

Tension headache

Peer reviewed by **Dr Hayley Willacy, FRCGP**

Last updated by **Dr Colin Tidy, MRCGP**

Last updated 16 Mar 2023

✓ Meets Patient's **editorial guidelines**

Est. **8 min** reading time

Tension headache is the most common form of headache. Painkillers, taken only when needed for the pain, work well in most cases. Attention to lifestyle factors, such as stress, posture and exercise, may help to prevent headaches. Medication to prevent headaches may help those who have frequent tension-type headaches.

At a glance

- A tension headache is the most common type of headache affecting both sides of the head.
- Symptoms include a band of mild to moderate pain across the forehead or a sensation of tightness.
- Tension headaches can last from 30 minutes to several days, but a few hours is most common.
- Common triggers include stress, anxiety, tiredness, eye strain, hunger, or changes in caffeine/alcohol intake.
- Over-the-counter painkillers like paracetamol or ibuprofen can help relieve tension headaches.
- See a doctor if your headache lasts more than two days or is accompanied by unusual symptoms.

This summary has been automatically generated from the article content to help readers quickly understand the key points.



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

What is tension headache?

Tension headaches are the most common type of **headache** people experience and tend to affect both sides of the head. It's difficult to say precisely how common, as estimates from different studies have varied wildly, but most people will have a tension headache at some point in their lives.

Who is affected by tension headaches?

Somewhere around half of adults experience tension headaches at some time in their lives, and about 1 in 40 adults experience chronic tension headaches (headaches on more than half of the days for three months or more) – although some of these cases may be medication-overuse headaches (medication-induced headaches) and it may therefore be an overestimation.

Tension headaches are slightly more common in females and the average age of onset is 25–30 years.

Tension headaches are called episodic tension headaches if they occur on less than half of the days in a month. They are called chronic tension headaches if they occur more than half of the time.

Tension headache symptoms

Tension headaches are usually felt as:

- A band of mild to moderate pain across the forehead.
- Pain that worsens as the day goes on.
- Sensation of tightness around the hat-band area.

There are usually no other symptoms. Some people don't like bright lights or loud noises, and don't feel like eating much when they have a tension headache.

How long do tension headaches last?

They can last for anything from 30 minutes to several days, although a few hours is most common. They can be uncomfortable and tiring, but they do not usually disturb sleep. Most people can carry on working with a tension headache. They are not



usually made worse by physical activity, although it's not unusual to be a bit sensitive to bright light or noise.

What causes tension headaches?

The cause is not clear. Some headaches occur due to muscular tension; however, many tension headaches develop for no apparent reason. Some headache triggers include:

- Emotional tension, **anxiety**, **tiredness** or stress.
- Muscle contractions in the head and neck.
- Eye strain.
- Hunger.
- Physical factors such as bright sunlight, cold, heat, noise, etc.
- Caffeine.
- Alcohol.
- Dehydration.

Your genetic make-up may also be a factor. So, some people may inherit a tendency to be more prone to develop tension headaches more easily than others when stressed or anxious.

Tension headache is a primary headache – which means that it is not caused by other conditions. So, if you have a tension-type headache, a doctor's examination will be normal apart from the muscles around the head perhaps being a little tender when a doctor presses on them. Any tests that may be done will also be normal.

Are any other headaches similar to tension headaches?

Some common conditions can cause a headache similar to a tension headache. These include a **high temperature (fever)**, which may cause a similar headache. A similar headache is also common if you don't have caffeine for a while when you were used to drinking lots of caffeine-rich drinks, such as a lot of coffee. This is a caffeine withdrawal headache.



Tension headache treatment

Painkillers

Painkillers often work well to ease a tension headache. **Note:** you should not take painkillers for headache for more than a couple of days at a time. Pain relievers that are used include:

- **Paracetamol**, which often works well. It is best to take a full dose as soon as a headache starts. This may ward off the headache better than treating it after it has fully developed. You can take a second dose after four hours if necessary.
- **Anti-inflammatory painkillers**. These include ibuprofen which you can buy at pharmacies. You need a prescription for other types, such as diclofenac and naproxen. Typically, anti-inflammatory painkillers, rather than paracetamol, probably ease the pain in more people with headaches.
- **Aspirin**. Due to a high risk of causing stomach side-effects, aspirin should only be taken if you do not get relief from paracetamol or anti-inflammatory painkillers. **Note:** teenagers and children under the age of 16 years should not take aspirin.

