

The Hospital Stage following an Acquired Brain Injury

A brain injury can have a huge impact on family and friends along with the individual affected. To make coping with the crisis easier it can be helpful to become familiar with the hospital environment and some of the procedures that take place and personnel you will encounter.

Arrival and Initial Treatments

The time of injury is a time of crisis and the treatment in hospital is geared towards survival. For the unconscious person, they may need assistance breathing, so may be connected to a ventilator via a tube inserted into the windpipe called an endotracheal tube.

Depending on the type of injury, urgent neurosurgery may be carried out. The main reasons to perform surgery include:

- Removal of a blood clot or haematoma
- To reduce the pressure inside the brain – intracranial pressure due to swelling or oedema
- To treat a build up of fluid in the brain, hydrocephalus, by inserting a device known as a shunt to drain liquid from the brain to reduce the build up of pressure.

Other reasons to perform neurosurgery might include:

- To “clip” an aneurysm and prevent it from rupturing and causing a haemorrhage
- Removal of a tumour
- Taking a sample of cells (biopsy) to detect the tumour type

Following neurosurgery

Following neurosurgery, a person typically will spend time in the Intensive Care Unit (ICU) in which round the clock care is provided. When the person is unconscious, a number of aids are used such as an intravenous drip, a catheter to remove urine or an enema to remove solid wastes. Additionally, a heart monitor is used to check heart rate and electrical activity along with a respirator to supply oxygen. All monitors are equipped with an alarm system which warns them if a patient requires attention.

If the person is unable to breathe unaided, the endotracheal tube may be replaced with a tube going directly into the windpipe in a minor operation known as a tracheostomy

The appearance of someone in intensive care can be upsetting. The person with the injury may look gaunt due to weight loss, have their head shaved and sweat profusely. Additionally, a person with the injury may act differently to what you are used to. They may be unable to move limbs or they may move in a strange manner.

Prognosis

One of the most urgent questions for a family member is what the chances of survival and recovery are. In many instances it is difficult for a health professional to predict the future of a person with an ABI.

Every injury is unique and symptoms and abilities can change rapidly, which can be frustrating. During this time it can help to make a note of all your concerns and questions for the medical and

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nursing team, as time with doctors is often limited. A diagnosis is made after a medical assessment, brain scan and lab tests.

Medical and Diagnostic Tests

There are a number of tests that may be carried out after an injury. Some tests, such as the CT and MRI scans are designed to look at brain structure, and some, such as EEG and Evoked Potentials look at the way the brain is functioning.

CT scan – A detailed X-ray accompanied by an injected dye that looks at the brain's structure.

MRI scan – Used to look closely at brain structure following a CT scan. This scan can sometimes reveal damage missed by a CT scan.

Electroencephalogram (EEG) – Measures electrical activity in the brain. This test can indicate the presence of seizures (epilepsy).

Angiogram – Examines blood vessels in the head and neck by introducing a small catheter. This can help to identify blockages that might give rise to strokes and aneurysms.

Evoked Potentials – This test registers the electrical activity on the scalp resulting from activity of our senses, such as smell and hearing.

Lumbar Puncture – This test extracts some of the cerebrospinal fluid for examination. This can help to diagnose tumours and haemorrhages.

Early stages of Recovery

As the person emerges from unconsciousness, they will enter a stage known as Post Traumatic Amnesia (PTA). Memory may be affected and a person may

not recall what happened to them, past events or people close to them.

Unusual behaviour such as aggression or inappropriate language may also occur. In the early stages of recovery seizures may occur due to disturbed electrical activity in the brain caused by brain swelling or scar tissue.

Coping Strategies

To help you and the family adjust, a number of strategies may help:

- Acknowledge your feelings and reactions to the experience
- Try and reduce other stresses in your life
- Accept support from people around you such as helping at home or coming on a visit
- Ensure that you are eating and sleeping
- Ask nursing and medical staff any questions you may have
- Talk to others about your feelings and experiences
- Be aware that other people will deal with the situation differently
- Read any literature offered to you and contact organisations you feel can help (e.g. Headway's helpline 1890 200 278)
- Try and maintain a sense of normality by developing a routine

If you have any queries or concerns, make a note of them and ask one of the medical and rehabilitation team.