

Headache



Brain & Spine
Foundation

A guide for patients and carers

The **Brain & Spine Foundation** provides support and information on all aspects of neurological conditions. Our publications are designed as guides for people affected by brain and spine conditions – patients, their families and carers. We aim to reduce uncertainty and anxiety by providing clear, concise, accurate and helpful information and by answering commonly asked questions. Any medical information is evidence-based and accounts for current best practice guidelines and standards of care.

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(In the middle of this booklet is a pull-out headache diary)

Introduction

This booklet provides information on headache in adults. It discusses the different types of headache, possible causes and treatments, and how lifestyle can be affected. Headaches affect each person differently and because there are so many different types, your doctor or consultant will be in the best position to offer advice and information to meet your individual needs. This booklet also provides information on possible treatments, recovery, rehabilitation and returning to everyday activities. Sources of further support and information are listed in the Useful contacts section ([see page 37](#)). References are available on request.

Common questions

What are headaches?

Headaches are an extremely common health complaint, with 90% of men and 95% of women having at least one headache per year. It is usual to have at least the occasional headache. The majority of headaches are not serious and can be improved by simple lifestyle measures like drinking enough water, ensuring you get enough rest, and through the sensible use of over-the-counter painkillers.

Are headaches dangerous?

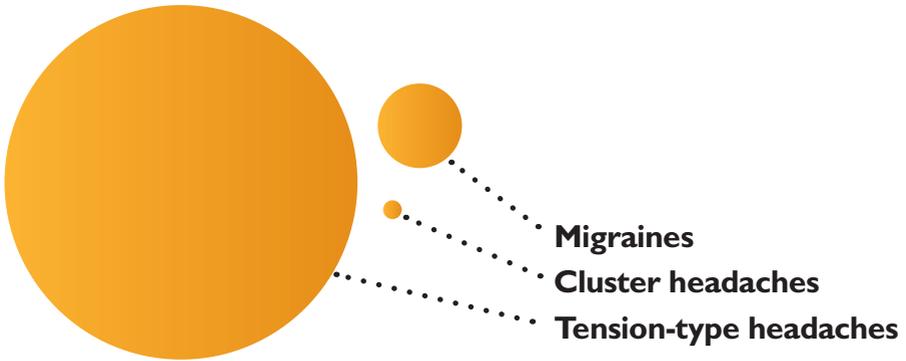
The vast majority of headaches are not from a serious cause, and whilst they may be very painful and may also be debilitating, they are not normally dangerous. Very occasionally a headache can be a symptom of serious disease, which is why so many people are concerned enough to seek advice from their GPs. Some of these people are referred to neurological clinics for further investigation. It is the role of the doctor, both in general and specialist practice, to make a clear diagnosis and suggest either further investigations or appropriate treatments. Headache is one of the most common problems seen in GP surgeries and neurological outpatient clinics.

What are the different types of headache?

Headaches can be split into two types: primary headaches and secondary headaches.

Primary headaches are headaches that are not due to an underlying health problem. Tension-type headaches, migraines and cluster headaches are common examples. Tension-type headaches are the most common kind of headache, and are what most people will experience.

Proportions of people who suffer from primary headaches



Secondary headaches are headaches caused by an underlying illness, an injury or a drug. Treating the primary illness or injury that is causing the secondary headache can often offer relief.

Headaches can also be described as **chronic** or **episodic**. Chronic means that headaches are experienced frequently over a long period of time, whereas episodic means that headaches occur less frequently and irregularly.

What causes headaches?

Certain lifestyle factors are thought to trigger primary headaches for some people. Such factors include drinking caffeine, dehydration, tension, poor sleep, and changes in atmospheric (air) pressure. Anxiety and stress are also likely to make a person more vulnerable to getting a headache.

Secondary headaches can occur for a number of reasons, depending on the underlying health problem. Both illness and injury can lead to irritation or stretching of the coverings that surround the brain, and irritation of the blood vessels at the base of the brain. When this happens, one of the possible symptoms is a headache. Medication can sometimes cause headaches if it is taken too often or if it affects hormone levels.

How is the diagnosis made?

Keeping a headache diary can be very helpful for getting the right diagnosis (for an example, see the pull-out Headache diary in the centre of this booklet).

Most kinds of headache can be diagnosed from a patient's description of the type of pain, along with the headache history and pattern, and a physical examination by the doctor.

Tests are usually not necessary if the headache follows a standard pattern, particularly if the person feels better after reassurance and simple treatment.

A person who does not improve or who has unusual features to his or her attacks may have to undergo a further review. Most tests that are carried out are done to rule out any health conditions that could be causing headaches, in order to support a diagnosis of a primary headache disorder.

Blood tests

Simple blood tests can sometimes help to identify any changes or abnormalities which may be causing headache.

A test called an ESR (erythrocyte sedimentation rate) can be used to identify inflammation in the body, and is helpful in diagnosing **temporal arteritis** (see page 27).

Occasionally, it is necessary to do other blood tests to rule out thyroid or kidney problems.

