



the effects of brain injury

Introduction

This fact sheet aims to show some of the more common difficulties that people can face as a result of brain injury.

It is important to remember that every brain injury is different and that the consequences can vary enormously depending on the severity of the injury and the area of the brain that it affects.

The effects of brain injury

The effects of brain injury are commonly grouped into three main areas. These are:

- Physical affecting how the body works
- Cognitive affecting how the person thinks, learns and remembers
- Emotional and behavioural affecting how the person thinks, feels and acts

Physical effects

Paralysis and muscle weakness: This can often affect one side of the body more than the other, depending on the area of the brain that is injured.

Fatigue: Experiencing tiredness is common as everyday tasks such as walking or eating can require a greater degree of concentration after brain injury. Even people who have experienced mild brain injury may experience fatigue and it is important to be patient, take things slowly and be allow time to rest.

Epilepsy: Brain injury can leave a person more susceptible to experiencing epileptic seizures or fits. If a person has not had a seizure before it is important to call for medical assistance immediately. Epilepsy can be managed using a range of drugs, but these do have side effects. It is important to speak to your doctor and to notify DVLA as people with epilepsy may not be allowed to drive.

Headaches and pain: People with brain injuries often experience headaches and other pains in the body, which can be linked to fatigue and to the increased sensitivity or the brain's impaired ability to process of pain messages. If you experience prolonged, regular or severe headaches and pains then contact your doctor.

Sensory impairment: As all of the senses, sight, touch, hearing, taste and smell, are processed in the brain these senses can be reduced, lost or exaggerated after brain injury.





Ataxia and poor co-ordination: Ataxia is an uncontrolled movement or tremor affecting the coordination of movements. As well as this, people with brain injuries can also experience other coordination difficulties which can cause difficulties with everyday tasks and with mobility.

Speech: There are various problems with speech and language following brain injury, both physical and cognitive and it is important to remember that these difficulties do not mean that a person has lost their intelligence. Physical difficulties can include unclear or slurred speech as well as slow or rapid speaking. Some people may lose the ability to speak altogether.

Mobility: Mobility can be affected following brain injury as a result of impaired coordination and balance amongst other things. Movement can become slow and some people may need a wheelchair, sticks or other mobility aids.

Hormonal imbalance: The pituitary gland and hypothalamus are located in the brain and are responsible for regulating hormone levels. If damaged this can lead to increased or decreased release of one or more hormones. For further information about the effects and management of hormonal imbalances speak to Headway Devon or your doctor.

Disturbed sleep: Brain injury can affect a person's ability to sleep. This can affect a person's ability to fall asleep, their ability to recognise when they need sleep, the amount of sleep that is needed, and the quality of their sleep. This can lead to fatigue and can have a knock-on effect on other conditions.

Cognitive effects

Memory: Memory problems are common following brain injury. This can affect short and long term memory, but short-term memory problems are more common. Memory difficulties can affect a person's ability to learn new information.

Motivation and self-initiation: People with brain injuries can find it difficult to motivate themselves or get started on a task. This can be mistaken for laziness and may also be a symptom of depression.

Attention and concentration: This is very common after brain injury and can mean that people find it difficult to complete a task or taken on new information, especially when this is combined with memory difficulties.





Information processing: It can be more difficult for people with brain injuries to work out what has been said to them. This means it can take people more time to think things through. When someone is struggling to process information, this can lead to confusion, frustration and anger and can be known as "cognitive overload."

Impaired reasoning: This may affect a person's ability to think logically or to understand rules.

Impaired judgement: This can cause difficulties in accurately perceiving and interpreting the behaviour and feelings of both the self and others.

Lack of insight: People with brain injuries may lack insight into their own conditions and how they are perceived. People may not appreciate or understand their own problems which can lead to the setting of unrealistic and unobtainable goals.

Aphasia, and language difficulties: Aphasia can affect the expression and understanding of language, as well as reading and writing abilities. Aphasia can be receptive (difficulty in making sense of what is heard or read) or expressive (difficulty finding the right words to say or write).

Perceptual and spatial difficulties: A person may have difficulty in processing visual information. They may be unable to make sense or pictures and shapes, or may find it difficult to find their way around a building. Sometimes people may not respond to things in one side of their field of vision, or may ignore a particular side of their body, for example when shaving. This is known as visual neglect.

Executive skills: The term "executive skills" or "executive functions" refers to abilities such as planning and organising, goal setting and flexible problem solving.

Emotional & behavioural effects

Frustration, **irritability and anger**: As well as experiencing difficult and frustrating effects of brain injury, people can experience a lower tolerance for frustration. These feelings can build up quickly and may be very difficult for the person to control. Some people may use abusive or obscene language as an outlet for this anger.

Anxiety/depression: This may be caused by injury to the areas of the brain that control emotion but can also be a sign that someone is gaining insight into the effects of their injury. Often people feel a sense of loss following brain injury as well as anger, sadness, guilt and confusion. In addition to this people may experience anxiety as the future can be frightening if a person is facing complex difficulties.





Lack of interest in others or self-centredness: People with brain injuries may think in an ego-centric manner, which can show a lack of interest in the feelings, needs, opinions and behaviours of those around them. A person may find it very difficult to "put themselves in someone else's shoes."

Disinhibition and impulsiveness: This occurs when there is a loss of control over behaviour. A person may speak or act without thinking or in inappropriate ways, e.g. being over-familiar or making sexual advances with the wrong people at the wrong time. A person with disinhibition may also be unable to control what they are thinking and may make inappropriate outbursts.

Obsessive behaviour: A person may become obsessed with one particular activity, idea or behaviour, for example being afraid of theft and repeatedly checking or hiding belongings and money.

Mood swings and emotional lability: People with brain injuries may have difficulty managing their emotions and may swing from one emotional state to another guite suddenly. People may also have a tendency to laugh or cry easily.

Loss of confidence: This can be common after brain injury and a person may need a lot of encouragement and reassurance.

Personality change: As our personalities, likes and dislikes are all formed in the brain, brain injury can change a person's character. This can be difficult for the individual to recognise and come to terms with. and can be especially difficult for family members and friends.

About Headway Devon

Headway Devon is a local charity providing care, support and opportunities for people with brain injuries as well as information, respite and advice for family members and carers.

We are the local brain injury experts, with over 19 years of experience in working with people with brain injuries. and are able to offer services across Devon and Torbay.

For more information or to make a referral to Headway Devon please contact us by calling 01392 211822 or emailing info@headwaydevon.org.uk. More information about Headway Devon, brain injury and the support available can be found on our website: www.headwaydevon.org.uk.

We are affiliated to Headway UK, the national brain injury charity, but are completely independently managed and funded.