

Information for Patients

Chronic Daily Headache: An Overview

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Key risks for progression of headaches to chronic daily headache include:

1. **Acute medication use month after month at greater than 2 days per week**
2. **Stress and life events, particularly with unrecognized/untreated anxiety and/or depression**
3. **Poor Sleep, often influenced by all the other risk factors**
4. **Obesity**
5. **Caffeine, in smaller amounts than you may think!**

Chronic daily headache refers to headaches of almost any type that occur very frequently, generally at least 15 days per month for a period of six months or more. Chronic migraine is diagnosed when headache occurs greater than 15 days per month and migraine or pain killer use occurs at least 8 of those days. Patients with tension-type headaches and no migraine occurring 15 or more days per month are diagnosed with chronic tension-type headache.

The Importance of Achieving a Specific and Accurate Headache Diagnosis

Getting a specific headache diagnosis that is accurate is very important because it will have a major influence on matching your treatment plan to the type of headache and severity of illness. Diagnosis influences the treatment plan by directing the type of medical tests that are run, type of medications recommended and long-term management goals you and your practitioner select. More importantly, matching your beliefs about your headache type(s) to an accurate diagnosis is crucial, as otherwise test recommendations, medications and long-term behavioral management adherence is likely to decrease or not be started at all. For example, the plan of care will be very different for headaches diagnosed as sinusitis than for headaches diagnosed as migraine. But if you believe your headaches are due to sinus headache, while your practitioner believes you have migraine, try to resolve the differences so you can comfortably put recommendations into action. For those with "chronic" migraine a very different treatment regimen is likely to be offered than for those with less frequent "episodic" migraine. Incorrect diagnosis leads to an inappropriate treatment plan and lack of relief for the patient. With chronic migraine, wrong treatment may even lead to a worsening of the headache condition. An accurate diagnosis yields the best chance for appropriate treatment to relieve symptoms. A diagnosis you believe to be incorrect causes you to likely distrust the treatment, so communication of your opinion about your headache beliefs is critical to resolve differences.

Headache diagnoses and treatment plans are made on the basis of:

- Accurate total of any days with headache in an average month and accurate duration of headache with or without treatment. This identifies the likely headache syndrome.
- Pain characteristics such as location, severity, pain quality, and response to routine physical activity.
- Associated symptoms like sensitivity to noise (phonophobia), visual changes, and light sensitivity (photophobia).
- History of the illness (that is, when it started, how it has changed, and how long it takes to reach peak or worst pain/disability).
- Physical (especially exam of your head and neck muscles) and neurological exams especially your eyes.

Because symptom patterns tend to change over time—especially in the case of chronic headaches—the history is particularly important. Along with a physical examination, the history helps determine the need for specialized tests—either to rule out progressive or life-threatening problems or to confirm the diagnosis. An accurate diagnosis then guides physicians to a specific treatment approach, one that is most often based on scientific research.

Research shows that at least one-third to one-half of patients seen in specialty headache clinics began with occasional migraine attacks that gradually progress or transform into chronic migraine. Sometimes the migraine symptoms themselves will also transform over time. For example, the migraine symptoms might have initially involved severe throbbing pain on one side of the head accompanied by nausea and vomiting. After progression of the condition, headaches might occur on both sides of the head (bilateral) as a constant dull pain with or without nausea.

To assess if headaches are progressing, an accurate and detailed description of the headache characteristics, duration, and frequency are all very important. This history will help ensure an accurate diagnosis. An understanding of the specific causes or contributing factors that lead to progression, and then reversing them, is key to successful treatment.

What are common risk factors for progression from an episodic headache to a chronic headache condition?

There are several risk factors that put the headache patient at risk for exacerbation of their condition. Several of these are "modifiable" or conditions that the patient with their physician can work with to help prevent headaches from progressing. Modifiable risk factors are (1) medication overuse, (2) stress, (3) sleep disturbance, (4) obesity, and (5) caffeine. Some factors are not modifiable, such as a genetic predisposition. Therefore, it is important that patients work closely with their physician to help establish boundaries for those conditions that they have control over. Some modifiable risk factors are reviewed in detail below.