Scans

CT, MRI and MRA scans of the brain are useful in the assessment of causes of headache such as subarachnoid haemorrhage, cerebrospinal fluid (CSF) leaks, and abnormal growths. It should be stressed that the vast majority of scans prove to be normal, but also that having a brain scan is not always the most appropriate investigation for every individual. (You might be interested in reading our [Brain and spine scans fact sheet for further information.](#))



Lumbar puncture

Examination of the cerebrospinal fluid (the fluid that surrounds the brain and spine) is done by carrying out a lumbar puncture. It is a specialist investigation, which is only undertaken in hospital and nearly always after a scan has been performed. A lumbar puncture can help doctors to check for signs of infection, bleeding or raised intracranial pressure. This will only be done if a person's symptoms and circumstances lead doctors to look for very specific headache conditions, such as meningitis, idiopathic intracranial hypertension (IIH) or spontaneous cerebrospinal fluid (CSF) leaks. (You might be interested in reading our [Lumbar puncture fact sheet for further information.](#))

Tension-type headache

Tension-type headache is the most common type of headache. Most people are likely to have experienced tension headaches in their lifetime. They can occur at any age, but are most common in teenagers and adults, and are more common in women.



Up to 80% of people (or eight people in every 10) experience tension-type headache from time to time. The name 'tension-type' does not mean that these headaches are caused by stress or muscle tension, it is simply the term used to describe the headache pattern.

In this type of headache, the pain usually affects both sides of the head and feels like a tightening or pressing pain rather than a throbbing pain. There is little, if any, nausea (feeling sick). Neck muscles may also feel tight along with pressure behind the eyes. Tension headaches should not usually be too disabling or prevent you from going about your everyday activities. If along with the headache you dislike light, sound, feel sick or have to stop what you are doing it is more likely you may be experiencing a migraine ([see page 10](#)).

Causes

We don't know exactly what causes tension-type headaches. Brain chemicals (neurotransmitters) and the sites in the brain that sense and react to these chemicals (receptors) are thought to play a part. Stress and muscle tension are known to make them worse.

Certain environmental factors have been known to trigger or worsen tension-type headaches, including:

- stress and anxiety
- tiredness
- lack of physical activity
- dehydration
- certain smells
- squinting
- poor posture
- missing meals
- caffeine (found in coffee, tea and energy drinks) and coffee withdrawal
- noise
- bright sunlight

Treatments

These headaches are usually relieved by over-the-counter painkillers, such as paracetamol and ibuprofen. It is best to avoid painkillers containing codeine as they can cause headaches if taken too often. However, if your headaches happen at least two to three times a week, you may wish to talk to your GP about more effective treatment.

Be careful not to take more than the recommended dose of painkillers as this can lead to **medication overuse headaches** (see page 23). If you have been taking any form of painkiller regularly for any condition (not just headache), it is always best to talk to your GP about when it would be safe to stop taking them.

Prevention

If you experience frequent tension-type headaches, it will be helpful to keep a diary to try to identify what could be triggering them (an [example headache diary can be found in the centre of this booklet](#)). It may then be possible to alter your diet or lifestyle to help prevent them occurring as often.

Healthy lifestyle habits for improving tension-type headache

Regular exercise is important for general health and wellbeing, and can reduce stress levels. Tension-type headache is more common in people who get little exercise than those who are active. You can start by exercising 'little and often', gradually building up what you are doing as your body becomes used to it. However, take care to avoid anything too strenuous too soon as this can actually trigger headaches.

Stress-coping strategies, such as cognitive behavioural therapy (a type of talking therapy) and relaxation techniques like meditation and yoga, may be effective non-drug approaches to improve headaches for some people.

Maintaining good posture will help reduce muscle stiffness and tension that is often linked with headache. For the same reason, massage may also be helpful. Sitting in a fixed position for a long time can make tension-type headaches worse. Consider your job role – using computers, hairdressing and long-distance driving all encourage us to stay in one position for long periods.

Take regular breaks to stretch your muscles and change your posture. Yoga, Pilates and Tai Chi can also be helpful.

Getting enough sleep and maintaining a regular sleeping pattern will mean you are less likely to develop a headache.

Keeping hydrated is very important, as dehydration is a well-known headache trigger. Official guidance is to try to drink six to eight glasses of water every day (sugar-free soft drinks, herbal and fruit teas are also good alternatives).

Regular mealtimes will keep your blood sugar levels and your energy levels more stable. Try to avoid very long gaps between meals.

Some people find that acupuncture helps and that a course of up to 10 sessions of acupuncture over five to eight weeks may help to prevent chronic tension-type headaches. However, more research is needed to fully understand exactly how acupuncture works. Acupuncture is well tolerated by patients, meaning it is very unlikely to cause any harm when done by a trained professional.

Sometimes, antidepressant medications may be given to help prevent chronic tension-type headaches. This is because these types of drugs work on the receptors and neurotransmitters in the brain which are thought to trigger the headaches. However, there is limited evidence to show how effective these medications are. For further advice, talk to your GP.

Migraine

A migraine is an intense, often debilitating, headache that may be accompanied by other symptoms such as feeling sick (nausea), being sick (vomiting), visual problems and an increased sensitivity to light, sound, smell or movement.

Migraines commonly last between four hours and three days. Some people experience migraines several times a week. Others might only experience attacks every few years. If you experience headaches on 15 days or more each month, and eight of these headaches are migraines, this is known as chronic migraine.

Although migraines are not life-threatening and do not shorten people's life expectancies, they can have a significant impact on the quality of people's lives. Repeated migraines may also have an impact on family life, social life and employment.

There are two main types of migraine:

- migraine **without aura** (sometimes called **common migraine**)
- migraine **with aura** (sometimes called **classical migraine**).

Migraine aura

Aura is the name given to part of the migraine made up of a range of temporary neurological symptoms. Around a third of people who experience migraines experience an aura before their attack. Whilst most auras happen before the migraine, they can occur during or even after the headache stage.

The main symptoms of an aura are visual problems such as blurred vision (difficulty focussing), blind spots, flashes of light, loss of half of the field of vision (hemianopia) or a zigzag pattern (fortification spectrum) moving from the central field of vision towards the edge.

