Bringing Chronic Daily Headache into Focus

By Nathan Hall
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These new rules may change the definition of head pain, but some practitioners may find the new guidelines themselves to be a source of headaches.

“Please don’t shoot the messenger!” is how Stewart J. Tepper, MD, Director of the New England Center for Headache, opened his presentation last summer at the American Headache Society’s 46th Annual Scientific Meeting, before telling the assembled migraine specialists how they were going to have to change their daily practicing techniques. The crowd chuckled at this and his cartoon of two men hiding from bullets behind a table. No shots were fired that day, although in a scientific conference he was far from the front lines of a neurology clinic’s examining room, where esoteric classification systems aren’t always practical.

Since then, most neurologists have probably heard about the updates to the International Headache Society classifications of chronic daily headache, which were first published in Cephalalgia 2004;24, suppl.1. The revisions broaden the clinical indications by defining several new headache syndromes, clear up many areas that previously were overly broad, and attempt to streamline the format. On the whole, the latest IHS guidelines seem like an effective way to code each type of headache based on etiology to help inform treatment decisions.

However, there are lingering questions about how these new guidelines translate into clinical practice, especially how the new system seems to exclude some patients from officially having chronic migraine despite fitting this definition by the old criteria. And although the updated guidelines were largely based on past research, they also made some significant changes to how practitioners diagnose certain conditions, particularly patients who appear to have what used to be called “rebound” headaches. Some American practitioners have expressed dissatisfaction with the new system, which changed the definition of many terms they were previously familiar with and in some way competes with the existing medical diagnostic criteria.

The IHS guidelines have already been adopted by the FDA and the NIH, as well as for the WHO ICD 10A and 11 coding for diagnostic procedures, but many neurologists in the field have not had a chance to apply them to their daily practice, largely because the reimbursement codes have not recognized the changes. And due to the relatively recent publication of the guidelines, some practitioners are not entirely certain what is different about these guidelines versus what was said in 1988. Finally, there are practitioners who feel some elements of the guidelines are simply too academic to bother with in practice. In this article, we’ll look at what these changes mean in a clinical setting.

Chronic Migraine Controversy

Perhaps the biggest bone of contention about the guidelines is the very strict criteria under which the new diagnosis “chronic migraine” is defined. Under the current rules, chronic migraine must meet all of the IHS migraine without aura criteria C and D consistently for at least 15 days per month without medication overuse and not attributed to any other disorder. If medication overuse is present, the IHS calls for a diagnosis of “probable chronic migraine with probable medication overuse.”

In clinical practice, these stringent criteria translate to very few cases that can actually be diagnosed as chronic migraine. One study conducted by Marcelo Bigal, MD, PhD and Richard B. Lipton, MD found that only nine percent of patients with transformed migraine also fulfilled the criteria for chronic migraine (Headache 2003;43:509-510).

Dr. Lipton, who was also in the IHS’s classification committee, says he feels the strict guidelines may make diagnosis of chronic migraine better for research purposes than practice. “Chronic headache is perceived by many as being specific for researchers looking for a pristine group of patients, but too restrictive for practice.” He says many recent studies support the notion that the clinical applications for this part of the guidelines are limited.

However, Dr. Lipton says its inclusion into the IHS’s guidelines still shows progress over the existing system which did not have this category, particularly since this is more in line with how neurologists in Europe were diagnosing their patients. “The good news is that the society now recognizes chronic migraine, the bad news is that it is so clinically restricted,” he says.

The term “transformed migraine” (TM) was first coined by Ninan Mathew, MD. Patients with this condition typically have a history of episodic migraine with a process of transformation—as the headache frequency increases, the associated symptoms become less severe and occur less often. It usually ends in a pattern of chronic daily headache that resembles chronic tension-type headache (CTTH) with some attacks of typical migraine superimposed.

According to the previously accepted Silberstein-Lipton criteria, TM must satisfy two conditions:
1. The headache is not a CDH that develops abruptly in a previously headache-free patient.
2. One of the following three exists: a prior history of IHS migraine, a period of escalating frequency, or concurrent superimposed attacks of migraine that meet the IHS criteria.
Silberstein and Lipton defined TM as previous episodic migraine and a gradual transformation to daily headache of any intensity for at least 15 days per month without medication overuse and usually a migraine without aura. The ICHD-II, though, does not use this term in its diagnostic criteria.

