

Impact and Effects of ABI

An Acquired Brain Injury (ABI) is potentially one of the most devastating disabilities, with a huge range of effects due to the complexity of the brain.

Common effects of Acquired Brain Injury are problems with:

- Cognition — thinking and memory
- Communication/language
- Physical/sensory abilities
- Emotional/behavioural/personality issues

There is overlap and interconnections between these effects. The number and severity of problems resulting from a brain injury will differ from person to person because each individual's brain injury varies in the extent and location of damage. The extent of these change may only become apparent at time goes on.

The extent of the effects and challenges for the person with brain injury depends on:

- The severity of the ABI
- The location of the brain damage in ABI
- The length of time since brain injury
- The extent a person has been able to integrate back into the community
- The support available to the person.

Cognitive changes and difficulties

The cognitive effects of a brain injury affect the way a person thinks, learns and remembers. Different mental abilities are located in different parts of the brain, so a head injury can damage some, but not necessarily all, skills such as speed of thought, memory, understanding, concentration, solving problems and using language

Thinking difficulties are common after an ABI.

Thinking difficulties can have a big impact on everyday life.

Some common thinking difficulties are:

- slower thinking processes
- reduced flexibility in thinking
- memory difficulties
- difficulties learning new information
- attention and concentration problems

- poor planning and organisational skills - executive ability
- poor reasoning and judgement
- difficulties in recognising objects (changes in vision perception).
- Lack of insight into their situation and life issues
- Lack of initiative

Communication/language changes and difficulties

Communication problems after brain injury are very common. Although most of us take it for granted, the ability to communicate requires extremely complex skills and many different parts of the brain are involved.

The brain controls speech and language. If the parts of the brain responsible for speech and language are damaged there can be difficulties with communication.

The difficulties will depend on the nature and extent of the damage to the brain.

Speech, language and communication difficulties can have a major impact on everyday life.

Some common speech language and communication difficulties are:

- difficulty understanding what is said to you
- difficulty finding the words you are looking for
- difficulty in moving and coordinating the muscles used for speaking.

In addition cognitive difficulties such as memory problems, information processing problems and control problems impact on language and communication.

There are three principal sources of communication difficulties arising from damage to the brain:

a) Damage to the communication areas of the brain which may cause:

- Dysphasia: Word finding, sentence construction and comprehension difficulties
- Dysarthria: Muscle control difficulties
- Dyspraxia: Muscle co-ordination difficulties
- Nonverbal communication difficulties.

b) damage to the cognitive areas of the brain which may cause:

- Memory problems
- Information processing problems
- Planning problems

- Inflexible thought process
- Initiation problems
- Control problems.

c) damage to the brain's frontal lobe which may cause social communication deficits for example:

- difficulty following the social rules and conventions of communication.

Physical - sensory changes & difficulties

Many people make an excellent physical recovery after a brain injury, which can mean there are few, or no, outward signs that an injury has occurred. There are often physical problems present that are not always so apparent, but can have a real impact on daily life.

Our body functions are controlled by our brain.

After a severe ABI motor difficulties, swallowing difficulties, sensory deficits, loss of bladder and bowel control and epileptic seizures are common.

After a severe ABI there can be difficulties with movement.

Dizziness, headaches and fatigue also occur after both mild and severe ABI.

There are rehabilitation strategies to help with most of these symptoms.

Some common difficulties are:

- motor/movement problems e.g.
 - * muscle weakness (e.g. weakness on one side of the body, weakness in both legs)
 - * muscle spasticity (e.g. where limbs become stiffer and when you try and move them you can feel resistance and the person with the ABI can feel pain).
- sensory problems e.g.
 - * loss of vision
 - * loss of smell
 - * loss of hearing or ringing in the ear (tinnitus).
- dizziness and balance problems
- pain and headache
- fatigue
- bladder and bowel problems
- Epileptic seizures.

Emotional/behaviour/personality changes and difficulties

Changes in emotion and behaviour are common after an ABI.

Everyone who has had a brain injury can be left with some changes in emotional reaction and behaviour. These are more difficult to see than the more obvious problems such as those which affect movement and speech, for example, but can be the most difficult for the individual concerned and their family to deal with.

