



the spastic centre

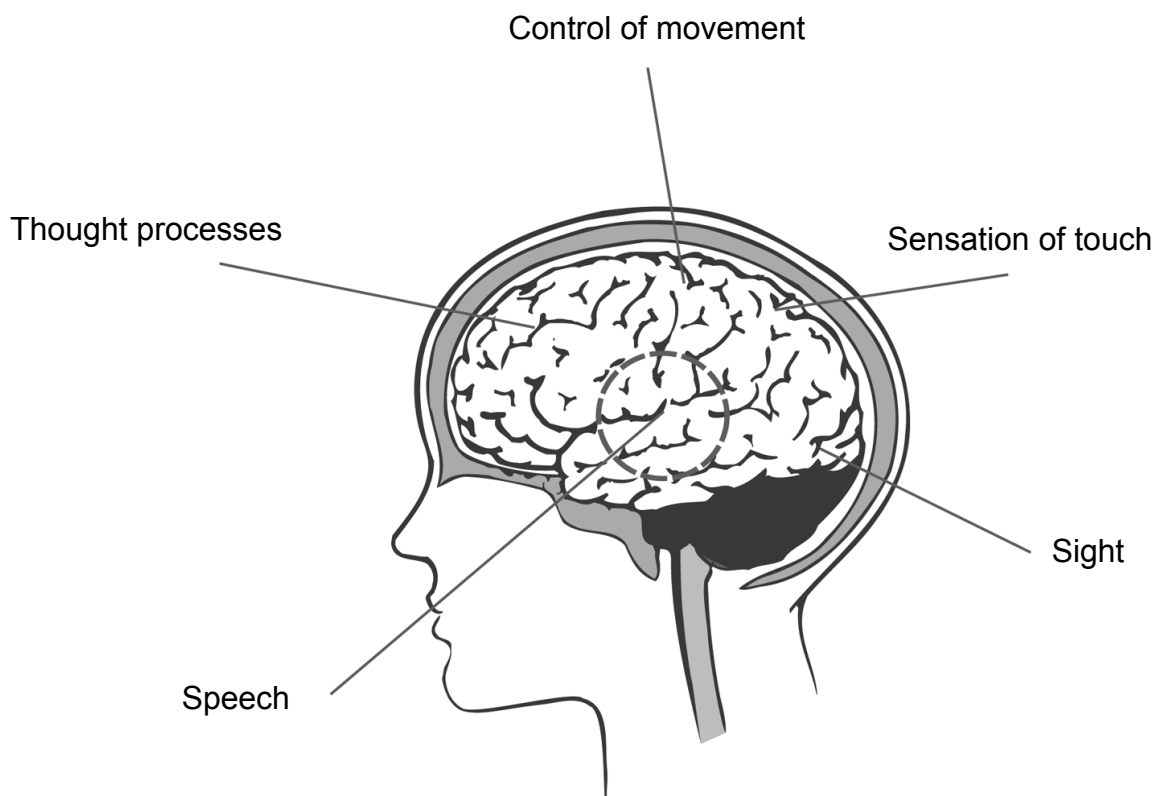
What is Cerebral Palsy?

Cerebral palsy is a disorder of movement control, which results from damage to part of the brain. The term cerebral palsy is used when the problem has occurred to the developing brain, usually before birth. It occurs most often in babies born prematurely or with a low birth weight.

CEREBRAL	Refers to the brain
PALSY	Means weakness, or paralysis or lack of muscle control

The brain controls everything we do. Different parts of the brain control the movement of muscles and parts of the body. In cerebral palsy, there is damage to, or lack of development of, one or more of these areas of the brain.

People with cerebral palsy can have problems such as weakness, stiffness, clumsiness, difficulty coordinating simple movements, shakiness and difficulty with balance. These problems can range from mild to severe. In mild cerebral palsy, a person may be slightly clumsy in one arm or leg, and the problem may be barely noticeable. In severe cerebral palsy, the person may have a lot of difficulties, with the whole body affected. Each person with cerebral palsy will be affected in different ways, depending on the severity of the brain damage and the areas of the brain affected.



What are the different types of cerebral palsy?

There are several different types of cerebral palsy, which are grouped into categories.

1. Spastic cerebral palsy

This is the most common type of cerebral palsy. Spasticity means stiffness or tightness of muscles. The muscles are stiff because the message to the muscles is sent incorrectly through the damaged part of the brain.

When people without cerebral palsy perform a movement, some groups of muscles become tighter and some groups of muscles relax. In people with spastic cerebral palsy, both groups of muscles may become tighter. This makes movement difficult or even impossible.

