

## **Pathways To Comfort: Dealing With Pain And Brain Injury A Companion Guide To The Road To Rehabilitation Series**

### **Step 2: Post-Traumatic Headaches**

Post-traumatic headaches are headaches initiated from head or neck injury, such as in a whiplash-type injury or blow to the head. The resulting headache varies from person to person. Most commonly, the resulting post-traumatic headache is one of the following:

- post-traumatic cervicogenic headache
- post-traumatic muscle tension headache
- post-traumatic migraine headache
- post-traumatic cluster headache
- post-traumatic vascular headache

The most favorable outcomes are seen with those who seek early treatment. It's also important immediately following any head trauma to rule out subdural hematoma, a potentially fatal condition caused by intracranial bleeding. Chiropractors frequently treat post-traumatic headaches and do so with success.

Again, individuals should be warned that relying on analgesics to remedy post-traumatic headaches does nothing to correct the cause of the headache and generally worsens the headache in what's known as the "rebound effect".

**By: David C Haas, MD, SUNY Upstate Medical University**  
**Website: <http://www.upstate.edu/neurology/haas/hpptdx.htm>**

The medical literature on chronic post-traumatic headaches is huge and is diverse in opinions about their causes. Especially contentious is the contribution of litigation to the complaint of headache and other post-traumatic symptoms. The references listed in this section, and in the section on "whiplash" offer some perspective on this subject. In the U.S. and in many other countries a high proportion of patients with chronic post-traumatic symptoms seek financial remuneration for their symptoms. From this, comes the opinion that patients exaggerate or even feign their symptoms. However, facts indicate that this opinion is incorrect for the great majority of patients.

**Acute and chronic post-traumatic headaches – An overview**  
**By: David C Haas, MD, SUNY Upstate Medical University**

Roughly 50% of patients who are stunned or knocked out by a blow to the head experience headache soon afterwards. The International Headache Society (IHS) calls this headache an "acute post-traumatic headache." However, as acute suggests "severe" and "brief," which are inaccurate adjectives for many of these headaches, I prefer "early post-traumatic headache." Most of these headaches are not severe and require only simple

analgesics for relief. These early headaches occur just as commonly in people whose heads have been jerked during automobile accidents. (The inappropriate metaphorical term "whiplash" is commonly used to refer to these movements of the head and the neck.) These headaches disappear within a few weeks in about 70% of the sufferers, but the other 30% (or 15% of persons subjected to head trauma or "whiplash") continue to have headaches for years. The IHS calls these chronic post-traumatic headaches.

No correlation exists between the severity of the trauma and the chance of developing a chronic post-traumatic headache (Haas, 1993). This well-established fact suggests that this headache is not caused by brain damage. Instead, as other evidence suggests, the headache is most likely related to a person's reaction to the traumatic event. Some cultural determinants of these reactions are discussed in the section on "whiplash".

My recent study (Haas, 1996) found that about 75% of chronic post-traumatic headaches had the features of the naturally occurring (non-traumatic) chronic tension-type headache and about 25% had the features of naturally occurring migraine without aura. Among the former, roughly 25% were probably adversely affected by analgesic abuse.

Patients with chronic post-traumatic headaches after head trauma or "whiplash") often have other symptoms, such as dizziness, insomnia, and impaired memory and concentration, which together with the headache are commonly referred to as the post-traumatic (or post-concussion) syndrome. To believe that these symptoms are from traumatic brain injury, in the usual case, is a mistake in my opinion. Instead, the symptoms are most likely related to altered psychological states, as are the headaches. However, patients who have suffered brain damage may be mentally impaired. Sometimes, neuropsychologic examinations are needed to distinguish between these two types of altered mentation. Exactly what changes in a person's psychological state account for the post-traumatic symptoms has not yet been adequately explained.

### **Chronic post-traumatic headache: Diagnostic criteria**

The 1988 International Headache Society criteria are in need of revision, in my opinion (Haas, 1994). They were based on the assumption that the headaches were related to intracranial disturbances. I suggest the following criteria for the category of chronic post-traumatic headache.

1. Headache should begin within 3 months of a traumatic event.
2. Headache should be present for more than 3 months after its onset.
3. Subdural hematoma or traumatic hydrocephalus should be absent.

Headaches meeting these criteria are ostensibly related to the traumatic event, but not by means of a subdural hematoma or traumatic hydrocephalus. At our current level of understanding, coding a headache as "chronic post-traumatic" should not imply that it is related to brain injury or other structural intracranial or cervical abnormalities.

Chronic post-traumatic headaches can be subdivided into the following classes.

1. Chronic headache after head trauma.
2. Chronic headache after head movement without a blow to the head ("whiplash movement").
3. Chronic headache after accidents without head trauma or notable head movement

Although the headaches in these three categories are identical both symptomatically and etiologically in my opinion, I favor coding them by antecedent events, since the prevalent view is that these headaches are distinct entities.

After coding a chronic post-traumatic headache as one of the three above types, I advocate coding it for the class of natural (non-traumatic) headache in which it fits--in other words as chronic tension-type, or as migraine without aura, or as whatever other headache class it resembles.

Author: David C Haas, MD, SUNY Upstate Medical University