Other aura symptoms can include tingling sensations (pins and needles) and numbness in the face, or in the arms and legs; speech problems, such as slurred speech; dizziness; weakness on one side of the body and, very rarely, loss of consciousness. Symptoms relating to sensation usually begin in one place and move over time – this is a useful way to distinguish from the symptoms of a stroke which can be similar but typically have a sudden, abrupt onset. With migraine, tingling may begin in the fingers of one hand and, over a matter of minutes, travel up the arm into the face or down into the leg, and numbness may then follow.

Symptoms

The main symptoms of migraine are an intense, throbbing or pounding headache often affecting the front or one side of the head, feeling sick (nausea), being sick (vomiting), and an increased sensitivity to light, smells and sound. The throbbing headache is often made worse by the person moving. Many people with migraine choose to go to bed to avoid these stimuli. Each migraine can follow a different pattern and this pattern often changes over the course of a lifetime.

Other symptoms of migraine might include poor concentration, food cravings, feeling hot or cold, sweating (perspiration), dizziness and an increased need to

pass urine. This can occur before, during or after the migraine attack. People might also experience stomach aches and diarrhoea.

It is common for people to feel tired for up to two or three days after a migraine.

Causes

We do not know the exact cause of migraine, but researchers believe that the answer lies in genetics. Migraines tend to run in families, but this does not mean that everyone in the family will get them. Migraine is common in immediate blood relatives (parents, children, brothers and sisters). It is suggested that a mix of several different genes may influence whether or not a person will develop migraine, and a great deal of research is going on to try to identify which genes these are. One very rare form of migraine, called familial hemiplegic migraine, has been traced to specific genes.

Women are about three times as likely as men to experience migraines. This is thought to be largely due to hormonal factors. Women might find that they experience a migraine just before, or just after, the start of their period. Some women find that oral contraception (the pill) can trigger migraines, but it can also be useful to treat certain types of migraine. It might be that women experience migraines as they approach the menopause, or that hormone replacement therapy (HRT) triggers migraines ([see page 25](#)).

Migraine triggers

There are various factors which might trigger a migraine. Each person is different and you should try to identify which factors might apply to you and try to avoid them. Many people find that they are able to tolerate one of the triggers on its own, but a combination can bring on an attack.

Physical and emotional triggers include:

- stress
- anxiety
- tiredness
- loss of sleep or irregular sleep
- strenuous exercise that you are unused to
- tension in the neck or shoulders
- eye strain (for example, after looking at a computer screen)
- dental problems (for example, teeth grinding).

Dietary triggers include:

- lack of food (dieting)
- irregular meals
- dehydration
- alcohol
- caffeine
- certain foods such as chocolate, cheese and citrus fruits.
- certain food additives such as monosodium glutamate (MSG), aspartame (a sweetener), Tyramine and nitrates.

There is now more evidence to suggest that food cravings can be a warning sign that a migraine attack is approaching, rather than triggering an attack.

Environmental triggers include:

- bright lights, glare and flicker
- loud noise
- strong smells
- smoky environments.

Other triggers include smoking and some sleeping tablets, which can also give a “hangover” feeling on waking.

Treatments

There is no absolute cure for migraine. However, lots of treatments are available to help ease the symptoms of a migraine attack.

When a migraine attack occurs, most people find that lying down in a quiet, dark room is helpful. Sleeping (if you are able to) can also help. Some people find that their symptoms die down after they have been sick (vomited).



Most people affected by migraine will already have tried paracetamol, aspirin and perhaps anti-inflammatory drugs such as ibuprofen (Nurofen) before they seek advice from their doctor. If ordinary painkillers alone are not relieving your symptoms, your GP might prescribe you a triptan (a painkiller specifically for migraine headaches) to be taken in addition to over-the-counter painkillers (paracetamol or an anti-inflammatory drug such as ibuprofen). Triptans are available in different forms to suit individuals (tablets, injections and nasal sprays) although it is important to note that some people develop short-term side effects when taking triptans. Tightness in the chest or throat, a rushing feeling in the body or tingling in the fingers are often reported but are not harmful.

Your doctor may also prescribe you anti-sickness medication. This may help with the nausea and vomiting but is mostly used to help you absorb your painkillers faster.

If your situation does not improve after treatment, you might be referred to a specialist migraine clinic. (For more information see the [Useful contacts section on page 37.](#))

It is important to avoid taking painkillers on more than two days per week or more than 10 days per month as this can make things worse by triggering medication overuse headaches. This may cause you a daily headache but also make it more difficult to treat your migraine with preventative drugs.

If you are having migraine headaches more than three to four times per month, or if your attacks are lingering on as a dull, muzzy headache, regular pain medication may not be the most appropriate treatment and you may need to go on a preventative medication. Before you start or stop taking any medication you should always talk to your GP.

Prevention

If you experience frequent migraines, your GP might discuss preventative medication with you.

It is important to note that preventative drugs for migraines are not pain medication, but instead help to reduce the number of migraines. They can take time to work, so you often need to take them for a minimum of three to six months before feeling the benefits.

You might find that this medication reduces the frequency and severity of your attacks but does not stop them completely. You will need to continue your other migraine treatments when you experience an attack.

(You might be interested in reading our [Migraine fact sheet](#) for further information.)

Cluster headaches

This is quite a rare type of headache, affecting about 1 in 1,000 people. Although anyone can experience cluster headaches, research suggests it may be more prevalent in males than females.