New Types of Headaches

Chronic migraine isn’t the only new addition to ICHD-II. “There are a number of disorders that were not previously defined that are defined now,” Dr. Lipton says. “These are well worth noting because they have applications for neurologists.” He also says the diagnostic entries are the most important part of the revisions, because “if you recognize the disorder, you get the treatment right.”

One of the most noteworthy steps forward is the inclusion of episodic paroxysmal hemicrania to go with chronic paroxysmal hemicrania, two conditions that were previously put together with cluster headaches.

The main difference in these conditions is that cluster headaches typically last 30-90 minutes during one to two episodes per day while the paroxysmal conditions last from 10-15 minutes but can occur up to 10 times a day. Cluster headaches are also more commonly seen in men, while hemicrania tends to appear more often in women. See Table 2 for the IHS criteria on cluster headache.

“The key thing to note about hemicrania is that it only responds to indomethacin,” Dr. Lipton says. “The disorder is far more common than previously believed, so including episodic paroxysmal hemicrania was seen as a big step forward.”

Another disorder now included is hypnic headache. This is nocturnal headache that occurs in patients over age 50 during REM sleep; it presents with a throbbing lateral pain sufficient to awaken the patient. Attacks can last from five to 60 minutes, although most incidents last half an hour. Lithium carbide is the recommended treatment for this condition.

Also joining the list of new entries is short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT). This condition is characterized by bursts of moderate to severe pain and tearing, red eyes. It also does not respond well to any known treatments. The condition is rare, with only a few known cases in the world. A similar condition, short-lasting unilateral neuralgiform headache attacks with autonomic symptoms (SUNA), was not included in ICHD-II. This one has very similar features and a location to SUNCT without the red-eye requirement and other autonomic features. More specific criteria can be found in the guidelines’ appendix.

Among the other possible primary headache diagnoses found in the miscellaneous section, we have “4.1 primary stabbing headache,” which replaces the old classification of “4. Miscellaneous headaches unassociated with structural lesions” and “4.1 Idiopathic stabbing headache.” This condition is characterized by transient and localized stabs of pain that occur spontaneously in the absence of an organic disease of underlying structure in the cranial nerves. Specifically, it must have head pain consisting of a single stab or a series of stabs not attributable to another disorder and must be exclusively or predominantly felt in the distribution of the first division of the trigeminal nerve (orbit, temple and parietal area), last up to a few seconds and recurring with irregular frequency ranging from one to many per day.

Changes to Old Definitions

The new additions are not the only part practitioners need to study. Many of the familiar terms now have new terminology and criteria that may change the diagnostic process.
The IHS system is divided into three parts to differentiate the multifarious headache presentations:

1. Primary headaches not attributed to another disorder.
2. Secondary headaches attributed to another disorder.
3. Cranial neuralgias, central and primary facial pain and other headaches.

Although chronic daily headache is one of the most significant diagnostic terms, it is not actually used in the guidelines. Instead, there are some new terms for headache and headache types, including: chronic migraine, trigeminal autonomic cephalalgia, hemicrania continua, infrequent and frequent episodic tension-type headache, new daily persistent headache, and medication overuse headache.

New daily persistent headache is now written as something quite different than the NDPH described in the system devised by Silberstein and Lipton in Neurology 1996;47:871-875. Under these new rules, NPDH is defined as having a relatively abrupt onset of an unremitting CTTH, while before this would have been termed as being transformed migraine. This presents a similar problem to the chronic migraine situation in that a new onset chronic daily headache that fulfills the migraine criteria for 15 days would no longer be designated as NDPH because the onset is the most important feature, with no consideration given to the features of the pain. This will likely make it confusing to practitioners who have the same term being used in two classifications for different disorders, which means researchers and clinicians will need to note which system they are using to validate their study design or diagnosis.

