

Cerebral Palsy

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Cerebral palsy (CP) is a term used to describe a group of chronic conditions affecting body movement and muscle coordination. It is caused by damage to one or more specific areas of the brain, usually occurring during fetal development; before, during, or shortly after birth; or during infancy. Thus, these disorders are not caused by problems in the muscles or nerves. Instead, they are **caused by abnormalities in parts of the brain that control muscle movements**.



"Cerebral" refers to the brain and "palsy" to muscle weakness/poor control. CP itself is **not progressive or degenerative** however, secondary conditions, such as muscle spasticity, can develop which may get better over time, get worse, or remain the same. People may have CP as the result of **brain damage** in the first few months or years of life, **brain infections**, or **head injury** from a motor vehicle accident, a **fall**, or **child abuse**. People may have cognitive disabilities, but more often they do not.

The **majority of children with cerebral palsy are born with it**, although it may not be detected until months or years later. Common early signs of CP are a lack of muscle coordination when performing voluntary movements (ataxia); **stiff or tight muscles and exaggerated reflexes (spasticity)**; **walking with one foot or leg dragging**; **walking on the toes, a crouched gait, or a "scissored" gait**; and **muscle tone that is either too stiff or too floppy**.

Treatment for CP may include physical and occupational therapy, speech therapy, drugs to control seizures, relax muscle spasms, and alleviate pain; surgery to correct anatomical abnormalities or release tight muscles; braces and other orthotic devices; wheelchairs and rolling walkers; and communication aids such as computers with attached voice synthesizers.

Different types of cerebral palsy

Spastic cerebral palsy. In this form of cerebral palsy, which affects 70 to 80 percent of patients, the muscles are stiffly and permanently contracted. Doctors will often describe which type of spastic cerebral palsy a patient has based on which limbs are affected, i.e spastic diplegia (both legs) or left hemi-paresis (the left side of the body).

Athetoid, or dyskinetic cerebral palsy. This form of cerebral palsy is characterized by uncontrolled, slow, writhing movements. These abnormal movements usually affect the hands, feet, arms, or legs and, in some cases, the muscles of the face and tongue, causing grimacing or drooling, or have difficulty with speech. The movements often increase during periods of emotional stress and disappear during sleep. Athetoid cerebral palsy affects about 10 to 20 percent of patients.

Ataxic cerebral palsy. This rare form affects the sense of balance and depth perception. Affected persons often have poor coordination; walk unsteadily with a wide-based gait, placing their feet unusually far apart; and experience difficulty when attempting quick or precise movements, such as writing or buttoning a shirt. The ataxic form affects an estimated 5 to 10 percent of cerebral palsy patients.

Expert in Cerebral Palsy? DSES is always looking for volunteers to help teach or give presentations!!

Resources and Additional Information

National Institute of Neurological Disorders and Stroke; www.ninds.nih.gov

United Cerebral Palsy; www.ucp.org

Kids Health; www.kidshealth.org