The pain is much more severe than migraine, but affects a smaller area of the head – usually in, above, behind or below the eye on one side of the head. They are called cluster headaches because people usually get one or more of these attacks every day, for several weeks or months, before the pain subsides. A pain-free period will then follow which may last for months or years before the headaches return. The headaches tend to return around the same time of year, more commonly in spring and autumn.

There are two types of cluster headache:

- **Episodic** – The headache clusters are separated by ‘headache-free’ periods of one month or more.
- **Chronic** – The headache clusters are separated by ‘headache-free’ periods of less than one month or are not separated at all. Roughly 10% of cluster headaches are chronic.



Cluster headaches can be a severe and disabling condition. The headaches often wake people up about one to two hours after they go to bed, at the same time each night or in the early hours of the morning. The pain tends to start suddenly with no warning and can last between 15 minutes and three hours (although they often last less than an hour).

This pain is frequently accompanied by other symptoms on the same side as the pain, such as:

- watering from the eye
- redness of the eye
- drooping and swelling of the eyelid
- a smaller pupil during the attack
- sweating of the face
- a blocked or runny nose on the affected side of the face
- a feeling that the ear is blocked

Restlessness and agitation is another common symptom; sufferers find it extremely difficult to remain still unlike people with migraine who prefer to be still and lie down.

Causes

Research has suggested that cluster headaches are linked to increased activity in an area of the brain called the hypothalamus. However, it is not known what causes the hypothalamus to act in such a way. You may be offered a brain scan when your cluster headaches first start to rule out other possible causes of your headaches.

Cluster headaches can be triggered by:

- drinking alcohol during the active headache period (the period of time when headaches are happening daily);
- a sharp increase in body temperature (caused by the environment or by exercise)
- breathing in nitroglycerin (a medication which causes blood vessels to enlarge)

Treatment

Cluster headaches cause a lot of suffering, but they are not life threatening. They cannot be treated with over-the-counter painkillers and people affected should therefore be treated at a specialist clinic. There are two main approaches to managing cluster headaches.

1. Treatments to relieve pain during an attack

Sumatriptan: A drug treatment given as an injection, usually into the fatty area of the thigh muscle.

Oxygen therapy: This involves a patient inhaling a high flow of pure oxygen for roughly 15 minutes, at the beginning of every attack to shorten the pain. If appropriate, oxygen can be delivered to your home in large, static containers but also small, portable containers for travelling or work. It must be stressed that oxygen is explosive; you must not smoke in the same room as the oxygen containers, expose them to high heat or damage them.

2. Treatments to prevent cluster headaches

If cluster headaches occur very often, or last for longer than three weeks at a time, preventative treatments are advised. These treatments involve prescription medications. Preventative treatments should be given under the close care and guidance of a specialist. These can include drugs such as verapamil (used in other circumstances to treat heart problems), lithium carbonate (often used to control mood) or topiramate (originally developed as an antiepileptic drug). Not all of these drugs will be suitable for everyone.

Another possible treatment is a **greater occipital nerve block**. This treatment involves injecting a local anaesthetic and possibly a steroid drug into the back of the head which relieves the pain for some time; usually

several weeks. This treatment seems to be effective for some people, although there is limited scientific evidence to back it up.

Neurostimulation may be an option for patients who have not found any relief in any other types of treatment. **Occipital nerve stimulation, deep brain stimulation** and **sphenopalatine ganglion stimulation** all involve implanting a device into a part of the body that gives out an electrical pulse that is controlled by the patient;

- in occipital nerve stimulation, the pulse stimulates two nerves under the skin.
- deep brain stimulation involves more invasive and complex surgery that allows the pulse to be delivered directly to a part of the brain called the posterior hypothalamus.
- for sphenopalatine ganglion stimulation the device is inserted into the cheek where it can stimulate a group of nerves in the face.

More recently, an external nerve stimulator has become available in some areas of the UK. This device is not implanted but is held on the neck, over the vagus nerve, to try to prevent the attacks. It is generally your specialist who would have access to this rather than your GP.

The aim of all these therapies is to relieve pain and reduce the frequency of headaches. However, medical evidence to support them is limited, and they will not be considered unless all other treatment options have failed. Assessment and implantation of these devices requires very specialist knowledge and experience, so it is often necessary to travel some distance to access these options.

(For links to further information and support on cluster headaches, please see the Useful contacts section on page 37.)

Secondary headaches

Secondary headaches are headaches that have an underlying cause, such as an illness, injury or drug. There are a number of different possible causes for secondary headache, some of which are explained over the next few pages.

Common infections

Headache is a common feature of any infection which raises body temperature, such as flu or a chest infection.

Sometimes with a common cold an infection develops within the sinus cavities (spaces behind the cheekbones and forehead that are connected to the nose) and this can cause a headache. This infection usually causes tenderness in the bones above or below the eye on one or both sides, a high temperature and the production of mucus. Nasal decongestants (taken for no longer than a week) and over-the-counter painkillers can be used to relieve any pain. These infections normally clear up by themselves within a couple of weeks.



If this type of pain frequently occurs without any signs or symptoms of infection then it is more likely to be migraine ([see page 10](#)).

Thunderclap-type headache

A thunderclap-type headache is a severe headache that peaks (reaches it's most painful) within 60 seconds of starting out of the blue. This type of headache may be due to a nerve or blood vessel disorder, or an infection.

