# Medication Overuse Headaches

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**KEYWORDS**

• Medication overuse headache • Chronic daily headaches • Triptans • Ergots
• Opioids • Combination analgesics • Detoxification • Prophylactic medications

**KEY POINTS**

- Overuse of any class of drugs, Triptans, ergots, opioids, simple, or combination analgesics used to treat acute headaches, especially migraine, can lead to the development of medication overuse headache.
- People suffering from primary headache types, such as migraine or tension-type headache, are at higher risk to develop chronic headache following the overuse of acute headache drugs.
- Treatment of medication overuse headache requires withdrawal as an initial step, coincident initiation of preventive treatment, a multidisciplinary setting, and includes education of patients.
- Treatment strategies must include decisions on withdrawal of medications on an outpatient or in hospital setting and a detoxification plan that minimizes patient discomfort.

Medication overuse for headaches and subsequent medication overuse headache (MOH) is a growing problem worldwide. Epidemiologic data suggest that up to 4% of the population overuse analgesics and other drugs for the treatment of pain conditions such as migraine and that about 1% of the general population in Europe, North America, and Asia have MOH.[1] MOH is far easier to prevent than cure, and any agent used in the acute treatment of headaches can, with overuse, initiate MOH. These include the newer agents such as the Triptans as well as older agents including ergots, combination drugs, especially with barbiturates, opioids, and others to be detailed below. The recent admonition to treat headaches, especially migraines, early has compounded the problem and encouraged more frequent use of headache abortive medications, especially the Triptans, when beginning headaches may or may not evolve into full-blown headaches. Patients, eager to avoid full-blown headaches, especially disabling migraines, may subscribe to the "more is better" medical philosophy and become prone to MOH.

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## CRITERIA FOR DIAGNOSIS

MOH previously known as rebound headache, drug-induced headache, or medication-misuse headache has the following diagnostic criteria[2,3]:

A. Headache present for more than 15 days per month fulfilling criteria C and D.
B. Regular overuse of 1 or more drugs that can be taken for acute and/or symptomatic treatment of headache for more than 3 months.
C. Headache has developed or markedly worsened during medication overuse.
D. Headache resolves or reverts to its previous pattern within 2 months after discontinuation of overused medication.

The criteria were further revised in 2006 to remove the requirement for cessation of the headache or reversion to baseline after 2 months.[4]

## HISTORY

Although credit for describing MOH first has been given to Horton and Peters in 1963,[5] Peters himself had presaged the association of ergot withdrawal and headache in 1951.[6] As Isler points out, "warnings against worsening of headaches by "too strong drugs" are found at least from the seventeenth century onward (Maxwell 1679)."[7]

## PLACE IN CLASSIFICATION

From the seemingly endless number of headache entities, the International Classification of Headache Disorders (ICHD-2) in 1988,[8] updated in the year 2004,[2] offers a new understanding of headache disorders. It is the key to the diagnosis and treatment of headaches. It divides headaches into primary and secondary with 4 primary headache categories and 8 secondary headache categories. A primary headache disorder is not due to another condition, whereas a secondary headache disorder is due to another identifiable condition such as a brain tumor.

The primary headache disorders are

1. Migraine
2. Tension-type headache
3. Cluster and other trigeminal autonomic cephalgias
4. Other primary headaches

The secondary headache disorders are

1. Head and neck trauma
2. Cranial or cervical vascular disorders
3. Nonvascular intracranial disorders
4. Substance abuse or withdrawal disorders
5. Infection
6. Disorders of homeostasis
7. Disorders of the cranium, neck, eyes, nose, sinuses, teeth, mouth, or other facial or cranial structures
8. Psychiatric

The distinction between primary and secondary headaches is the key. There are 2 goals for any headache evaluation:

1. The recognition of primary headache syndromes for which treatment is available.
2. The recognition of secondary syndromes, which may constitute a threat to life or function.