

# Medication Overuse Headache

Medication Overuse Headache (MOH) occurs when acute (symptomatic) headache treatments are used too frequently. The end result is a worsening of headaches, which may become harder to treat, more resistant to preventive medications, and more chronic. In fact, medication overuse is one of the main risk factors for episodic headaches (less than 15 days monthly) becoming chronic (occurring more days than not). MOH was previously termed “rebound headache” or “transformed migraine.”

## Information and Frequently Asked Questions

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Yes, you can have too much of a good thing! In the case of headache treatment, it can get you into trouble.

MOH can complicate almost any type of headache, although it most frequently occurs in patients with migraine. Using migraine as an example, it's easy to understand how MOH can unintentionally develop. Migraine headaches are very disabling and the natural response is to take medication for them when they first start—the earlier in the process that an effective treatment is taken, the more likely that the migraine will be successfully treated. There are many options for the symptomatic treatment of migraine and most of them can lead to MOH. After finding an effective medication (or more than one medication), patients may find themselves taking “an extra dose” to make sure the headache doesn't come back. Often the fear and anxiety of having another migraine leads to medication overuse, as the headache sufferer reaches for his or her medication bottle at the slightest twinge of pain (which may not ultimately even turn into a headache). Pain medications may be used preemptively in situations known to trigger migraine, such as stressful situations. Over time, the receptors in the brain change in response to chronic exposure to medications, and it requires more and more medication to produce the same effect. Some people find that they are essentially taking acute medications for headache prevention and are going through them “like candy” because they feel the effect “wear off.”

## What medications cause MOH?

Almost any pain medication can lead to MOH. This includes over-the-counter products, particularly those containing acetaminophen and/or caffeine. Anti-inflammatory drugs vary in their likelihood of causing MOH. Ibuprofen poses a higher MOH risk than naproxen or aspirin. Combination preparations and triptans may lead to MOH while dihydroergotamine (DHE) has a lower risk. Opioids and narcotics are extremely problematic in that they lead to MOH as well as physical and psychological dependence. Common examples include butalbital, hydrocodone, oxycodone, oxymorphone, hydromorphone, meperidine, tramadol, codeine, fentanyl, and morphine.

## How do I know if I am at risk for MOH?

You may be at risk if any of the following situations apply:

- Taking symptomatic medications more than three times a week
- Being able to tell when your symptomatic medications wear off, then taking another dose
- Using over-the-counter medications “like candy”
- Needing a quantity override on your triptan prescription more often than not
- Your headache frequency gradually worsens while needing symptomatic treatment more often

**How is MOH treated?**

1. Stop the medications that are causing MOH (without substituting others!).

Over-the-counter medications can often be stopped “cold turkey,” knowing that the first few days will be difficult. Medications containing caffeine will produce caffeine withdrawal in addition to the effect of stopping the analgesic. Bridge therapy, such as a short course of corticosteroids, a long-acting triptan, or DHE, may be used on an outpatient basis. With severe overuse, hospitalization or outpatient infusion treatment may be needed. Discontinuing daily narcotics, opioids, and barbiturates may cause physical withdrawal so these drugs should not be stopped abruptly. Inpatient treatment to withdraw medications, break the headache cycle, and adjust preventive medications may be needed.

2. Begin preventive therapy for headaches.

Stopping the offending agent may be enough to control the headaches, or at least restore their baseline frequency. Starting a preventive medication while eliminating the overused medications often leads to more rapid control of headaches overall. Having the extra protection of taking a preventive medication also eliminates some of the anxiety associated with the possibility of the headaches returning.

3. Address the emotional and behavioral components.

“Reaching for the pill bottle” on a frequent basis is a counterproductive solution to managing headaches. Cognitive-behavioral therapy, stress-reduction techniques, lifestyle modifications, and addressing underlying anxiety and depression are often needed in combination with the other treatment strategies mentioned.

**Headache and Facial Pain Disorders Program**

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