The emotional and behaviour changes are both:

- a consequence of the areas of the brain that have been damaged
- and the process of dealing with having an ABI and the impact on your life and those around you.

Common emotional reactions to an ABI include:

- depression
- anxiety and fear
- anger
- frustration
- mood swings.

Common behaviour changes include:

- apathy or reduced motivation
- increased irritability
- aggressive behaviour (verbal and/or physical)
- socially inappropriate behaviour
- difficulties relating to others
- restlessness /agitation.

Changes in sexual functioning after an ABI are also common. Sexual functioning involves physical, emotional, social factors all of which can be affected by an acquired brain injury

Challenges and difficulties

Just as the specific effects will be unique to each individual and their injury, the specific challenges will also be unique to each individual and their injury.

Some common challenges and difficulties are:

- Having difficulty in paying attention
- Being easily confused and overwhelmed
- Having problems learning new information

- Being slower in processing information
- Difficulty being able to use their knowledge in new situations
- Experiencing difficulty in keeping up with conversations
- Having difficulty starting activities
- Experiencing word-finding difficulties
- Having problems producing or understanding language
- Having problems getting or staying organised
- Having problems planning
- Fixed in thinking patterns
- Difficulty following the social rules and conventions of communication
- Loss of self-esteem and self-confidence
- Changes in personality, more egocentric, outgoing/introverted
- Irritability and "short fuse" / increased anger outbursts / difficulties in emotional control
- "Before/ and now" comparisons
- Impaired social and personal coping skills
- Impulsivity
- Sexual disinhibition
- Lack of initiative & drive / apathy, low motivational states
- Adjustment issues-depression, anxiety
- Relationship changes

Impacts on everyday life

The common effects of ABI described in the previous sections impact on the lives and relationships of those dealing with ABI.

For people with moderate or severe acquired brain injury the impacts on life and relationships can be extensive.

Work

Many people are unable to return to the work they had previously done.

For people with ABI with severe injuries, some studies have shown that after five years post injury only around a third were employed.

Leisure pursuits

Many people either lose all their leisure activities or have to change activities.

An Australian study found that at five years post-injury, 63% of people with TBI had had to make changes to the sort of leisure activities that they had enjoyed prior to their injuries.

Marriage or relationship

Marriage or relationship breakdown are common.. For marriages that do stay together, there can still be a number of changes, for example, the loss of the sexual component of the relationship.

Friendships

Loss of friendships is common. People with ABI often report a feeling of isolation and find it difficult to interact and engage with friends.

Some studies found that at five years post-injury, 50% of people with TBI reported that they had lost friends and become more socially isolated since their injury.

Impact on family

The majority of people with a brain injury are discharged from an acute rehabilitation unit to return to their parents or partners. This often produces enormous changes and stress for the family unit as well as for individual family members.

Many families find it a rewarding experience to provide support for a family member with ABI. However, in other cases, it can be extremely stressful.

Sources of stress can relate to:

- Family members having to give up work, and being financially worse off
- Increased level of conflict due to temper control problems
- Family members (especially partners) having to take on new roles if partner with TBI no longer able to play these roles (e.g. financial manager, home maintenance, disciplinarian with children, etc.)
- Family members who play a caring or support role losing touch with their own social networks, becoming more socially isolated
- Family members experiencing grief or depression, mourning for the person "they knew before" the ABI
- Family members experiencing post- traumatic stress if they witnessed or were involved in the accident that caused the injury.
- Changed relationships with children taking on greater responsibilities and needing to be more grown up.

Psychological reactions

People with ABI can experience a range of differing psychological reactions. This can include depression, anxiety, low self-esteem and thinking about suicide. A high proportion of people can experience periods of depression, sometimes severe.

Family and friends

Issues for carer's friends and family members

Issues that carers, friends and family members may have to work through and/or deal with include:

- The extent of personality & behaviour changes
- Changes to accommodation needs
- Managing respite for themselves and their family member with ABI
- Access to social support
- Access to behaviour support
- Understanding and managing mental health issues following ABI
- Involving others in their lives, loss of privacy.

A separate section of our website will be devoted to Issues and Information for Carers and family, but below are brief ideas around