The new system also has several new terms for CTTH (see Table 3). Notice the new criteria involving mild, moderate and severe nausea. It is often hard to say where one should draw the line clinically between these three extremes, and also difficult to know if the choice will be validated or useful.

Finally, there were significant changes for persistent daily headache. It is important to note the new definition is different from the Silberstein-Lipton classification of this condition. According to the IHS rules, NDPH is associated with a relatively abrupt onset on an unremitting primary CTTH, while the old rules allowed for a new onset of this primary daily headache. This can make it hard to define a new onset chronic daily headache that fulfills the criteria for migraine in more than 15 days, because according to the IHS it is not NPDH. Treatment is often difficult for this condition, but Dr. Lipton says that NSAIDs often prove effective.

**Too Much Medication**

Medication Overuse Headache (MOH) is now included in the second part of the criteria (i.e., secondary headaches attributed to another disorder). It represents an interesting combination of a new addition and a change in terms. This is defined as a
headache for more than 15 days per month associated with frequent as-needed headache treatment. This term replaces “rebound” and all of the S-L diagnoses associated with medication overuse.

Overall, the criteria for MOH are that triptans or combinations (opioids, butalbital, caffeine) must be used for at least 10 days per month for more than three months and that simple analgesics must be used for at least 15 days per month for three months. It must also have a headache frequency that is markedly increased with rising drug use and, after detoxification, it goes back to episodic headache by two months. The guidelines instruct practitioners to assign a diagnosis of probable MOH if the patient is not yet detoxified or the medications are gone but the headache has not yet reverted.

In clinical practice, MOH is very difficult to diagnose because there are so many different types. Different drug classes for different periods of time create different headaches. According to the guidelines, here are the distinctions:

8.2.1 Ergotamine-overuse headache is CTTH with ergotamine use for more than 15 days per month.

8.2.2 Triptan-overuse headache is chronic migraine with triptan use more than 10 days per month.

8.2.3 Analgesic-overuse headache is CTTH with analgesic use for more than 15 days per month.

8.2.4 Combination-overuse headache is CTTH with combination medications for more than 10 days per month.

How clinically effective these distinctions are remains to be seen. The clinical relationships between drug intake (i.e., that triptan headache is chronic migraine while ergotamine is simple) or that there is a difference in frequency still needs to be determined as consistent. It is also not clear yet if two months is enough time to accurately gauge a rebound reaction.

A more streamlined system?

While it may be a challenge to learn the new IHS classification criteria, they do pool a wide range of fragmented data gleaned from recent medical research, putting them together in a streamlined system. Having all the rules together in one place eliminates the need to look at the S-L criteria for CDH as well as the various other sources for new concepts such as the idea that there is a clinical difference between frequent and infrequent ETTH based on both the frequency and degree of nausea. However, the new order of the rules may leave some practitioners confused and searching for the new definitions they have been diagnosing and treating for some time.

Many of the diagnoses, classification divisions and concepts still need to be validated by future studies, so it’s likely there could be an addendum to the IHS guidelines soon. And the guidelines themselves are likely to see sectional or partial revisions before 2020, because the Classification Subcommittee recommends the results of validation studies be implemented more frequently than once every 16 years.

Morris Levin, MD, chair of the American Headache Society’s classification committee, says, “I feel the ICHD-II is a wonderful document, but there is room for revision and methods of doing this and we intend to work within the system to bring about these changes.” In fact, the group could be meeting as soon as next year to discuss revising the guidelines for chronic daily headache.

The Silberstein-Lipton Criteria

Drs. Stephen Silberstein and Richard Lipton developed a system for chronic daily headache or near-daily headache lasting more than four hours for more than 15 days monthly that was adopted throughout the world (Neurology 1996;47:871-875). Cases were to be labeled with one of these designations: (1) transformed migraine, (2) chronic tension-type headache, (3) new daily persistent headache, or (4) hemicrania continua. Each would be further categorized as occurring either with or without medication overuse. Note that in this system it’s possible to have chronic headache with medication overuse, while the ICHD-II guidelines state chronic headache cannot exist with migraine overuse. Many American neurologists find this system easier to use because all migraine conditions are put together in one section, while the ICHD-II has each placed in different sections.