

### **Recovery from Brain Injury**

Recovery from a traumatic brain injury is a long, difficult process. It is emotionally draining for both the patient and the patient's family. Weeks and months may elapse before the patient is anywhere near their former self; progress to the best possible recovery may take years.

If you or a loved one suffer from a traumatic brain injury, it is important that you have some understanding of all the factors involved. Be prepared; while many brain-injured patients return to nearly the abilities they had before the injury, others do not.

### **What to Expect in the Initial Days after the Injury**

Initially, your survival may be the key issue. Doctors will try to reduce brain swelling, stop any brain bleeding, and keep your heart rate, breathing, and blood pressure stable. As you regain consciousness you may be agitated and confused. Chances are you will not remember this part of your recovery.

If you are dealing with a brain-injured loved one, you need to steel yourself to deal calmly and patiently with the patient so that he or she will not become more agitated. Speak slowly, in short sentences. Realize that the patient may not understand what you are saying; this is normal in the first stages of recovery and does not mean that this is a permanent condition. This condition is sometimes hard for family members to grasp, since the brain-injured patient may seem to be speaking normally.

Sometimes touching the patient can make them agitated; in other cases, a comforting touch may be exactly what is needed. Your loved one's reactions will be your best guide.

Talking with the patient's doctor can help you understand what is going on at this stage. It is also important to talk with the nurses and physical therapists; these professionals may be better able to explain the patient's condition than the doctor can, since doctors are frequently in a rush and may not have time to deal with all of your questions. In addition, nurses and therapists are more involved in the patient's day to day care routine and so may have excellent insights.

### **Changes to Expect**

Changes in memory and thinking skills are to be expected. Many brain-injured patients can remember events that happened years ago, but have difficulty with remembering things that happened five minutes ago; this is called short-term memory loss. A speech therapist or language pathologist will work with you to help you deal with memory problems.

Patients with traumatic brain injury may experience personality changes; they may lash out easily in anger or they may become withdrawn. Depression is common. Psychological counseling and medication can help.

Frequently, a person with TBI may become easily angered at the slightest provocation. Family members may feel the brunt of this anger. Quick trigger anger is difficult for everyone involved, but a time-out strategy may help diffuse your anger. Experts recommend getting away from an anger-triggering situation for at least fifteen minutes; this will give your attention time to turn to something else. You may want to consider having a family member tell you when you need a time-out.

The anger associated with a TBI can come from both physical changes and psychological adjustment. The center of the brain which allows us to keep our emotions in check and respond in a socially appropriate manner, is frequently injured by a TBI; not only do brain-injured people tend to become easily angered, they also tend to exhibit other emotions more freely. For example, a person with a TBI may cry over a cross-word directed at them or at an unintended slight.

Communication may also be difficult for a person with TBI. It is common a person to know what they want to say, but forget some of the words necessary to convey this information. It is also common for person with TBI to confuse similar sounding words and not even to realize that they are doing so. Being unable to recall words is termed anomia and everyone experiences it occasionally, but for the person with TBI anomia can be a constant burden. If anomia is one of the consequences of your TBI, a speech therapist can help you by teaching you strategies around the difficulty.

Occasionally a person with a TBI will experience vision problems related to brain changes, but will not realize it. For example, it possible for a person to be processing visual information coming from only one eye and to not realize that they cannot see on the opposite side. This can cause the person to run into objects and to be an unsafe driver, without knowing the cause of the problem.

As many as 50% percent of TBI patients will continue to experience some form of headache. These can be related to nerve and muscle strain in the neck and shoulder area or they can be vascular (related to blood flow). Headaches related to pinched nerves and muscle strain may respond well to physical therapy. Various medications can bring relief for vascular headaches, but you should always consult your doctor before taking any medications for headaches.

Sleep problems and fatigue are also frequent problems for the TBI patient. A person's sleep cycle may be completely disrupted. A previously heavy sleeper may find that they wake up with a light noise or vibration. Some people find that they awaken every hour of the night. If you or your loved one with TBI experience sleep problems, doctors can prescribe medication to help. Generally, traditional sleeping pills are not appropriate for someone recovering from a brain injury; doctors prefer to use mild anti-depressants for sleep disorders in TBI.

Good sleep habits, such going to bed at the same time every night and keeping the bedroom as dark as possible can also help combat sleep problems associated with TBI. Naturally, getting a good night's sleep will also help you combat the fatigue that frequently accompanies TBI.