Subarachnoid haemorrhage (bleeding into the coverings of the brain) is the most common cause of thunderclap-type headache. Subarachnoid haemorrhage is usually caused by an arteriovenous malformation (an abnormal tangle of blood vessels) or by an aneurysm (an abnormal bulge) on a large blood vessel at the base of the brain that has ruptured (burst). (You might be interested in reading our booklets, [Subarachnoid haemorrhage and Vascular malformations of the brain](#), for further information.)

A single, severe headache could also be a symptom of **stroke**. A stroke is a disruption in the blood supply to the brain, which is usually caused by a blockage (blood clot) in a blood vessel. A stroke has very clear visual signs, including drooping on one side of the face, weakness or numbness in one side of the body and speech problems. Signs and symptoms usually come on instantly, unlike the way symptoms of a migraine aura develop gradually. Sudden loss of all or part of the vision may also be a symptom of stroke and requires urgent medical attention at hospital. (You might be interested in reading our [Stroke fact sheet](#) for further information.)

If a subarachnoid haemorrhage or a stroke is suspected, the person experiencing symptoms should be taken to hospital as a matter of urgency.

Post-traumatic headache (PTH)

Headache is very common following a head injury, even in minor events that do not cause any harm to the brain. The headache usually develops within days of the head trauma, or after regaining consciousness, and usually fades over the following weeks or months. Acute post-traumatic headache should improve with painkillers and rest. Further investigations, including brain scans, are usually found to be normal and are often not required unless a person is experiencing other neurological symptoms.

In some individuals, however, the headache may remain for many months. This is called chronic post-traumatic headache, and is often more difficult to treat. If you are concerned, talk to your GP or specialist.

It is important to note that any head trauma, no matter how mild, can make a pre-existing headache condition worse, or it can bring on a headache in someone who has never experienced this before. Even something as mild as 'heading' a football could trigger a headache.



Other symptoms experienced along with post-traumatic headache may include feeling sick (nausea), dizziness, poor concentration, memory problems, extreme tiredness and intolerance to light and noise, and can lead to anxiety and depression. These symptoms are broadly referred to as concussion and will often go away within two weeks. However, in some cases they may carry on much longer. When problems like this persist for months after the trauma, it can be called 'post-concussion syndrome'. The reason why some people experience post-concussion syndrome is not fully understood.

Headache diary

(Please pull out and keep)

We have included this example headache diary for you to look at.

Keeping a headache diary can help to identify headache triggers and patterns. It can also be used to aid in managing your symptoms by keeping a record of what does and doesn't work for you.

It might be useful to photocopy the diary before you start to fill it in so that you can make more copies in the future if needed.

You may want to create your own headache diary. Not all of the information this example diary asks for may be relevant to you, and there may be other things that you want to add and keep track of. Use this example to give you an idea of what you might wish to include.

(Please pull out and keep)

Sometimes, the persistent problems of post-concussion syndrome can be misunderstood as over-worrying or health anxiety. In cases where symptoms of concussion persist for months, a mental health condition, such as depression, may be involved. This can make existing symptoms even more difficult to live with, and sometimes a specialist opinion should be sought from a neurologist or neuropsychologist about how best to treat this.

(For more information on Mental Health services see the Useful contacts section on page 37.) (You might be interested in reading our Head injury booklet for further information.)

Medication overuse headache

A medication overuse headache is caused by taking painkiller medication too often. It is important to note that medication overuse headaches can happen even if you are taking the recommended dose of a medication, but taking this dose too frequently or in addition to painkillers you are taking for other pain problems. This type of headache is usually seen in people who have been taking medication regularly to treat pain from tension-type headache or migraine.



It is thought that regular overuse of medication may increase the brain's sensitivity to pain and the tendency to develop headaches. This means that in trying to relieve their pain patients can end up making it worse without realising.

Medication overuse headaches commonly result from long-term overuse of the group of painkilling drugs called analgesics (e.g. paracetamol, codeine). Doctors consider 'overuse' as regularly taking these drugs on more than 15

days per month. Triptans that are often prescribed to treat migraine can also cause medication overuse headaches if they are taken too often. Regularly taking triptans on more than 10 days per month is classed as overuse. It has been known for many years that ergotamine, which is the active ingredient of many older migraine remedies, can cause headaches if taken regularly (more than 10 days per month). This group of drugs is now used less often since the development of the triptans. If you still use this type of medication then you may wish to discuss with your GP the newer options.

However, even simple painkillers such as paracetamol, aspirin and ibuprofen can cause medication overuse headaches to develop. Many over-the-counter tablets contain a combination of a painkiller and codeine or caffeine, which produces medication overuse headache faster if used more than 10 days per month.

People taking medication in these amounts are often seen in specialist clinics. Stopping the medication completely can cause a very severe withdrawal headache, usually lasting between two and 10 days, although it can be up to eight weeks. This headache may come alongside other symptoms, such as anxiety, feeling sick (nausea), being sick (vomiting), restlessness and problems sleeping. During this period, it is important to drink plenty of water to keep well hydrated.

Once medication overuse has stopped successfully, doctors can assess the original headache condition and suggest more effective treatment options.

Stopping or reducing medication use

If a person has been dependent on painkillers for months rather than years, it may be best to stop all at once rather than slowly cutting down.

However, if taking products containing codeine, tramadol or morphine has caused painkiller headaches, it can be dangerous to stop suddenly. Instead, it is advised to gradually reduce the number of painkillers taken. This is best done under the supervision of a doctor.

Always talk to your GP or specialist before making any changes to your medication.

Hormones and headaches

The contraceptive pill may make headaches worse. Sometimes these headaches follow a migraine-type pattern, but others affect both sides of the head, and are more like tension-type headaches.

