



Fatigue after a traumatic brain injury (TBI)

What is fatigue?

Fatigue is an overwhelming sense of physical or mental tiredness that may affect any or all areas of functioning: physical, cognitive, and social. For people who have had a brain injury, fatigue is a very common and persistent problem.

Mental versus physical fatigue

Physical fatigue can be from any kind of physical labour such as exercising, mowing the lawn or playing sports. Immediately after a brain injury physical fatigue can be a problem e.g. it requires a lot of energy to relearn how to walk. For most people, physical fatigue tends to subside about six months following an injury.

Mental fatigue refers to the fatigue that results from 'brain work' such as working on the computer, writing a letter, reading the newspaper, conversing, studying, planning, problem solving and driving. Although mental fatigue also decreases over time, it tends to be a persistent problem that needs to be managed carefully. For a lot of people it does not go away completely.

Why is mental fatigue a common symptom of brain injury?

It is not known exactly why fatigue is such a common problem for people who have had a brain injury. However, it is thought that fatigue results because the brain has to work a lot harder than it did prior to the injury. Some of the brain cells are damaged, and do not work as efficiently as they should – information does not flow as easily around the brain. The brain has to work harder to cope with this resulting in fatigue. Also, the brain takes longer to restore its energy, meaning that it takes longer to recover from fatigue than it did prior to the injury. Fatigue may also be a side effect of some medication.

Mental fatigue can affect the success of all rehabilitation efforts. Fatigue decreases concentration, memory and social interactions. It increases irritability, distractibility, depression and anxiety. Fatigue can cause confusion and decrease the ability to make good decisions. It may also increase physical symptoms such as headaches and dizziness. It is therefore very important to manage fatigue.

What can be done about it?

It is a good idea to slowly build up work hours, gradually increasing stamina¹. For some people, a return to full time work may not be realistic at least for some time. The number of home and social activities undertaken may also need to be reduced.

There are a number of basic strategies that can be used to manage fatigue:

- **Learn to identify the early signs of fatigue.** These include puffiness and redness of the eyes, slowed or slurred speech, muddling of words, irritability and increased forgetfulness. These should be acted on as soon as possible e.g. by taking a nap.
- **Schedule important, difficult or stressful tasks and appointments at times where energy levels are at their peak.** For most people, this is in the morning. Fatigue tends to set in during the afternoon, around 2-3pm.
- **Fatigue affects your ability to attend to, process and store, information in your memory.** It is therefore important to learn new information when you are not fatigued.
- **Evaluate what a job requires.** By planning how long a task will take to complete, you reduce the stress of unrealistic time pressures.



- **Rest periods** during the day are crucial, particularly after cognitive (brain) work. It is a good idea to schedule in a regular rest period each day e.g. an hour in the early afternoon. Plan extra rest periods before and after big or tiring events.
- **Rest** can be simply lying down, or sitting quietly. It does not have to be sleep.
- **Avoid 'overload'**. Where possible, spread work, home, and social activities evenly throughout the week, ensuring adequate rest periods.
- **Keep a fatigue journal**. This is useful if there appears to be no pattern to the fatigue. By noting times of fatigue, activities undertaken around that time and the effects of resting a pattern may emerge. This can then help in developing an appropriate weekly schedule.
- **Friends and family** may be more tuned in to and aware of fatigue than the person with the brain injury. Their input may be very important.
- **Recognise that fatigue may have an accumulative affect**. For example, a person could continue on with normal activities, not take rest periods and feel fine for a week, only to be hit by extreme fatigue that disrupts functioning for several days.
- **Relaxation can help** reduce stress which can be a major cause of fatigue. The rehabilitation team can provide information on various relaxation techniques and tips to help poor sleep patterns.
- **Exercise** increases the amount of oxygen that gets into the blood system. Oxygen improves our ability to think. While the brain only weighs less than 5% of the entire body weight, it uses 30% of the oxygen in the body. It is critical that you consult your doctor before undertaking exercise.
- **A sensible and healthy diet** helps us to maintain energy levels. Consult your doctor or dietitian.

Conclusion

Fatigue is a common and persistent problem following a brain injury which may require some lifestyle changes. However, effective fatigue management can be achieved. Much of this revolves around weekly scheduling of activities, rest periods, and appointments. Your rehabilitation team will be able to advise you further on fatigue management.

Remember that everyone is different. It is important that the above strategies are tailored to suit the needs of each individual.

References:

- www.tbiguide.com/fatigue.html
- www.subtlebraininjury.com/fatigue.html
- <http://whis.nzl.org/injury/fatigue/html>

¹ It is recognised that some employers want employees to work full time or not at all. Brain injury rehabilitation professionals will advise on and provide support with vocational issues.