TBI patients are faced by two types of fatigue: mental and physical. Physical fatigue comes from doing physical activity. In the first months of recovery after a brain injury, you will tire far more easily than you used to. Physical stamina will return gradually; for most people, excess physical fatigue will cease after six months of recovery time.

Mental fatigue may plague the TBI patient far longer than physical fatigue. Mental fatigue comes from doing a task requiring thought, such doing your bookkeeping or writing an essay. People with TBI are troubled by mental fatigue because the brain must adjust to its new status; areas of the brain not accustomed to the mental task at hand may be used to compensate for loss of function of the other areas of the brain. Since most people are freshest in the morning, it is a good idea to do most mental tasks in the morning if possible.

## **Emotional Adjustment**

A person with a TBI will also experience difficulty adjusting psychologically. After an initial phase of agitation and confusion, it is common to deny that anything is wrong. This especially likely to happen in the case of relatively mild injury, where the patient was quickly sent home and on the

outside appears to be the same as always. The person may easily forget things or become confused, but at first he or she will not admit that something is wrong. If you have a family member with TBI in this state, you must patiently insist that they need help, but this is not always easy. A balance must be struck, between doing the right thing for the patient and not overly exciting them; changing the subject and discussing the matter when everyone is calmer is generally the best plan. However, sometimes TBI patients want to do things that are dangerous, such as drive; in such a case do not hesitate to explain to the patient that it is too dangerous for them to do this activity right now. Most patients with TBI do eventually realize that something is wrong with them.

As the person realizes that he or she can no longer do the things they once did, anger is a common reaction. This anger may be directed at themselves, at the perceived cause of the accident, at God, or at those around them. This stage is frustrating, whether you are the one with the TBI or a family member of the patient. If you are family member or friend you can help by listening to the patient's concerns and trying to identify with them.

The support of family and friends is vital during your recovery period. If you are the family member of a person with TBI, you also need emotional support. If you do not already have a good emotional support network or even if you do it is helpful to join a special support group for people dealing with brain injuries.

Eventually, most people with TBI learn to recognize and accept their limitations, while using their strengths and remaining talents.

### **Can Recovery be Predicted?**

Predicting recovery from a traumatic brain injury is tricky. In the first days after the injury, doctors will use a standardized scale such as the Glasgow Coma Scale (GCS) to classify the seriousness of the injury. The higher the number on the GCS the milder the injury is and the greater the chances of a full recovery. A rating of thirteen or over indicates a mild brain injury. A rating between nine and thirteen indicates a moderate injury and a rating of eight or below indicates a severe brain injury. Ratings on the GCS scales and other standardized scales are useful, but only to a point; they cannot predict the rate at which an individual person will recover.

The location of the injury is also a factor, since different areas of the brain control different bodily functions. Some areas of the brain are more able to recover than others are. Scientists

still do not understand all the factors contributing to recovery from brain injury. Brain injury kills some the neurons (nerve cells) of the brain, but it is believed that in some cases the neurons may simply be injured; if these neurons are able to recover, the brain will be likely to regain more function. In some cases, other neurons which were not injured may take over the function of the damaged or dead neurons.

Dr. Glen Johnson, clinical neuropsychologist and Clinical Director of the Neuro-Recovery Head Injury Program in Traverse City, Michigan explains that recovery from a traumatic brain injury depends on a number of factors and may not be the same even for patients in similar general health and age with similar injuries. However, patient's overall health, physical condition and age will be one factor in trying to predict the rate of recovery. Younger people are more likely to recover fully from brain injury than older people are. Brain imaging scans are not always helpful in judging the extent of the injury; sometimes scans may show nothing wrong and yet the patient is clearly demonstrating signs of brain injury.

Johnson notes that the patient's IQ may play a factor in the extent of his or her cognitive impairment. For example, a person with an above average IQ will be less at disadvantage by losing ten IQ points than a person with a lower IQ will be. Johnson explains, however, that patients with higher IQs may also be more attuned to extent of their injury and thus may be more easily depressed or disheartened when their cognitive abilities do not return to former capacity.

Despite the uncertainty in predicting recovery from a brain injury, the good news is that doctors today have a far greater understanding of how to help the brain injured patient, than they did in the past. Even though you or your loved one may never completely recover from a TBI, there are ways to cope. Developing confidence that you can deal with your new limitations will help speed you on your way to the best possible recovery for your individual circumstances.

Source: <http://www.brainandspinalcord.org/brain-injury/recovery.html>

### Sources

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