Headaches are most commonly reported as a side effect of the combined pill (containing both oestrogen and progestogen), which is taken for three weeks before a break to have a period. It is thought that headaches can be triggered by falling levels of the hormone oestrogen, which explains why headaches are so common in the days when the pill is not being taken.

The progesterone-only pill may be suggested for women who find the combined pill worsens their headaches. Studies suggest that headaches are less likely to occur with the lowest dose pills containing newer types of progestogens, although this is not the same for everyone. There may also be

the option of taking the pill continuously. In some cases, however, women can only expect their headaches to settle down if they stop taking the pill altogether. To discuss the contraceptive options available to you, talk to your GP or local family planning clinic.

The combined contraceptive pill is not recommended for women who experience auras before a migraine. This is because migraine with aura has been linked to a very slightly increased risk of having a stroke. For women who have migraine with aura, taking the combined pill can increase their risk further.

Oestrogen levels remain constant throughout pregnancy and most women find that headaches are reduced during pregnancy, particularly in the later stages – though they may return afterwards.

As they approach the menopause, over 90% women are affected by headaches. This is due to periods coming more frequent and changes to the normal hormonal cycle. In general, hormone replacement therapy (HRT) is more likely to worsen headaches than improve them. If HRT is essential to reduce unpleasant symptoms, such as hot flushes, a relatively low dose may cause fewer problems. Women may also find HRT patches or gel better than tablets, because they keep hormone levels steadier and so may be less likely to trigger headaches. Your GP will be able to advise you on what options are available. Alternatively, your GP may be able to refer you to a specialist menopause clinic for advice. Many women do find that their headaches settle down after the menopause.

Triggered headache through coughing, straining and exertion

These headaches can in fact be primary or secondary, depending on whether or not the pain is a symptom of a separate health problem. Headache from any cause can be worsened by coughing or straining as this temporarily increases the pressure inside the head. Occasionally however, people find that coughing will actually trigger a new headache.

Sometimes, headaches can be triggered or worsened after running or other forms of exercise, such as weightlifting. Headaches can also occasionally be triggered by sexual intercourse. If these headaches are not out of the ordinary for the person affected, they are often harmless and not a symptom of anything more serious. However, anyone experiencing pain for the first time under any of these circumstances should talk to their GP, so that any possible harmful causes can be ruled out.



Temporal arteritis (giant cell arteritis)

This is an inflammation of the lining of the arteries (blood vessels), usually in the head and neck. It often causes people to develop extreme tenderness in the sides of their head, between the forehead and the ear, and the artery in this area often appears visibly raised or swollen under the skin. It is an uncommon condition. People affected are usually in their fifties or older, and it is three times more common in women than in men.

People complain of a steadily worsening headache on the head. Other symptoms include jaw or ear pain when chewing, weight loss, tiredness and muscle pain. This condition is easy to treat but may produce visual problems

and sight loss if it is left untreated. If this condition is suspected, your GP will carry out some blood tests to detect inflammation. Sometimes a biopsy of the artery is required, which involves a small sample of the artery being removed for study. The sample is looked at under a microscope to check for any signs of inflammation inside the lining of the artery.

The condition is usually treated with steroids, starting at a high dose and then gradually reducing to a smaller dose. Never stop taking steroid medication suddenly, unless your doctor has advised you otherwise. Doing so can make you very ill.

Idiopathic intracranial hypertension

This is a rare cause of the gradually worsening type of headache, associated with visual symptoms such as brief loss of vision or double vision. It tends to affect young women, particularly those who are overweight. It has also been linked with some drug treatments. These headaches and vision changes are as a result of a higher than normal pressure around the brain.

To diagnose the condition, doctors will usually use an instrument called an ophthalmoscope to look for any swelling of the optic nerve at the back of the eyes. This should be followed by a brain scan, which often does not show any worrying abnormalities. Another investigation that a doctor may wish to carry out is a lumbar puncture to measure the pressure in the fluid around the brain. ([You might be interested in reading our Lumbar puncture fact sheet for further information.](#))

What happens in this condition is not very well understood, but it is thought that the increased pressure around the brain is directly linked to weight gain or excessive body weight. Weight loss is the main mechanism for bringing this condition under control. For some people however, this condition is not related to weight.

There are some drugs which seem to help in this condition. If doctors are worried that vision is deteriorating as a result of the condition, shunts may be advised. For further advice, talk to your GP or specialist. (You might be interested in reading our [Hydrocephalus and shunts fact sheet](#) for further information.)

Cerebrospinal fluid leaks and intracranial hypotension

Cerebrospinal fluid (CSF) is the fluid that surrounds the brain and spine, and is contained by a membrane called the dura. Sometimes, a tear in this membrane can allow CSF to leak out, lowering the volume and pressure of CSF – this is referred to as intracranial hypotension – which can in turn cause a headache.

A tear can occur as a result of a lumbar puncture, surgery or trauma, an underlying medical condition, or it can happen spontaneously for no apparent reason – although this is uncommon. Whilst not generally life threatening, some CSF leaks can cause severe headaches and the symptoms can be very debilitating and disabling.

A headache caused by a CSF leak is typically worse when you are upright and eases when you lie down flat. People often find that their headaches worsen as the day goes on, the longer they have been out of bed and upright. Some people may also experience other symptoms, such as neck pain and stiffness, feeling sick (nausea), problems with hearing, concentration issues and fatigue, dizziness, vision changes and sensitivity to light (photophobia).

Some CSF leaks resolve without the need for any specific treatment. To give your body the best chance of healing, you should drink plenty of water and try to limit any bending, lifting, stretching or straining. If you have to sneeze, don't hold your nose. Some people have found that caffeine (in coffee, tea or cola) helps to ease the headaches.

