

Headache - some causes explained

A headache is experienced when various structures of the head and neck are irritated. The sensation of pain can be 'referred', which means the irritation in one area can transmit the feeling of pain via associated nerves to another area. A good example is neck pain leading to headache. It is likely that nearly all of us will experience headache during our lifetimes. This is because headache is one of the most common illnesses in Australia, with around 15 per cent of us taking painkillers for a headache at any given time.

Causes of headaches

There are different types of headache and many different causes, which explains why the condition is so common. Recurring headache can be caused by different factors working together.

Stress and muscular tension

Stress is thought to trigger the body's 'fight or flight' response, which is characterised by shallow breathing, elevated heart rate and blood pressure, and increased amounts of 'stress chemicals' like adrenaline. Stress can cause or worsen a headache in a number of ways, including:

- Tightening the muscles, particularly of the upper back, shoulders, neck and head
- Lowering a person's tolerance to pain
- Nullifying the effects of medications like painkillers
- Reducing the levels of endorphins, which are the body's natural painkilling chemicals.

Diet and food sensitivities

According to some studies, what we eat and when we eat it plays a significant role in headache and migraine. Different causes of diet related headache include:

- Fluctuations in blood sugar levels, which can lead to spasm of the arteries in the head
- Caffeine withdrawal, commonly caused by regular and excessive consumption of coffee and tea
- Food additives, such as MSG (monosodium glutamate)
- Naturally occurring chemicals in foods, such as amines.

Jaw problems

Dental abscesses, post-extraction infection and difficulties with the joint of the jaw can cause pain in the local area, as well as referred pain to the face and head. Misaligned teeth can also increase muscular tension in the jaw and contribute to recurring headache.

Hormonal influences

Migraines affect more women than men, and some researchers believe that sex hormones play a key role. For around half of these women, migraine occurs in the few days prior to or following their menstrual period. Some studies suggest that reduced levels of the sex hormone oestrogen around the time of menstruation may be to blame.

Eye problems

If a person has difficulties with their vision, such as long-sightedness, they tend to squint and strain the eye muscles in order to better focus their vision. Eye diseases like glaucoma can cause headache by referring pain into the structures of the head.

Ear, nose and throat disorders

There are many disorders of the ear, nose and throat that can cause recurring headache. Some of the more common include:

- **Sinus problems** - caused by infection, cold, flu or allergic reactions such as hay fever
- **Labyrinthitis** - the general term for any type of inflammation of the inner ear
- **Infection** - of the ear, nose or throat, caused by either bacteria or viruses
- **Trauma** - such as blows to the ear or perforation of the ear drum
- **Hayfever** - when the immune system overreacts to such irritants as pollen
- **Tonsillitis** - an infection most often caused by the bacterium *streptococcus*
- **Tumours** - brain tumour is a relatively rare cause of recurrent headache.

The nervous system

Irritated, inflamed or damaged nerves can bring on a headache. Some causes include:

- **Haemorrhages** - some health conditions, such as hypertension (high blood pressure) and diabetes, can cause the blood vessels to become damaged
- **Infection** - such as meningitis, which is inflammation of the membranes lining the brain and spinal cord
- **Nerve damage** - can be caused by, for example, vitamin deficiencies or trauma to the head or neck. A tumors may also be to blame.

Medications and 'rebound headache'

Some medications can aggravate headaches in susceptible people, including:

- **Birth control pills** - such as the combined pill, which includes synthesised versions of the sex hormones oestrogen and progesterone
- **Painkillers** - some over-the-counter medications can contribute to recurring headache if misused or overused
- **Drugs for diabetes** - some classes of these medications can aggravate headaches.

Other causes of headaches

Headache and migraine can be caused or aggravated by a number of other factors, including:

- **Poor posture** - which puts unnecessary strain on the muscles of the back and neck
- **Hangover** - caused by abuse of alcohol or drugs
- **Temperature** - extremes of heat and cold
- **Dehydration** - which affects blood pressure
- **Noise** - especially loud noises
- **Temporal arteritis** - inflammation of the artery at the temple, most common in elderly people.

Seek medical advice for recurring headache

Headache and migraine can be caused by many contributing factors working together. That's why professional advice is needed to investigate and properly diagnose the specific factors behind an individual's recurring headache. In some cases, headaches and migraines may be a warning about more serious underlying problems.

Where to get help

- Your doctor
- Neurologist
- Dietitians Association of Australia Tel. (02) 6163 5200
- Chiropractor, osteopath or physiotherapist
- Complementary medicine professional
- Dentist

Things to remember

- Headache is one of the most common illnesses in Australia.
- The different causes of headache include stress, diet, jaw problems, and illnesses of the eye, ear, nose and throat.

- Since recurring headache can be caused by many different factors working together, it is important to seek diagnosis from a qualified health professional.

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