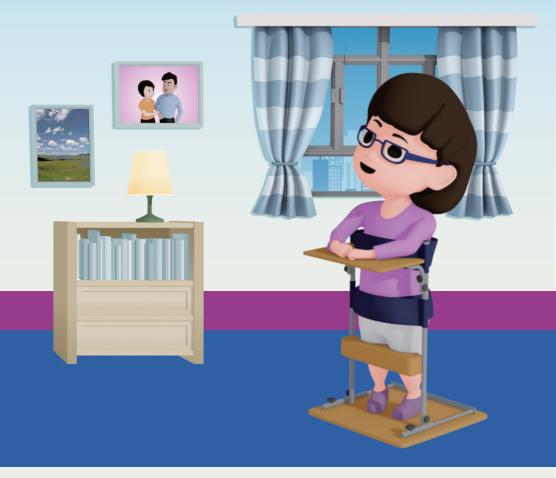
### Developmental Disorders in Children

## **Cerebral Palsy (CP)**

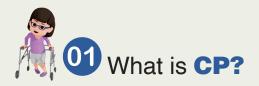


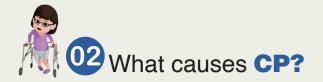


**Child Assessment Service** 

Department of Health

The Government of the Hong Kong Special Adminstrative Region www.dhcas.gov.hk







Cerebral Palsy is a broad term that describes a group of disorders of development that primarily affect movement and posture. It causes limitation of activity, and may be accompanied by disturbances of vision, hearing, sensation, cognition, communication and behavior, or symptoms such as tremor and seizure.

Cerebral Palsy is caused by injury to the immature brain of a child before, during or after birth as the child grows up.

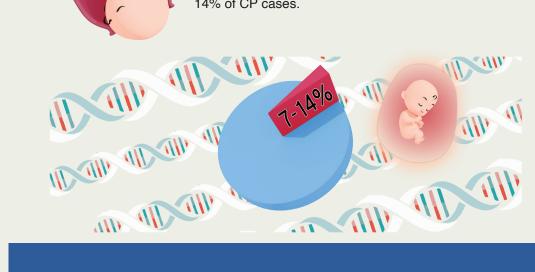
During antenatal period, maternal use of alcohol or illicit drugs, intra-uterine infection, maternal high blood pressure or placental complications could cause cerebral palsy.

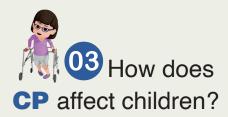




Prematurity, congenital malformation of the brain, hypoxic injury to the brain due to prolonged or complicated labour, bacterial or viral infections after birth can also cause cerebral palsy.

Genetic factors are estimated to be involved in 7 to 14% of CP cases.





Motor deficits of children with CP often includes delayed motor milestones, persistent primitive reflexes, abnormal muscle tone, for example, muscle tone being too high or too low, and abnormal walking pattern, or early hand dominance.



The mainstay of treatment is to treat or reduce the increased muscle tone and associated complications, and to promote function.

Physiotherapy such as stretching can help to reduce spasticity and prevent contracture of the ankles.

Physiotherapist will make use of different equipment to prevent contractures, enhance muscle flexibility and range of motion. They will choose suitable mobility aids to improve mobility of the child.



Necessary equipment and communication aids should be provided at home and in school to facilitate daily communication and learning. Appropriate care should be given to these children, and education for the children and their caretakers on the management of CP is crucial.

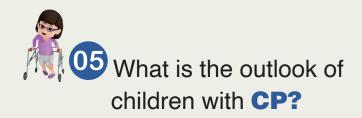






Different children require different treatment, such as medication and surgery.

Medication mainly aims to reduce spasticity and involuntary movements. Orthopaedic surgery can be useful for correcting fixed deformities of joints. In addition, Selective Dorsal Rhizotomy can reduce muscle spasticity by cutting certain nerve rootlets in the spinal cord.



If children are unable to sit by age 2, unable to walk by age 7, they will have a poorer chance of gaining independent walking ability later on in life.

On the other hand, if they have good head control by 9 months old, sit independently at age 2, or crawl at age 2½, the chance for independent walking later will be higher.

Children with cerebral palsy may have the following complications when they grow up, including musculoskeletal deformities and chronic pain, overuse syndromes of tendons, arthritis and degenerative changes (commonly over the hip, knee, ankle, lumbar and cervical spine).





Active participation in therapy by the children and their families can prevent these complications. With appropriate treatment and support, people with CP are able to communicate effectively with others, benefit from education, participate in community and have appropriate employment.



#### **Initial Check-up**

Maternal and Child Health Centres / Paediatricians / General Practitioners



#### **Further Assessment**

Child Assessment Service



Specialist Clinics in Hospitals



#### **Training and Treatment**

## Professional Services

- Physiotherapy
- Occupational Therapy
- Speech Therapy

#### **Preschool Training Services**

- Early Education and Training Centre
- On-site Preschool
  Rehabilitation Service
- Integrated Programme in KG-cum-CCC
- Special Child Care Centre

## Services for School-aged Children

- Learning Support and Accommodation
- Special Schools



# Education Bureau: Integrated Education and Special Education Information Online https://sense.edb.gov.hk/en/index.html

Hong Kong Education City: Inclusion Pavilion www.hkedcity.net/sen

Canchild - Cerebral Palsy www.canchild.ca/en/diagnoses/cerebral-palsy

Surveillance of Cerebral Palsy in Europe https://eu-rd-platform.jrc.ec.europa.eu/scpe\_en

**United Cerebral Palsy Association** www.ucp.org