2. Athetoid cerebral palsy

Athetosis is the word used for involuntary unpredictable movements that occur in this type of cerebral palsy. This involuntary movement is present even at rest and is often most noticeable when the person moves. In addition, children with athetoid cerebral palsy often have very weak muscles or feel floppy when carried.

3. Ataxic cerebral palsy

This is the least common type of cerebral palsy. Ataxia is the word used for unsteady shaky movements or tremor. People with ataxia also have trouble keeping their balance.

4. Mixed types

Many people do not have just one type, but a mixture of several of these movement patterns.

What part of the body is affected?

Again, this is different from one person to another.

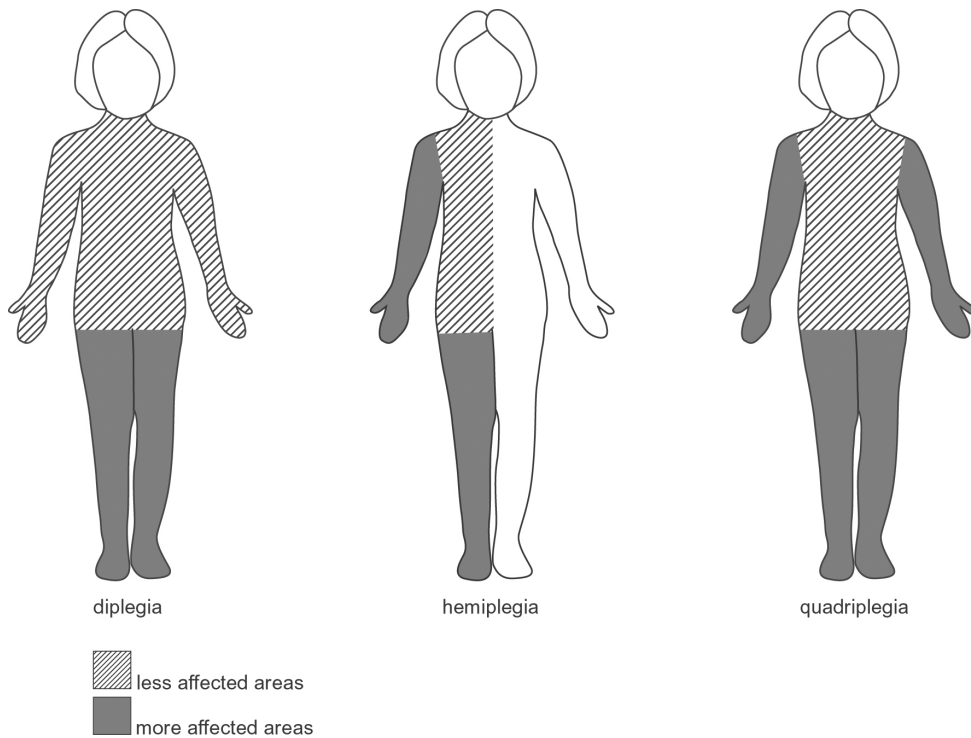
Certain words are used to describe the parts affected:

Hemiplegia - the leg and arm on one side of the body are affected.

Diplegia - both legs are affected significantly more than the arms. People with diplegia usually have some clumsiness with their hand movements.

Quadriplegia - Both arms and legs are affected. The muscles of the trunk, face and mouth can also be affected.

(see figure over page)...



What is the cause of cerebral palsy?

There are many different causes. The risk is greater in babies born preterm and with low birthweight. Whilst the reasons for this remain unclear, cerebral palsy may occur as a result of problems associated with preterm birth or may indicate an injury has occurred during the pregnancy that has caused the baby to be born early.

In some cases damage to the brain may occur:

- in the early months of pregnancy, for example, if the mother is exposed to certain infections such as German Measles;
- due to the baby not growing at the correct rate during the pregnancy;
- at any time if there is a lack of oxygen supplied to the baby. This is of particular concern during birth. Current research suggests that in some cases this may be due to abnormalities already present in the baby which affect the baby during the birth process;
- in the period shortly after birth, if an infant develops a severe infection such as meningitis or encephalitis, which, in rare cases, may result in brain damage;
- accidentally in the early years of life; for example, with a near drowning or car accident.

In many people it is important to note that, despite a careful review and various tests, the cause of the cerebral palsy remains unknown.

What other difficulties may people with cerebral palsy have?

1. Disorders of hearing – People with cerebral palsy sometimes also have hearing problems.
2. Disorder of eyesight - People with cerebral palsy may have squints or other visual problems.

