

## **Medication overuse headache**

Some patients who suffer from episodic headache disorders such as migraine or tension-type headache, can progress to experience frequent, sometimes constant headaches for which they frequently use painkillers or other headache treatments. Over the past few decades it has become apparent that the frequent use of painkillers in the long-term may actually make headaches worse. A vicious cycle can develop in which the patient takes painkillers, the painkillers make headaches more frequent or more severe, thus more painkillers are required, worsening headache further.

Medication overuse headache is reported to be the third most common type of headache following tension-type headache and migraine and is thought to affect between 1-2% of the general adult population. This condition is more commonly seen in women than men and although it can occur at any age it is most common in people aged 30 to 60 years.

Medication overuse headache can also develop in patients with episodic migraines or tension-type headache when they start taking painkillers on a regular basis for another condition, for example for arthritis.

### **Symptoms**

Patients with medication overuse headache suffer from headache daily or on most days. The severity, type and location of the head pain experienced by patients in medication overuse headache can vary a lot between individuals, however in all cases the headaches must have developed or markedly worsened while the patient has been consuming painkillers frequently, usually on at least 10-15 days per month.

Patients who begin with tension type headache usually develop more frequent or constant tension type headaches, these are pressing/tightening headaches that affect both sides of the head. When patients who start with episodic migraines take frequent painkillers they usually continue to have migraine attacks but also develop regular, less intense tension-type headaches between their migraines. Whereas, when migraine patients frequently use triptan medications (such as sumatriptan, see below) they often get more frequent migraines, but do not develop the tension-type headaches between attacks.

In all cases painkillers provide only temporary relief and the headache soon returns. Some patients start taking painkillers or triptans routinely everyday to try to prevent headaches or migraine attacks, however this just makes the situation worse.

It has been reported that all acute treatments for headache including have the potential to make headaches worse, however the main medications involved seem to be the stronger painkillers containing medications called opioids (such as morphine, oxycodone), including combination products that contain a weak opioid called codeine, and migraine specific prescription medications called triptans (such as sumatriptan, zolmitriptan, eletriptan, naratriptan and rizatriptan).

The amount and frequency of medication intake required to cause medication overuse headache is not clear but it does seem to depend upon the type of painkiller being used. It is important to remember that medication overuse headache can develop following frequent intake of a combination of headache treatments, so switching between painkillers will not necessarily prevent worsening of headache. A list of the commonly used medications reported to cause medication

overuse headache, and the number of days of use thought to put patients at risk of developing this condition can be found in the table below, however medication overuse headache may develop in some patients who take less painkillers than this.

Name of medication	Examples of brand names of products available	Number of days of use per month required for 'overuse'
Paracetamol	Panadol, Panamax, Herron gold	15 days per month
<i>Anti-inflammatory medications</i>		
Ibuprofen	Nurofen, Panafen, Advil, Herron blue, Rafen	15 days per month
Aspirin	Aspro clear, Disprin	15 days per month
Diclofenac	Voltaren	15 days per month
Ketoprofen	Orudis, Oruvail	15 days per month
Naproxen	Naprogesic	15 days per month
<i>Triptan medications (for migraine)</i>		
Sumatriptan	Imigran, Sumatab, Sumagran	10 days per month
Zolmitriptan	Zomig	10 days per month
Naratriptan	Naramig	10 days per month
Eletriptan	Relpax	10 days per month
Rizatriptan	Maxalt	10 days per month
<i>Combination medications</i>		
Caffeine/paracetamol	Panadol Extra	10 days per month
Codeine/paracetamol	Panadeine, Mersyndol, Codapane	10 days per month
Codeine/paracetamol/doxylamine	Mersyndol night, Tensodeine	10 days per month
Codeine/aspirin	Codis, Aspalgin, Disprin Forte	10 days per month
Codeine/ibuprofen	Nurofen Plus, Panafen Plus	10 days per month
<i>Opioid medications</i>		
Morphine	Ordine, Kapanol,	10 days per month
Oxycodone	Endone, Oxycontin	10 days per month

## Treatment

At present the main treatment for medication overuse headache is to simply withdraw the overused medication. Unfortunately this can be quite difficult and distressing for patients as the headache often gets worse during withdrawal before it gets better. Consultation with a headache specialist is often required and in some cases patients are even admitted to hospital while they withdraw from their painkillers. Headache preventative medications can be started before the painkillers are withdrawn and sometimes headache preventative medications which were previously ineffective may become effective after withdrawal. Doctors may also prescribe other medications to help with symptoms during withdrawal, such as anti-nausea medications.

Although evidence is limited some behavioural interventions such as stress management, relaxation therapy and regular aerobic exercise may help to prevent headaches.

## Prevention

As medication overuse headache can be quite difficult to treat prevention is very important. Patients with migraines or tension-type headache should talk to their doctor or pharmacist about which types of medications are best to use for their headaches and how often it is safe to take them. In general it is best to use the minimum amount of painkillers possible, no more than 10 days per month. Combination painkillers that contain codeine, such as Panadeine (including Panadeine Extra and Panadeine Forte), Mersyndol and Nurofen Plus are often better avoided all together for most patients. Patients who experience frequent headaches can talk to their doctor about the use of headache preventative medication, which may reduce the need for painkillers in the first place.