

## **Cerebral Palsy**

Cerebral palsy is a group of disorders that affect movement and muscle tone or posture. It's caused by damage that occurs to the immature brain as it develops, most often before birth.

Signs and symptoms appear during infancy or preschool years. In general, cerebral palsy causes impaired movement associated with abnormal reflexes, floppiness or rigidity of the limbs and trunk, abnormal posture, involuntary movements, unsteady walking, or some combination of these.

People with cerebral palsy can have problems swallowing and commonly have eye muscle imbalance, in which the eyes don't focus on the same object. They also might have reduced range of motion at various joints of their bodies due to muscle stiffness.

Cerebral palsy's effect on function varies greatly. Some affected people can walk; others need assistance. Some people show normal or near-normal intellect, but others have intellectual disabilities. Epilepsy, blindness or deafness also might be present.

### **Teaching Strategies:**

- Encourage independence.
- Remove obstacles so that the student can move freely from lesson to lesson.
- Encourage support for the student from classmates.
- Consider physical access issues such as ramps, toilets, lifts and classroom layout.
- Incorporate advice from the occupational therapist in the student's programme.
- Use computers and audio-visual aids in the student's learning and teaching programme.
- Specialised equipment may also be necessary such as adapted keyboards, page turners, word boards or special desks.
- If writing is difficult consider using a tape recorder.
- Encourage communication to prevent isolation.
- Teach social skills if necessary.
- Allow students extra time to complete tasks.

- If teaching Physical Education, note that slower-paced activities are better than those requiring a fast response. Students will do better catching a bounced ball than a thrown one; kicking a stationary ball than a moving one.

#### **Cause:**

- Gene mutations that lead to abnormal development
- Maternal infections that affect the developing fetus
- Fetal stroke, a disruption of blood supply to the developing brain
- Bleeding into the brain in the womb or as a newborn
- Infant infections that cause inflammation in or around the brain
- Traumatic head injury to an infant from a motor vehicle accident or fall
- Lack of oxygen to the brain related to difficult labor or delivery, although birth-related asphyxia is much less commonly a cause than historically thought

#### **Symptoms:**

- Variations in muscle tone, such as being either too stiff or too floppy
- Stiff muscles and exaggerated reflexes (spasticity)
- Stiff muscles with normal reflexes (rigidity)
- Lack of balance and muscle coordination (ataxia)
- Tremors or involuntary movements
- Slow, writhing movements
- Delays in reaching motor skills milestones, such as pushing up on arms, sitting up or crawling
- Favoring one side of the body, such as reaching with one hand or dragging a leg while crawling
- Difficulty walking, such as walking on toes, a crouched gait, a scissors-like gait with knees crossing, a wide gait or an asymmetrical gait
- Excessive drooling or problems with swallowing
- Difficulty with sucking or eating
- Delays in speech development or difficulty speaking

- Learning difficulties
- Difficulty with fine motor skills, such as buttoning clothes or picking up utensils
- Seizures