



Headache and brain injury

Headaches are a common and often persistent problem after acquiring a brain injury. Headaches can arise after damage to different structures both inside and outside the head.

In this article

- Major type of headaches
- Diagnosis
- Healthy habits to reduce headaches
- Treatment of headaches
- Where to get help

Major types of headaches

We'll cover some of those that can be common after a brain injury. Please note that how headaches are named and classified changes from country to country.

Tension headaches often feel like a diffuse vice-like pressure throughout the head, lasting from 30 minutes to a week. They usually respond well to over-the-counter analgesics like ibuprofen, paracetamol and aspirin. A very common cause of headaches is due to the microscopic damage to nerve pathways in the brain after a traumatic brain injury and other types of brain disorder, resulting in what is often called a tension headache.

Migraines are moderate to severe headaches, recurrent and pulsating in nature and often only affecting one half of the head. Other symptoms may include vomiting and sensitivity to light, sound or smell. They can last from four hours to three days in length. Sometimes the person sees an 'aura' before the migraine starts and can avoid the onset. This can be by avoiding activities that are triggering the migraine, or taking appropriate medication.

Musculoskeletal headaches are common with traumatic brain injuries when there is injury to the neck and/or structures in the head. An example of this is a whip lash injury. These headaches often worsen with stooping, bending or exertion. They may be associated with dizziness, sensitivity to light, sensitivity to sound and even imbalance. These headaches often disappear when the underlying problem is resolved.

Cluster headaches are typically short (15 minutes to three hours) of severe pain that usually is located around one eye. Other symptoms include nasal congestion, tearing and a red eye.

Diagnosis

If you are experiencing headaches after a traumatic brain injury it is important to report these to your doctor. This is because it could be the symptom of a condition needing urgent treatment. Headaches can also result as a reaction to medication in which case a new medication should be tried.

Healthy habits to reduce headaches
Before you try medications, there are basic lifestyle changes to try which could cut the chances of headaches occurring:

- Sleep well
- Regular exercise
- Avoid caffeine and nicotine
- Avoid certain foods that can trigger headaches e.g. red wine, monosodium glutamate, certain cheeses
- Minimize use of pain medications unless they are prescribed.



Treatment of headaches

As already mentioned, the tension headache is the most common one after a brain injury. This type of headache usually responds well to ibuprofen, paracetamol and aspirin.

Pain management in brain injury is often difficult as some medications may work against recovery. Certain medications can also become a problem because of their potential for substance abuse and their negative side effect on the ability to think clearly.

Anti-inflammatory agents are appropriate for musculoskeletal pain, though doctors must stay alert for possible gastric problems. This is because patients with brain injury and spinal cord injury tend to have high acid content in the stomach. This means they are susceptible to stomach ulcers which can be increased by these agents.

Antidepressants can be effective in controlling headache and nerve pain. These are not sedating except in high doses, and don't depress the respiratory cycle.

Most headaches following brain injury do not require surgical treatment. In some cases, particularly severe brain injury, surgical intervention may be required for conditions such as communicating hydrocephalus, carotid cavernous fistulas tension, pneumocephalus, brain abscesses and subdural hematomas. Appropriate clinical examination and diagnostic tests are needed to assess the form of treatment required.

Where to get help

There are support groups and medical facilities set up to help people cope with chronic pain. Contact your local doctor or Brain Injury Association to get the contact details in your State.

References and further information

ABC Fact File: Headache - http://www.abc.net.au/health/library/headache_ff.htm

Brain Foundation Australia: Headache Australia - <http://www.headacheaustralia.org.au/>

Migraine-related brain injury (Reuters) - <https://www.reuters.com/article/us-migraines-3/migraines-linked-with-brain-damage-idUSN2936166520070430>

Post-Traumatic Headaches - <http://www.headache-help.org/headaches-migraines-tension-cluster-sinus-pts-rare#injury>