1. Medication overuse

An important and common cause of headache progression is overuse of certain headache medications. When taken often, the very medications used to treat tension-type and migraine headache attacks can cause episodic headache to progress into a chronic headache condition. The medications known to play a role in this process include:

- Analgesics combined with caffeine
- Caffeine
- Ergotamine
- Opiates
- Prescribed analgesics
- Over-the-counter analgesics
- Triptans

All these medications can be effective in treating episodic headache when used on an occasional basis. However, when used more than two days a week, they may transform and aggravate headache. The result is called medication overuse headache previously known as rebound or analgesic overuse headache.

For medication overuse headache, the pain usually improves when the acute medication is tapered and then discontinued. Within two months (and frequently sooner), the chronic headache pattern will revert back to the earlier episodic headache pattern or will remit. However, discontinuation of medications that are being overused should only be done under close supervision of your practitioner because serious side effects may occur. Some of these side effects may include temporary worsening of headache, seizures, agitation, sweating, among others. That said, typically to get the process initiated, reduction of 1 tablet per week of any over the counter medication overused is safe without risk, except for pain worsening, while waiting for advice. Changes in prescription medications should probably be directed by your provider.

Following discontinuation of medications that are being overused should improve the headache status over time. This improvement confirms that the medication was indeed part of the problem. Even when episodic headache remains, it is often much more responsive to conventional treatment after the medication overuse has

been eliminated. It is important to recognize that a history of medication overuse will put the patient at risk of future overuse. Therefore, many of these patients may benefit from a daily preventive therapy in order to reduce frequent use of acute medications.

2. Stress

Stress is the most commonly identified trigger for a headache in the average headache sufferer. Therefore, it is not surprising that frequent life changes and chronic daily stressors or "hassles" are also implicated in the development of chronic headaches. These stressors may result in anxiety or depression or occur more likely due to either condition. Recognition of these relationships can be key to developing an adequate treatment plan.

3. Sleep disturbance

Headache may be aggravated by frequent sleep disturbance. The most common sleep problem for headache sufferers is insomnia, including difficulty falling asleep, difficulty staying asleep, or poor quality "non-restful" sleep. Snoring is a specific risk factor for chronic headache in some patients. Though the cause is not known, snoring could disturb sleep quality or compromise breathing.

4. Obesity

Obesity is associated with increasing headache frequency. Although the mechanisms for this are not well understood, several factors likely play a role. Diet and exercise are an important part of maintaining healthy headache hygiene. Discuss exercise and weight loss plans with your practitioner if you feel that this is something that you may be able to address in trying to control your headaches or keep your headaches from progressing.

5. Caffeine

Caffeine is added to certain pain medications because it can be beneficial for migraine when used occasionally and in moderation, defined ideally as 2 days per week or less. Frequent use of caffeine can also be a risk factor for headache progression. Caffeine is the most widely-used mood-altering substance in America. It is present in many beverages, dietary supplements, and in some foods, such as chocolate. Many Americans consume caffeine daily with very little awareness that they are ingesting a drug with potent effects. For some headache sufferers, caffeine aggravates headache in much the same way that medication overuse can. If eliminating caffeine, decide whether to cold turkey or taper it. The former may be associated with severe temporary exacerbation of headaches. A taper can be associated with failure to stop the caffeine and milder temporary mood variability.

Steps that can help reduce the risk of headache progression

1. Avoid using over-the-counter and acute prescription headache medications more than two days a week, with rare exceptions. If this is difficult, a daily medication to prevent migraine attacks may be useful.
2. Minimize, better yet, eliminate use of caffeine.
3. Make lifestyle changes that help to manage stress including
 - o routine exercise
 - o reduce stress
 - o eat healthily or lose weight, if needed
 - o try relaxation therapy, cognitive therapy or other nonpharmacological approaches
4. Get sufficient sleep (a regular pattern of seven to eight hours of sleep per night).
 - o speak with your provider about persistently disturbed sleep- especially if you snore
5. Carefully follow your provider's recommendations for any treatment plan
6. Follow-up with your practitioner and keep a routine headache diary so you have an accurate account of your headache frequency, medication taken and response to treatment

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