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Cerebral Palsy (CP) refers to a group of conditions that affects a person's ability to move, keep balance and posture. It is the most common movement disability in childhood. Cerebral means having to do with the brain, and palsy means weakness.



Questions

for Dr Thapelo Motshudi

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1 What causes it?

CP is caused by damage to the developing brain, which then affects a person's ability to control his or her muscles. There are many different things that can cause the damage and, in some instances, the exact cause cannot be determined. The brain damage can happen before birth, during birth, within a month after birth or during the first years of a child's life. CP related to brain damage before or during birth is called congenital CP. Congenital CP is the most prevalent, accounting for 85%-90% of cases. A small percentage of cases are caused by brain damage that occurs more than 28 days after birth, this is called acquired CP.

Some causes are:

- Poor brain development in the womb
- Infections or other medical conditions in the mother during pregnancy
- Disruption of blood flow to the child's brain
- Genetic conditions
- Toxins or drugs during pregnancy
- Damage to the head during delivery
- Complications related to premature delivery.

2 What are the different types?

One or more of the following movement disorders can occur, depending on which areas of the brain are affected:

- Stiff muscles (spasticity)
- Uncontrollable movements (dyskinesia)
- Poor balance and coordination (ataxia).

There are four main types of CP:

Spastic CP – this is the most common type. These children have increased muscle tone, which means their muscles are stiff and as a result their movements can be awkward

Dyskinetic CP – these children have problems controlling the movement of their hands, arms, feet and legs, making it difficult to sit and walk

Ataxic CP – patients with ataxic CP have problems with balance and coordination

Mixed CP – patients who have symptoms of more than one type of CP.

3 What are the symptoms?

The symptoms of CP vary from person to person. A person with severe CP might need to use special equipment to be able to walk, or might not be able to walk at all and need lifelong care. Some of the signs and symptoms include:

- Delays in movements and motor skills, such as holding head up, rolling over, sitting, crawling and walking
- Body parts that are too stiff or floppy
- Favouring one side of the body
- Inability to stand, even with support.

4 How is it diagnosed?

Diagnosis should be made as early as possible so that treatment can be initiated without delay. Developmental monitoring or surveillance means tracking a child's growth and development over time. If any concerns about the child's development are raised during monitoring, then a developmental screening test should be given as soon as possible. Once CP is suspected the pregnancy and delivery history is obtained, relevant blood tests are performed, and a brain scan is conducted.

5 What are the complications?

Muscle weakness, muscle spasticity and coordination problems can contribute to a number of complications either during childhood or in adulthood, including:

- Contractures – these are caused by muscle tissue shortening due to severe muscle tightening. Contractures can stop bone growth, cause bones to bend and can result in joint deformities, dislocation or partial dislocation
- Malnutrition – swallowing or feeding problems can make it difficult for someone who has CP, particularly an infant, to get enough nutrition
- Mental health conditions – people with cerebral palsy might have mental health conditions, such as depression
- Osteoarthritis.

6 How is it managed?

There is no cure for cerebral palsy, but it does not get worse with time. CP is managed by a multidisciplinary team, including paediatricians, neurologists, physiotherapists, occupational therapists, orthopaedic surgeons and mental health professionals. Medication is given to manage several symptoms and conditions associated with CP, including pain, reflux, infections, and constipation. In some instances, surgical procedures may improve mobility or manage pain.

If you suspect that your child has CP contact your local health professional, who will perform the initial evaluation and then refer the child appropriately. There are several local support groups available once the diagnosis has been made.