Opiate painkillers such as **codeine**, **dihydrocodeine** and **morphine** are not normally recommended for tension headaches. This includes combination tablets that contain paracetamol and codeine, such as co-codamol. The reason is because opiate painkillers can make you drowsy. They are also the most likely type of painkiller to cause medication-overuse headache if used regularly (described earlier). People who take opiate painkillers are also at increased risk of developing chronic tension headache.

Lifestyle changes

The best approach is to try to work out what triggers your headache. This can be done by making changes to your lifestyle. This includes:

- Going for a walk or doing muscle relaxation activities such as yoga.
- Taking a break.
- Having a neck and shoulder massage.
- Using a hot flannel on your neck or having a warm bath.



- Drinking less caffeine.
- Keeping hydrated.
- Eating slow-releasing energy foods.
- Reducing the number of pillows you sleep on.
- Getting plenty of sleep.
- Avoiding excessive noise.

Occasionally tension headaches are caused by reading in low light for long periods.

When to see a doctor about tension headaches

You should see a doctor if your tension headache has lasted more than two days. Taking painkillers for more than this time can cause you to develop a medication-overuse headache.

The vast majority of headaches are harmless but some headaches may indicate a serious underlying cause so see a healthcare professional for advice and in case you need any tests to be sure of the cause of the headaches. See the leaflet on **Headache** for more information.

Preventing tension headaches

Keep a diary

It may help to keep a headache diary if you have chronic tension type headaches. Note when, where and how bad each headache is, and how long each headache lasts. Also note anything that may have caused it. A pattern may emerge and you may find a trigger to avoid. For example, hunger, eye strain, bad posture, stress, anger, etc. Also try to take note of things that made it better, and things that were different on the days you were well, which may help point to a clue regarding what was wrong.

Stress management

Stress is a trigger for some people who develop tension headaches. Avoid stressful situations whenever possible. Sometimes a stressful job or situation cannot be avoided. Learning to cope with stress and to relax may help. Breathing and relaxation



exercises, or coping strategies are great **stress management** tools and may ease anxiety in stressful situations and prevent a possible headache. There are books and tapes which can help you to relax. Sometimes a referral to a counsellor or psychologist may be advised.

Regular exercise

Some people with frequent headaches say that they have fewer headaches if they exercise regularly. If you do not do much exercise, it may be worth trying some regular activities like brisk walking, jogging, cycling, swimming, etc. (This will have other health benefits too apart from helping with headaches.) It is not clear how exercise may help. It may be that exercise helps to ease stress and tension, which can have a knock-on effect of reducing tension headaches. It may also improve posture and neck muscle tension.

Take medication

Amitriptyline is the medicine most commonly used to prevent tension headaches. This is not a painkiller and so does not take away a headache if a headache develops. It is an antidepressant medicine and you have to take it every day with the aim of preventing headaches.

Once the headaches have been reduced for 4–6 months, the amitriptyline can be stopped. Other medicines are sometimes tried if amitriptyline is not suitable or does not help.

The time to consider taking medication for the prevention of headaches is not clear. If you are regularly having tension headaches more than four times a month then preventative treatment is best before headaches become very frequent. This may prevent frequent episodic tension headaches from becoming chronic tension headaches.

What is the risk of developing medication-overuse headache if I have tension headache?

Medication-overuse headache is caused by taking painkillers (or triptan medicines) too often for tension headaches or migraine attacks. The body responds to this by increasing the number of pain receptors in the head, so that the head becomes excessively sensitive and pain is felt all the time. If you find that you are having



See the separate leaflet called **Medication-overuse Headache (Medication-induced Headache)**.

How can I be sure it is not a more serious type of headache?

With tension headaches, you are normally well between headaches, and have no other ongoing symptoms. A doctor diagnoses that headaches are the tension type by their description. Also, there is nothing abnormal to find if a doctor examines you (apart from some tenderness of the muscles around the head when a headache is present).

Tests are not needed unless you have unusual symptoms, or something other than tension headache is suspected.

Other symptoms

The kind of symptoms that might make a doctor wish to do further tests to make absolutely sure your headache is not serious include:

- You have had a significant head injury in the previous three months.
- Your headaches are worsening and accompanied by high temperature (fever).
- Your headaches start extremely suddenly.
- You have developed problems with speech and balance as well as headache.
- You have developed problems with your memory or changes in your behaviour or personality as well as headache.
- You are confused or muddled with your headache.
- Your headache started when you coughed, sneezed or strained.
- Your headache is worse when you sit or stand.
- Your headache is associated with red or painful eyes.
- Your headaches are not like anything you have ever experienced before.
- You have unexplained **nausea or vomiting (sickness)** with the headache.



