

# Medication Overuse Headache: Overview, Risk Factors and Associated Conditions

## What is Medication Overuse Headache?

Medication Overuse Headache (MOH) occurs when a person is regularly overusing acute headache medications, resulting in increased headaches. The headaches should improve, or stop completely, once a patient stops using the offending drug.

Most patients with MOH have chronic migraine (15 or more headache days per month, with 8 or more days that are migrainous in nature). For instance, a patient may report that she experiences migraine attacks 10 days per month, but once she began using a certain drug, the headache usually recurred the very next day. This resulted in 20 days per month of headache. If a patient is overusing acute medications, but does not report an increase in headaches, they do not suffer from MOH.



**MO vs MOH:**

Medication overuse (MO) is defined as the use of acute medications for at least 10 days per month (or 15 or more days, depending upon the drug class). Unfortunately, MO is often confused with MOH, but not all patients with MO will suffer an increase in headache frequency.

## Which Medications Induce MOH?

Types of Medications	MOH Risk
<b>Opioids and Butalbital Medications</b>	Most likely to induce MOH
<b>Analgesics that contain a significant amount of caffeine</b>	Often induce MOH
<b>Triptans</b>	May induce MOH
<b>Simple NSAIDs or acetaminophen</b>	May induce MOH (but less likely than triptans)
<b>Gepants and Ditans</b>	Likely lower incidence of MOH

## Risk Factors for Developing MOH

Migraine and tension-type headache are more susceptible to MOH than cluster headache. People with migraine are more likely to experience MOH than those with “pure” tension-type headache without migraine features. Women may be at a higher risk than men, and those under age 50 probably experience MOH at increased rates.

- Other possible risk factors include:
- Cigarette smoking
- Sedentary lifestyle
- Ingestion of tranquilizers
- Depression and anxiety
- Substance abuse
- A family history of substance use disorder or MOH
- Chronic migraine or high frequency of episodic migraine

## Associated Conditions

Anxiety and depression are more prevalent in those with MOH, and OCD (a subset of anxiety) is significantly more prevalent. Patients with substance use disorders are at higher risk for overusing acute headache medications. There may be an association with a triad of MOH, obesity, and hypertension. Sleep disorders are also encountered more frequently.