

Possible effects of cell damage in **RIGHT** side of brain (**RIGHT hemisphere**)

Any of the following effects may occur depending on which area of the right side of the brain has been damaged:

- paralysis or loss of power (strength) in *left* side of body
- loss of feeling in *left* side of body
- loss of awareness to the *left*
- loss of vision to the *left*
- excessive talking
- slurred or monotonous speech
- swallowing or eating difficulty
- difficulty recognising familiar faces
- difficulty seeing how things relate to each other in space
- difficulty interpreting sounds
- denying the existence of problems
- depression
- tendency to sarcasm, or uncharacteristic and at times embarrassing behaviour or comments
- short concentration span
- memory problems
- poor judgement of physical abilities (especially safety awareness)
- muddled sense of time
- difficulty with abstract thinking, e.g. comparing ideas, solving problems
- mood swings
- lack of interest, difficulty in 'getting going'
- acting without thinking

Right side of brain

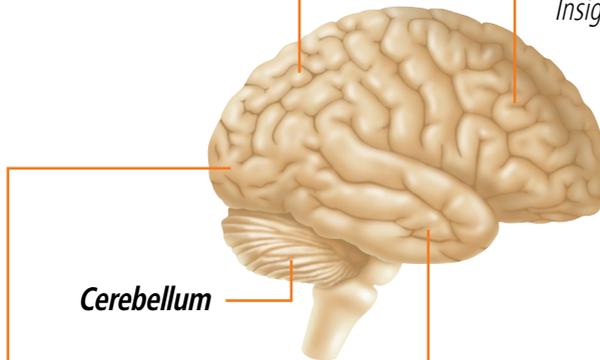
Different parts of the four main areas (lobes) control different functions. Damage in one side of the brain usually affects function on the opposite side of the body.

Parietal lobe:

*attention to stimuli
dressing
drawing
feeling shape and texture
finding one's way around
spatial imaging*

Frontal lobe:

*voluntary movement
personality and mood initiative
planning
social behaviour
strategies for new situations
bladder control
concentration
Insight*



Cerebellum

Occipital lobe:

interpreting vision

Temporal lobe:

*visual memory
facial recognition
music appreciation
hearing
mood (aggression)
non-language environmental sounds*

Possible effects of cell damage in **LEFT** side of brain (**LEFT** hemisphere)

Any of the following effects may occur depending on which area of the left side of the brain has been damaged:

- paralysis or loss of power (strength) in *right* side of body
- loss of feeling in *right* side of body
- loss of awareness to the *right*
- loss of vision to the *right*
- difficulty speaking
- not understanding what others are saying
- inability to read and/or write
- thoughts tend to be disconnected
- verbal memory loss
- difficulty with performing purposeful movements, e.g. combing the hair
- confusion between left and right
- easily frustrated
- slowness, clumsiness
- overwhelming urges to perform or repeat some actions
- difficulty structuring and planning behaviour
- poor motivation
- difficulty dealing with numbers (arithmetic)

Left side of brain

Different parts of the four main areas (lobes) control different functions. Damage in one side of the brain usually affects function on the opposite side of the body.

Frontal lobe:

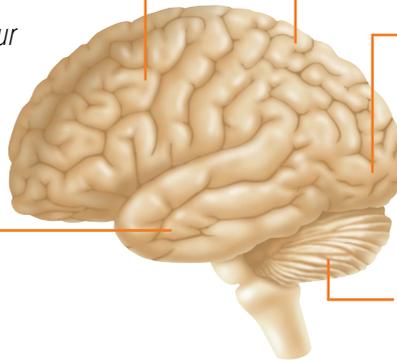
*voluntary movement
personality and mood initiative
planning
social behaviour
speech
bladder control
concentration
insight
context-dependent behaviour*

Parietal lobe:

*attention to stimuli
reading
writing
calculation
feeling shape and texture*

Occipital lobe:

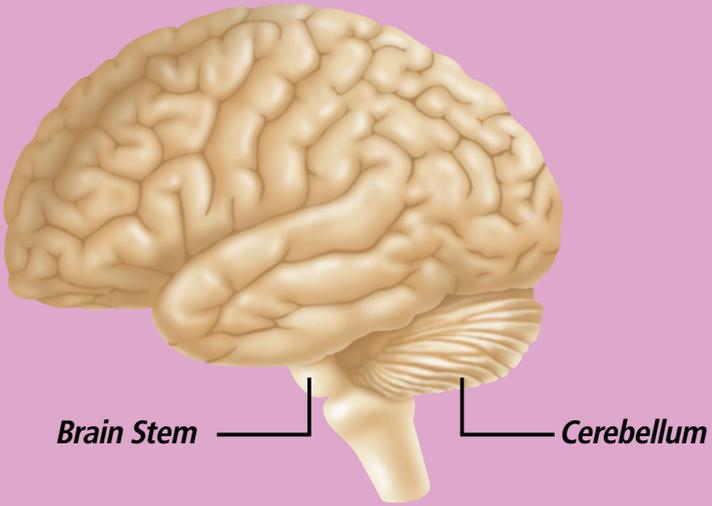
interpreting vision



Temporal lobe:

*visual memory
understanding spoken languages
mood (aggression)
hearing
language related sounds*

Cerebellum



Possible effects of cell damage in lower, back part of brain (cerebellum)

- Abnormal movement patterns of the head and upper body
- Problems with balance and coordination
- Dizziness, nausea, vomiting, hiccups.

Possible effects of cell damage in brainstem

- Coma or disturbed alertness
- Pronounced drowsiness
- Breathing difficulty
- Spontaneous changes in heart rate and blood pressure
- Nausea, vomiting
- Swallowing difficulty
- Loss of movement and sensation in one or both sides of the body.

Both the person with stroke and caregivers need to be aware of the nature of problems caused by the stroke, in order to:

- ensure safety
- avoid misunderstandings
- find ways around the problems.

The examples of problems given in the following pages are not a complete list.

Each person will have a different combination of effects of stroke, and different degrees of difficulty.

Some problems have more than one cause (for example, difficulty making a cup of tea could arise from difficulty judging depth or distance as well as movement and balance).