

Headache and nerve problems

A variety of nerve-related problems can cause or contribute to headache, including bacterial and viral infections, brain haemorrhages, and brain tumours. Treatments vary according to the cause, but generally, the recurring headache will ease once the underlying problem is addressed.

The nervous system

The nervous system allows the brain to communicate with all parts of the body and helps to control bodily functions. It also reacts to changes both outside and inside the body. The brain and spinal cord are called the central nervous system, while nerves throughout the rest of the body are referred to as the peripheral nervous system. The basic building block of the nervous system is a nerve cell, or neuron. Neurons are shaped differently depending on where they are in the body and what role they play.

Brain haemorrhages and headache

When a blood vessel inside the skull becomes damaged or ruptures, it can cause headache. Other symptoms can include neck soreness and difficulties controlling various parts of the body, depending on the location of the haemorrhage. A brain haemorrhage is a medical emergency and requires urgent treatment. Blood vessels are weakened by a number of different conditions, including:

- **atherosclerosis** – a build-up of fatty plaques in the arteries, which narrows their diameter and contributes to high blood pressure
- **brain tumours** – particularly aggressive or fast-growing varieties that invade tissue and blood vessels
- **head trauma** – such as a blow to the head caused by, for example, vehicle accidents and sporting injuries
- **high blood pressure** – or hypertension, when narrowed arteries cause the blood to pump harder
- **aneurysms** – a small sac formed on a weakened artery or vein.

Brain tumours and headache

Brain tumours are a relatively rare cause of headache. Typically, a slow-growing tumour exerts increasing pressure inside the skull. The symptoms vary depending on the size, location and type of tumour. They can include:

- loss of control over various parts of the body
- changes in personality
- headache that is chronic, dull and aching.

Recovery from a brain tumour is much more likely if it is diagnosed early, especially if the tumour is benign.

Infection and inflammation and headache

A variety of infections can cause headache. Other symptoms may include fever, skin rashes, neck stiffness and seizures. Some of the more common infections that cause headache include:

- **meningitis** – or inflammation of the meninges, the membranes lining the central nervous system

- **post-viral neuralgias** – a range of infections that can cause nerve irritation
- **shingles** – a viral infection that can recur after an initial bout of chicken pox
- **temporal arteritis** – inflammation of blood vessels.

Nerve damage and headache

Irritated, inflamed or damaged nerves in the brain, spinal cord or body can cause headache and pain. Treatment depends on the cause. Nerve damage can be caused by:

- infection
- trauma
- tumours
- vitamin deficiencies.

Intracranial (within the skull) pressure and headache

The brain and spinal cord are bathed in a special fluid called cerebrospinal fluid. This nourishes the central nervous system and acts as a shock absorber. The amount of cerebrospinal fluid is regulated but some conditions, such as tumour or obstructions to veins, can cause a build-up of fluid. The increase or decrease in pressure inside the skull can lead to headache.

Some medical procedures require the removal of some cerebrospinal fluid. If too much is taken and the brain tissue is not adequately cushioned, a headache can result.

Treatment options for headache

Headache can be caused by a combination of factors working together. That is why professional advice is needed to investigate and properly diagnose the specific factors behind a recurring headache.

Where to get help

- Your doctor
- Neurologist
- In an emergency, always call triple zero (000)

Things to remember

- A variety of nerve problems can cause or contribute to recurring headache.
- Nerve problems that cause headache include bacterial and viral infections, haemorrhages, and tumours.
- Typically, the headache goes away once the underlying disorder is successfully treated.

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