Headaches after Traumatic Brain Injury

Headache is one of the most common symptoms after a traumatic brain injury (TBI). They affect over 30% of individuals who have a TBI.

Headaches can come and go, with varying frequency and intensity, for more than a year after injury. Headaches can make it more difficult to think, remember things, and carry out daily activities.

Why do headaches happen after a TBI?
Headaches that occur right after a severe TBI may be due to small collections of blood and fluid inside the skull. They may also result from surgery needed to treat the TBI.

For all types of TBI (severe, moderate, and mild), headaches may occur due to:

- Changes in the brain after injury.
- Neck or skull injuries that haven’t fully healed.
- Tension and stress.
- Side effects of medications.

What are some typical kinds of headaches after TBI?
There are many different kinds of headaches; the following are the most common. It is not unusual for someone to have more than one type of headache.

Migraine headaches
- Migraine headaches happen because an area of the brain is more sensitive than before the TBI. This can trigger pain signals that spread out to other parts of the brain.
- Migraines typically have the following features:
  - Dull, throbbing sensation (usually on one side of the head).
  - Moderate to severe pain intensity.
  - Nausea or vomiting.
  - Light or sound sensitivity.
  - You might get a “warning” signal (like seeing spots or bright lights) that a migraine is coming; this is called an “aura.”
- You might be more prone to migraines if you have a family history of them.

Tension headaches
- Tension headaches are associated with stress, muscle tension, and muscle spasms.
- Tension headaches usually have the following features:
  - Tight, squeezing sensation (usually on both sides of the head).
  - Mild to moderate pain intensity.
  - Occur later in the day.

Cervicogenic headaches
- Cervicogenic headaches can occur when there has been injury to the muscles and soft tissues in the neck and the back of the head.
- Cervicogenic headaches usually have the following features:
  - Start in the neck, shoulders, and back of the head; the pain sometimes travels over the top of the head.
  - Mild to severe pain intensity.
  - Pain gets worse with neck movement.
  - Not associated with nausea or vomiting.

Rebound headaches
- Sometimes the same medicines used to treat headaches can actually cause headaches.
  - For example, missing a dose of pain medication that is taken once or more a day can cause a rebound headache.
- You can also develop a rebound headache if you suddenly decrease the amount of certain substances, like caffeine, you normally use.

Should I worry about having a headache after TBI?
Most headaches are not dangerous. But if you experience the following symptoms in the first few days after your injury, you should seek help from a healthcare professional:

- Your headaches get worse.
- You have nausea, vomiting, and vertigo/dizziness with your headaches.
- You develop arm or leg weakness with your headaches.
- You have trouble speaking during your headaches.
- You have increasing sleepiness during your headaches.
Do I need special tests to diagnose a headache after TBI?
In the first few days after a head injury, doctors will often order a CT scan of your brain to make sure there is no bleeding in your head. After that, a brain scan or other test is rarely needed in order to diagnose a headache accurately.

Usually, your doctor will use your history and symptoms to determine what kind of headache you have and how to treat it.

What can be used to treat a headache after TBI?
Treatments for headache depend on your individual case. It’s important to discuss your symptoms with your doctor and to keep track of your headaches and responses to treatment. Many people use a headache diary to do this.

The first step to treating any type of headache doesn’t involve drugs or other therapy. Simple lifestyle changes may make your headaches better. Try to:

- Get enough sleep.
- Get daily exercise like walking or stretching (if a particular exercise worsens your headaches, talk to your doctor).
- Avoid certain substances, like caffeine or monosodium glutamate (MSG), that may trigger headaches.
- Avoid taking daily doses of pain medication unless your doctor prescribes it.

Common types of treatment for occasional headaches include:

- Over-the-counter pain medicines like acetaminophen (Tylenol®) or ibuprofen (Advil®).
- Prescription medicines for migraine headaches like sumatriptan (Imitrex®).
- Relaxation therapy/meditation.
- Biofeedback therapy.
- Stretching or massage.
- Local injections of steroids or numbing medications.
- Heat or ice packs.

Treatment for recurrent headaches (those that happen more than twice a week) may require prescription medication, which may include:

- Antidepressants.
- Antiseizure medication like gabapentin.
- Certain blood pressure medicines, called beta-blockers, like propranolol.
- Botulinum toxin injections.

Source
Our health information is based on available research evidence and represents the expert consensus opinion of the TBI Model System directors.

Authorship
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Disclaimer
This information is not meant to replace advice from a medical professional. You should consult your healthcare provider regarding specific medical concerns and treatments.