

Cluster Headaches

Cluster headaches occur as attacks of severe, one-sided headaches. Typically, a number of attacks occur over several weeks (a cluster of attacks). They then usually go for weeks, months or years until a next cluster develops. An injection with a medicine called sumatriptan will usually relieve each headache. Some medicines are also used which aim to prevent the headaches.

What are cluster headaches and what are the symptoms?

Cluster headaches consist of attacks of severe one-sided pain in the head. It is sometimes called migranous neuralgia. Each attack develops suddenly, usually without any warning. Typically, you feel the pain mainly in or around one eye or temple. The pain may spread to other areas on the same side of the head. The pain may be 'burning' or 'boring'. Each attack lasts 15-180 minutes, but most commonly 45-90 minutes. Attacks may occur from once every two days, to eight times a day.

During each attack, one or more of the following symptoms also usually occurs: redness and watering of the eye; a runny and bunged up nose; sweating of the face; swelling of the eyelids; drooping of the eyelid; constriction of the pupil in the eye.

The pain during an attack can be so severe that you are likely to become restless, agitated, and unable to lie down. Some people even bang their head against the wall in frustration with the pain. Attacks often occur at night and wake you from sleep.

Attacks occur in clusters (bouts). That is, a number of attacks of pain occur over a period of time and then stop. During a cluster, each attack of pain usually occurs on the same side of the head. Each cluster of attacks usually lasts for several weeks or months. Each cluster is usually separated by months or years of remission (where no attacks occur). However, how often clusters occur can vary greatly from case to case. For example:

- A fairly typical case is for a cluster to last 6-12 weeks once a year, or every two years, and at about the same time of year.
- Some people have more frequent clusters, some less, than the above typical situation.
- In a small number of cases only one cluster of attacks ever occurs.
- In about 1 in 10 cases, attacks continue without any remission periods. (This is called chronic cluster headache.)

Who gets cluster headaches and what causes them?

Cluster headaches are uncommon. They affect about 1 in 1000 people. Men are five times more commonly affected than women. Anyone can be affected. The first cluster typically develops between the ages of 20-40 years, but it can start at any age. The cause is not known. Research suggests that a part of the brain called the hypothalamus

seems to become very active during each attack. However, what causes this overactivity is not known. There may be some genetic part as in about 1 in 20 cases the condition also occurs in some other close relatives.

Most cluster headaches occur for no apparent reason. However, some people find that something may 'trigger' a headache. If you find that something triggers a headache, then it is best to avoid it for the duration of a cluster period (until you are in remission). For example:

- Alcohol. Some people find that a headache often occurs within an hour or so of having a drink. It is usually advised to stop drinking alcohol for the duration of a cluster period.
- Hot temperatures may be a trigger (such as exercising in a hot room, or a hot bath).
- Strong smelling substances such as solvents, perfumes, petrol, etc.

How is cluster headaches diagnosed?

The diagnosis is based on the typical symptoms. There is no test to prove the diagnosis.

What is the treatment for cluster headaches?

Treatment is divided into treatments to relieve ('abort') each headache, and treatments aimed at preventing the headaches.

Treating each headache

Ordinary painkillers do not work. Generally, if you take an ordinary painkiller, it takes too long to work as the headache will usually have gone before the painkiller takes effect.

Sumatriptan given by injection just under the skin is the most widely used drug to 'abort' a headache. People with cluster headaches can be shown how to use this injection themselves. Use it as soon as a headache occurs. Sumatriptan is a 'triptan' medicine that is used to treat migraine and cluster headaches. It is not a painkiller. Triptans work by interfering with a brain chemical called 5HT. An alteration in this chemical is thought to be involved in migraine and cluster headaches. Some points about sumatriptan injection:

- It works quickly (within 10 minutes or so) to ease the headache in most affected people.
- The adult dose is a 6 mg injection for each headache. The maximum dose in 24 hours is two 6 mg injections (12 mg) with a minimum interval of one hour between the two doses.
- Side-effects sometimes occur, but if they do are generally mild and do not last long. They include feeling sick, dizziness, tiredness, and dry mouth. A minority of people also develop a warm-hot sensation, tightness, tingling, flushing, and feelings of heaviness or pressure in the face, arms, legs, and occasionally the chest.

- Some people should not take sumatriptan. For example, some people with heart disease, stroke disease, or peripheral vascular disease.

Sumatriptan by injection is usually the 'first-line' treatment. (Other treatments that have sometimes been used include: sumatriptan nasal spray, breathing 100 percent oxygen, ergotamine injections, and lignocaine nasal spray. In general, these are not as good as sumatriptan injections and are less commonly used these days.)

Preventing cluster headaches

Some medicines are used which aim to prevent cluster headaches. You may be advised to take one of these medicines. If used, they are taken every day throughout a cluster (and then stopped when the cluster is over). You may be advised to take one long-term if you have chronic cluster headaches. It is difficult to say exactly how good they work at reducing the frequency and/or severity of headaches. This is because there is a lack of large research trials which have studied these treatments. However, smaller research studies have shown encouraging results. Briefly:

- Verapamil is the most commonly used treatment. It is a medicine that is normally used to treat heart problems. It is not clear how it works for cluster headaches. The doses used are often higher than those used for heart problems, and you may need heart tests such as ECG before increasing to high doses.
- Lithium is sometimes used. This medicine is commonly used to treat manic-depression. Again, it is not clear how it may help cluster headaches. You need regular blood checks to measure the level of lithium in the blood to make sure the dose is correct.
- Methysergide is used to prevent migraine and cluster headaches. You should not take it for more than six months as there is a risk of possible serious side-effects.
- A steroid medicine may be given at the beginning of a cluster. This may help quickly to prevent further headaches, but you should not take it long-term due to side-effects. In some cases, a steroid medicine is started at the same time as one of the above medicines, but stopped after a few weeks when the other medicine has built up its effect.
- Various other medicines are sometimes used. Also, research continues to find better treatments for this very painful condition.

Further help and advice

OUCH (UK) - Organisation For The Understanding Of Cluster Headaches In The UK
C/O Errington Langer and Pinner, Pyramid House, 956 High Road, London N12 9RX
Helpline: 0161 272 1702 Web: www.clusterheadaches.org.uk

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