- You have low immunity – for example, if you have **HIV**, or are on oral steroid medication or medicines which suppress the immune system.
- You have or have had a type of cancer that can spread through the body.

Dr Mary Lowth is an author or the original author of this leaflet.

Frequently asked questions

Can tension headaches be mistaken for other conditions that cause headaches?

Yes, certain common conditions can cause headaches with symptoms similar to tension headaches. For example, having a high temperature (fever) can lead to a similar headache. Also, if you regularly consume a lot of caffeine and then stop, you might experience a caffeine withdrawal headache, which can feel like a tension headache.

Are there any alternative treatments or relaxation techniques that can help with tension headaches?

Beyond conventional painkillers, lifestyle changes and relaxation techniques can be very helpful. These include going for a walk, engaging in muscle relaxation activities like yoga, taking a break, getting a neck and shoulder massage, applying a hot flannel to your neck, or taking a warm bath. Ensuring you stay hydrated, eating slow-releasing energy foods, and getting enough sleep can also contribute to relief.

How often should I use painkillers for tension headaches before I need to worry about medication-overuse headache?

You should not take painkillers for headaches for more than a couple of days at a time. If you find yourself needing to take painkillers frequently, especially on most days, it increases your risk of developing a medication-overuse headache. If this happens, you should speak with a doctor for advice.



When should I start considering preventative medication for frequent tension headaches?

If you are regularly experiencing tension headaches more than four times a month, it is worth considering preventative treatment. This approach aims to reduce the frequency of headaches before they become very common, potentially preventing frequent episodic tension headaches from developing into chronic tension headaches.

Is it safe for teenagers and children to take aspirin for tension headaches?

No, aspirin should not be given to teenagers and children under the age of 16 years due to a high risk of causing stomach side-effects. For this age group, paracetamol or anti-inflammatory painkillers like ibuprofen are generally preferred if suitable.

These questions and answers have been generated from the information in this article.

Further reading and references



- **Prakash S, Patel P**  (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC28721092/>); Hemicrania continua: clinical review, diagnosis and management. J Pain Res. 2017 Jun 29;10:1493-1509. doi: 10.2147/JPR.S128472. eCollection 2017.
- **Headache - assessment**  (<https://cks.nice.org.uk/topics/headache-assessment/>); NICE CKS, March 2022 (UK access only)
- **National Headache Management System for Adults 2019**  (https://bash.org.uk/wp-content/uploads/brizy/custom_files/01_BASHNationalHeadache_Management_SystemforAdults_2019_guideline_versi.pdf); British Association for the Study of Headache (2019)
- **Headache - tension-type**  (<https://cks.nice.org.uk/topics/headache-tension-type/>); NICE CKS, July 2022 (UK access only)



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

About the author [View full bio](#)

Dr Colin Tidy, MRCGP

General Practitioner, Medical Author

MBBS, MRCGP, MRCP (Paediatrics), DCH

Dr Colin Tidy is an NHS Doctor, based in Oxfordshire.

About the reviewer [View full bio](#)

Dr Hayley Willacy, FRCGP

General Practitioner, Medical Author

MBChB (1992), DRCOG, DFFP, MRCOG (Part 1) MRCGP (2007), DFSRH (2013), MSc - medical education (2020)

Dr Hayley Willacy was an NHS GP working in northwest England, who retired from clinical practice in 2022 after 30 years.

Article history

The information on this page is written and peer reviewed by qualified clinicians.

Article also available in [English](#), [German](#), [Spanish](#), [French](#), [Italian](#) (<https://it.patient.info/brain-nerves/headache-leaflet/tension-headache>), [Portuguese](#) (<https://pt.patient.info/brain-nerves/headache-leaflet/tension-headache>), [Hindi](#) (<https://hi.patient.info/brain-nerves/headache-leaflet/tension-headache>), [Hebrew](#) (<https://he.patient.info/brain-nerves/headache-leaflet/tension-headache>), [Arabic](#) (<https://ar.patient.info/brain-nerves/headache-leaflet/tension-headache>), and [Swedish](#) (<https://sv.patient.info/brain-nerves/headache-leaflet/tension-headache>).

• Next review due: 7 Feb 2028

• 16 Mar 2023 | Latest version

Last updated by

Dr Colin Tidy, MRCGP

Peer reviewed by



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

Dr Hayley Willacy, FRCGP



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.