3. Epilepsy – People with cerebral palsy may also have recurring seizures (fits).
4. Intellectual disability and learning difficulties – People with cerebral palsy vary widely in their intellectual and learning capabilities. Some will show the same intellectual capabilities as other people, in spite of their physical difficulties. Others will have some degree of intellectual disability, ranging from mild through to very significant.
5. Perceptual difficulties - Perception is making sense of information gained from the senses. This enables people to do things such as move around obstacles, judge size and shape of objects and understand how lines are connected to form letters. People with cerebral palsy can have problems with perception as the brain may have difficulty interpreting the messages it receives from the senses.
6. Speech difficulties - Because the muscles of the mouth may be affected, some people with cerebral palsy may find talking difficult. Some people may be mildly affected whilst others cannot say any words at all. People who cannot speak clearly may use a communication board or electronic communication device.
7. Eating and drinking difficulties - Cerebral palsy may affect the muscles that open and close the mouth and move the lips and the tongue. Some people with cerebral palsy have difficulty chewing and swallowing certain foods.

Do people with cerebral palsy get better?

Cerebral palsy is a life-long condition - generally the weakness, stiffness or unwanted movements remain throughout the person's life. People with cerebral palsy live with it all their lives. It is important for children with cerebral palsy to receive support from an early age to ensure they have every opportunity to reach their full potential. There is, however, no cure for cerebral palsy.

Many people with cerebral palsy are healthy and live to old age. Those people with the more severe forms of cerebral palsy may have many health problems that result in a shortened life span. They may also experience signs of ageing at a much earlier age. For example a person with cerebral palsy may have problems with osteoporosis (brittle bones) from their early twenties. This disease would normally not be present in a non-disabled person until they were in their fifties, or older.

Can people with cerebral palsy lead a “normal” life?

This varies from person to person. People with mild cerebral palsy often need no additional support to undertake the activities that most people enjoy. Others may need assistance to eat their meals, go to the toilet, or need special equipment to communicate or move around (wheelchairs and walkers).

New technology has made a huge difference to people with cerebral palsy. Using special accessing devices, people with cerebral palsy can now use computers like everyone else - to 'surf' the net, email friends, apply for jobs and work in regular employment. Computer based technology allows people with disabilities to operate everyday appliances, such as TVs, videos, stereos and air conditioners.

Like the rest of the community, people with cerebral palsy have a wide range of skills, qualifications and experience. Some have abilities at work entry level, whilst many have tertiary qualifications such as TAFE certificates, diplomas and university degrees.

Is there any research being carried out?

In Australia and many other parts of the world, there is research aimed at studying the causes of cerebral palsy and the long-term effects on people as they grow older. Other research is also being carried out to help find the best methods of prevention, intervention and treatment. The Centre for Developmental Disability Studies www.cdds.med.usyd.edu.au and The Spastic Centre www.thespasticcentre.org.au are two organisations in NSW that are carrying out research into various aspects of cerebral palsy.

Websites about cerebral palsy

The Spastic Centre

The website of The Spastic Centre in NSW. This information-packed website features factsheets and brochures about various aspects of cerebral palsy, a glossary of terms, recommended reading, an extensive links page and a full list of Spastic Centre services.

<http://www.thespasticcentre.org.au/>

National Institute of Neurological Disorders and Stroke

The website of this US based institute contains a basic guide to cerebral palsy including what is cerebral palsy, associated conditions, causes, risk factors, early signs, diagnosis, treatment and research.

http://www.ninds.nih.gov/health_and_medical/pubs/cerebral_palsyhtr.htm

SCOPE

The UK's national disability organisation whose focus is people with cerebral palsy. This excellent site contains a wealth of information for people with cerebral palsy, their families, carers and disability providers. Features include a vast range of fact sheets, information about current research, campaigns in the UK, useful publications to download, FAQs, services, and discussion rooms on various practical topics.

<http://www.scope.org.uk/>

United Cerebral Palsy Associations

The UPA is the second largest health charity in America. Its mission is to advance the independence, productivity and full citizenship of people with cerebral palsy and other disabilities, through its commitment to the principles of independence, inclusion and self-determination. The site includes What's New, Innovative Projects and Research sections. The research section contains fact sheets designed to inform professionals and the public about recent medical findings, treatments and therapies related to developmental disabilities.

<http://www.ucpa.org/main.cfm/1>

In conclusion

It is important to focus on what the person with cerebral palsy can do and the ways they can maximise their achievements. Their physical appearance may not indicate their intellectual or cognitive abilities.

A person with cerebral palsy needs the same love, care and acceptance as any other person.

ACKNOWLEDGMENTS

This factsheet was based on:

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- ii) its revision, produced by The Cerebral Palsy Association of Western Australia's *Kids First Project*, 1994.

We are grateful to both organisations for permission to reproduce their material and make revisions reflecting local information suitable for families in NSW.