If a CSF leak persists, tests such as an MRI scan may help doctors confirm a diagnosis, while other scans, such as a CT myelogram (a scan of the bones and nerves in the spine), may help to pinpoint the exact location of the leak (if not already known). An injection of the patient's own blood into the spinal canal (known as an epidural blood patch) may be performed to help encourage the membrane to heal.

If a blood patch treatment doesn't work or isn't appropriate, and doctors know the location of the leak, the leak may be repaired with a special glue or surgery in exceptional cases. Once the leak has been sealed, symptoms should improve, although this can take time.

(For further sources of support around CSF leaks see the [Useful contacts section on page 37.](#))

Neck problems

Wear and tear on the joints of the neck, or muscle spasms, can sometimes cause a stiff neck and may occasionally trigger a headache. The pain can often be relieved by anti-inflammatory painkillers, such as ibuprofen. Physical therapy may be helpful for improving the underlying neck problem that is responsible for the headaches. For further advice, talk to your GP.



Reversible cerebral vasoconstriction syndrome

In reversible cerebral vasoconstriction syndrome (RCVS), the blood vessels in the brain get narrower (constrict) temporarily. The blood vessels naturally return to their normal size within three months.

The main symptom of RCVS is sudden and severe thunderclap headache, and headache attacks are experienced repeatedly for one to three weeks. People often experience other symptoms along with the headaches, including feeling sick (nausea), being sick (vomiting), sensitivity to light, confusion and blurred vision. Some people can experience seizures.

The disorder is more common in women than men, and more than half of cases occur after childbirth or after exposure to certain drugs.

As the condition resolves by itself, treatment is focused on managing the symptoms. Painkillers will be prescribed to ease the pain of the headaches and anti-epilepsy drugs may be given if you are experiencing seizures. If it is appropriate, doctors may be able to prescribe a drug to relax the narrowed blood vessels. General advice is to rest and avoid any factors that trigger headache attacks.

Sleep apnoea

Sleep apnoea is a condition where your breathing becomes irregular while you are asleep. People with the condition snore heavily and stop breathing for brief periods of time.

Some people with sleep apnoea experience headaches on waking in the morning. These often improve as the day goes on, but may be present all day. Headaches are accompanied by severe sleepiness throughout the day. This tiredness can cause problems with concentration and attention, which is particularly dangerous when working machinery and driving.

If you or your partner suspects that you stop breathing during your sleep and you often wake with a dull headache, you should speak to your GP about being referred for a sleep study. The study involves making a recording of your sleep and your oxygen levels using a simple monitor that you take home and wear overnight.

Secondary headaches

People with sleep apnoea are usually (but not always) overweight or have a very thick neck. Therefore, if you are diagnosed with sleep apnoea, weight loss is often the best treatment option. If you have moderate to severe sleep apnoea you may be advised to use a machine that will help keep your airway open when you sleep and stop you snoring so badly. This is very helpful for improving your sleepiness and fatigue as well as your concentration and attention throughout the day.

Headache and lifestyle

Most types of headache continue to affect people throughout their lives and are managed, rather than cured, by treatment.

Experiencing headaches may well have an impact on work and social life. However, if you have been diagnosed with migraine, tension-type headache or cluster headache, be assured that there are few, if any, long-term risks that come with these kinds of headache. Although headaches cannot be completely cured, the right treatment can often reduce the frequency of headaches and relieve pain effectively.

Leaving any of these forms of headache untreated should not cause long-term physical damage, but doctors recommend treatment because it should help to minimise unnecessary pain, suffering and disability, and hopefully stop a condition getting worse.

Eating and drinking

Unless you experience migraines that are brought on by particular dietary triggers, there is no need to cut out specific foods. It is sensible to aim for a healthy balanced diet, and avoid having lots of alcohol, caffeine and sugar.

Dehydration is a common cause of headache and general advice is to try to drink six to eight glasses of non-alcoholic fluids everyday (ideally water, although sugar-free soft drinks, herbal and fruit teas are good alternatives).



Stress

Stress is a well-known exacerbating factor for headaches (meaning that it makes them worse). However, migraines can also occur when stress is suddenly lifted, such as at weekends or on the first day of a holiday. Keep a diary of your activities to gauge how stress affects you. This will allow you to spot any patterns between your stress levels and your headaches, and see where you could try to make adjustments to your lifestyle and activities. You may wish to try out some relaxation techniques, such as mindfulness, yoga, Pilates, meditation or Tai Chi.

Daily routines

In order to manage migraines, it is important to maintain healthy routines. Becoming overtired, sleeping in, skipping meals, overeating, and too much sudden new exercise or none at all are extremes to be avoided. Regular sleep, diet and exercise are good habits for most people.

Work

Anyone who misses work on a regular basis, or whose work is impaired by headaches, should seek advice about more effective treatment. It is important to note that operating machinery may not be safe when taking some medications. Check with your GP if you are unsure.

The best approach to managing headaches at work is likely to be avoiding or minimising any known triggers, to reduce the risk of headaches developing.



Stress is not always avoidable at work, but other sensible measures, such as regular breaks from your computer screen, correct screen and seat positioning, and good lighting may help.

Smoking

Whilst smoking does not directly cause headache, it does increase the risk of heart attack, stroke and heart disease. If you use triptan painkillers to treat your migraine or cluster headaches and you develop any of these conditions your painkiller has to be removed on the recommendations of the manufacturers to prevent further increasing the risk of heart attacks or stroke. The best way to avoid potentially having to stop taking your painkillers is to stop smoking. Your GP will have many support options to help you quit smoking.

