. The hamstrings, adductors, hip flexors, and

gastrocnemius can all be affected by contractures. Physical therapy, bracing, botulinum injections, or tendon lengthening surgery may be needed to provide relief.

Procedures, Tests and Treatments

Selective dorsal rhizotomy for cerebral palsy: what you need to know

Intrathecal Baclofen Pump for Cerebral Palsy: Expert Answers to Parents' Most Frequently Asked Questions

Cerebral palsy: 4 procedures before surgery

List of used literatures:

1. "what is cerebral palsy" (May 2, 2022). Archived from the original on May 2, 2022.
2. "cerebral palsy" (September 01, 2021). Archived from the original on 3 August 2022.
3. Analiticheskiy obzor sostoyaniya i sovershenstvovaniya reabilitatsii detey s psixonevrologicheskoy patologiyey / T. T. Batыsheva [i dr.] // Detskaya i podrostkovaya reabilitatsiya .-2012.-N2.-C.4-15 .
4. Atlas detskoy invalidnosti v Rossii (Elektronnaya versiya)/A.A.Baranov, V.Yu. Alьbitskiy, D.M. Zelinskaya i dr. -2007.
5. Baranov, A.A. Invalidnostь detskogo naseleniya Rossii: Sentr razvitiya mejsektoralьnыx programm / A.A. Baranov, V.Yu. Alьbitskiy, D.I. Zelinskaya, R.N. Terletskaya. - 2008. - 207 s.
6. Baranov, A.A. Sokraщeniye predotvratimыx poterь zdorovьya detskogo naseleniya - strategiya sotsialьnoy pediatrii / A.A.Baranov, T.V.Yakovleva, V.Yu. Alьbitskiy [i dr.] // Voprosы sovremennoy pediatrii. - 2008. - T.7, №4. - S. 6-8.
7. Baranov, V.A. Fizicheskaya kulьtura: sennostno- gumanisticheskaya osnova kachestva jizni sovremennogo obщestva: avtoref. dis. ... dokt. fil. nauk / V.A. Baranov. M., 2010 - 43s.
8. Barbayeva S.N. Neyroadaptivnaya elektrostimulyatsiya v kompleksnoy reabilitatsii bolьnыx DTSP so spasticheskoy diplegiyey: avtoref.kan. med. nauk/ S.N. Barbayeva .- M., 2006. - 26 s.
9. Buklekbayeva, Sh.A. Razrabotka i otsenka effektivnosti reabilitatsionnыx meropriyatiy pri razlichnыx formax detskogo serebralьnogo paralicha.:avtoref. dis....dokt. med. nauk / Sh.A.Buklekbayeva. - Respublika Kazaxstan, Almatы 2010 - 39s
10. Bruykov A.A. Vliyaniye fiksatsionnogo massaja s ontogeneticheskoy gimnastikoy na funktsionalьnыye rezervы organizma detey s detskim serebralьnым paralichom: avtoref. dis. ... kand. med. nauk /A.A. Bruykov - M, 2012-24 s.