Acquired Brain Injury

What is an Acquired Brain injury?

Acquired brain injury (ABI) is an umbrella term used to describe injuries caused to the brain some time after birth.

There are many causes of such injuries including:
- road traffic collisions
- falls
- assaults.

Injuries can also be the result of non-traumatic events such as:
- a haemorrhage (bleeding in the brain)
- an infection
- hypoxia (lack of oxygen to the brain)
- a tumour.

How common are ABIs?
There are approximately 100-150 people per 100,000 of the population with an ABI. Young adults and those over 65 are most at risk with males 2-3 times more at risk than females.

How does the injury occur?
Injury to the brain occurs when there is a direct blow to the head or when the brain comes into direct contact with the skull. The brain is not fixed firmly in the skull; therefore it is vulnerable to injury.

Primary Damage: A direct impact to the skull

Open injury: Penetration through the skull into the brain

Closed injury: Collision between the brain and the inside of the skull

Secondary damage: Further damage to the brain caused by other injuries, swelling or infection.
What are the effects of ABI?

The diagram shows the cerebral cortex, the main areas of the brain and their functions. The frontal lobe is the most common site of injury due to its vulnerable position. Blows to the back of the head force the frontal lobe against the skull causing injury (contra coup).

ABIs can result in physical, cognitive and behavioural effects, depending on the sight of the injury. All of which can have long lasting effects on the person’s life.

**Physical:** Patients can experience increased muscle tone, muscle shortening, visual and balance impairments and changes in taste, smell and speech

**Cognitive:** Memory, attention, problem solving, concentration and language use can be affected

**Behavioural:** Changes in anxiety, anger, mood and personality are common.

**How severe is my injury?**

**Mild/Minor:** This group accounts for 75-80% of all ABIs. The effects of a mild head injury can include: nausea, headaches, dizziness, poor concentration and fatigue. Such effects can then lead to anxiety and depression. If these symptoms last this is often termed post-concussion syndrome. Whilst the effects can be anything but minor they are usually short-lived.

**Moderate:** Defined as a loss of consciousness for between 15 minutes to 6 hours. headaches, poor concentration, difficulties with memory, thinking and organising as well as behavioural problems are common.
Severe: People with severe injuries are likely to be hospitalised and receive extensive rehabilitation.

Will I ever get back to normal?
ABI is a lifelong condition and every case is individual. Some clients recover quicker than others. Those with a mild head injury usually return to leading their pre-injury life, while those with moderate and severe injuries learn to live with their brain injury, with some requiring on-going rehabilitation to aid them in living the life they choose. Ultimately, with the aid of family, friends and with input from a range of healthcare professionals many clients lead an active and full life.

What is involved in rehabilitation?
Due to the complexity of ABI and the effects it can have both on the individual and their families, a team approach is taken to ensure all the client’s needs are met. The team comprises of a number of different professionals who will work in conjunction with the individual to set goals.

Goals include all aspects of an individuals’ life and enables the person to identify the activities and level of functioning they wish to work towards with the team. It can also include working towards rebuilding relationships following their ABI.

Who is in the team and how can they help?

Case Manager: Support clients and their families and help resolve issues such as funding and housing. A Case Manager is usually the first point of contact.

Physiotherapist: Aims to address any physical deficits resulting from ABI.

Occupational Therapist: Works on cognitive and physical issues, aiding clients to be able to carry out the daily activities they wish to do.

Dietician: Aids clients to address any weight management issues arising since their brain injury and gives advice on dietary needs.

Speech and Language Therapist: Involved in aiding clients with communication or swallowing difficulties.

Psychologists: Aims to address behavioural, emotional and cognitive difficulties.

Assistant Practitioners/Rehabilitation Assistants: Work alongside clients and clinicians to help achieve goals.
Where can I get more information?

Useful websites

- [www.headway.org.uk](www.headway.org.uk) (ABI charity)
- [www.birt.co.uk](www.birt.co.uk) (ABI Charity)
- [www.braininjury.co.uk](www.braininjury.co.uk)
- [www.ukabif.org.uk](www.ukabif.org.uk) (UK ABI forum)

Useful books

- Confronting traumatic brain injury: devastation, hope and healing by W. Winslade and J. Brady
- Brain injury survival kit by C. Sullivan
- Head Injury: a practical guide by T. Powell

Contact us

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