Driving

Driving is rarely an issue in migraine as the symptoms come on slowly enough for people to be able to pull over to the side of the road if they judge this to be necessary. Similarly, if you experience cluster headaches, there is no need to inform the DVLA of your condition. If you feel an attack coming on whilst driving, you are advised to pull over as soon as is safely possible, deal with the attack in your usual way and wait a while longer after the pain has passed before resuming your journey. No one should be driving if their eyesight is affected or with a headache bad enough to interfere with their concentration. Untreated sleep apnoea can also impair your driving. **Always check if it is suitable to drive on your medication.**



Health professionals

Clinical nurse specialist (CNS): a nurse who specialises in a particular condition, or conditions.

Neurologist: a doctor who specialises in the diagnosis and treatment of people with neurological conditions, for example epilepsy.

Neuropsychologist: a psychologist specialising in the functions of the brain, particularly memory, concentration and problem solving.

Occupational therapist: a specialist health professional who offers practical support and advice on everyday skills and activities like washing, cooking and using equipment at home.

Radiologist: a specialist doctor who performs, reads and reports on scans such as angiograms, CT scans, MRI scans and X-rays.

Speech and language therapist: a specialist health professional who assesses symptoms, plans treatment and treats people with communication and swallowing problems.

Useful contacts

Brain & Spine Foundation

Office LG01, Lincoln House

Kennington Park

1-3 Brixton Road

London

SW9 6DE

Helpline: 0808 808 1000

helpline@brainandspine.org.uk

www.brainandspine.org.uk

Led by neuroscience nurses and staffed by trained experts, the Brain & Spine Helpline provides support and information on all aspects of neurological conditions for patients, their families and carers, and health professionals. Further information on a range of neurological problems is available online.

Headache

CSF Leak Association

PO Box 5761

Strathpeffer

IV15 0AQ

office@csfleak.info

www.csfleak.info

A UK charity working to raise awareness of cerebrospinal fluid leaks, improve access to appropriate diagnostic techniques and treatment, and support research and development.

IIH UK

19 Woburn

Washington

Tyne and Wear

NE38 7JX

info@iih.org.uk

www.iih.org.uk

Information and support for Idiopathic Intracranial Hypertension.

Migraine Action

4th Floor

27 East Street

Leicester

LE1 6NB

Helpline: 0845 601 1033

info@migraine.org.uk

www.migraine.org.uk

Research, medical advice and information.

OUCH(UK)

Organisation for the Understanding of Cluster Headache

Norham House

Mountenoy Road

Moorgate

Rotherham

S60 2AJ

Helpline: 0164 665 1979

info@ouchuk.org

www.ouchuk.org

Support, information and advice on cluster headache for patients, their families and health professionals.

The Migraine Trust

52-53 Russell Square

London

WC1B 4HP

Tel: 0207 631 6970

www.migrainetrust.org

Research, training, information and support, including a comprehensive list of migraine and headache clinics across the UK.

Mental health

Anxiety UK

Zion Community Resource Centre

339 Stretford Road

Hulme

Manchester

M15 4ZY

Helpline: 08444 775 774

support@anxietyuk.org.uk

www.anxietyuk.org.uk

Information and support on anxiety.

Mind

Mind Infoline

Unit 9

Cefn Coed Parc

Nantgarw

Cardiff

CF15 7QQ

Helpline: 0300 123 3393

info@mind.org.uk

www.mind.org.uk

Research, information and support on mental health.

Rethink Mental Illness

Head Office

15th Floor

89 Albert Embankment

London

SE1 7TP

Tel: 0300 500 0927

advice@rethink.org

www.rethink.org

Information and advice on mental health.

General advice

Citizens Advice Bureau

www.citizensadvice.org.uk

Visit the website to find information and your local CAB office. You can also find your local CAB in the phone book.

NHS Choices

www.nhs.uk

NHS non-emergency line: 111

Medical advice and information on NHS services

Online support groups

Online communities are a great way for people to interact, share their stories and experiences and provide mutual support. They are also a great way for people to alleviate stress and health anxiety as people can realise they are not alone.

The Brain & Spine Foundation have an online group on HealthUnlocked for people with any neurological condition to share their experiences in an anonymous and safe space. Find us at:

<https://healthunlocked.com/brain-spine-foundation>

Further reading

The Brain & Spine Foundation produces a number of booklets and fact sheets that give more information on topics mentioned in this booklet: Head injury, Subarachnoid haemorrhage, Vascular malformations of the brain, Brain and spine scans, Lumbar puncture, Migraine and Stroke.

These publications are all freely available on our website:
www.brainandspine.org.uk

Booklets are also available in print, on request. Requests can be made through the website or the Brain & Spine Helpline: 0808 808 1000.

References

Details of references used for this booklet can be requested by sending an email to references@brainandspine.org.uk

Thank you

We would like to thank everyone who contributed to this booklet, especially Julie Edwards (Clinical Nurse Specialist) and our service users who provided feedback.

Brain & Spine Foundation

Our mission is to improve the quality of life of people affected by neurological problems by providing expert information, support and education. We rely on donations to provide our services to anyone who needs us.

How to donate

- Online: www.brainandspine.org.uk/donate
- By phone: 020 7793 5900
- By post: send a cheque to the address below

Contact us

Brain & Spine Foundation

LG01 Lincoln House, Kennington Park, 1-3 Brixton Road,
London SW9 6DE

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