

# When **headaches** cause **havoc**...

Sumari Davis, BPharm
Amayeza Information Services

## Introduction

Headaches are common, can be quite painful and can disrupt daily activities of life. However, most cases are not caused by life-threatening disorders and can be well controlled with medicines and complementary therapies. This article will discuss the causes and symptoms of some of the most common types of headaches and how to treat them.

# **Causes and symptoms**

There are many different types of headache and they vary in terms of intensity, location and duration. Headache types differ slightly between adults and children and are summarised in Table I.

**Table I.** The most common types of headache in adults and children

Adults	Children
Tension-type headache Migraine headache Chronic daily headache Cluster headache Sinus headache	Migraine headache     Tension-type headache     A symptom of infection, e.g. ear infections, the common cold, sinus infections, etc     Allergy-related     A consequence of minor head injury

#### Tension headache

Tension headaches occur when neck and scalp muscles become tense, often in response to stress, tension, depression or anxiety. They occur more frequently in women than in men and although they can present at any age, they are more common in adults and older teens. Patients with tension headaches often try to relieve the headache by massaging

the scalp, temples or bottom of the neck. Table II provides a summary of the characteristics of some headache syndromes.

# Migraine headache

Migraine headaches can be classified as classic or common migraines. Classic migraines are associated with a so-called prodromal phase (aura) that may include patients seeing flashing lights, or tingling or numbness on one side of the body in the lips, fingers, face or hands that can last between 5 to 20 and rarely 60 minutes. The headache occurs soon after the aura stops and is often associated with nausea and vomiting. Patients with common migraine do not present with this aura, but may present with nausea and vomiting. It is unusual for patients to present with their first migraine episode over the age of 40 years and these patients should be referred to a doctor.

Migraines can be triggered by stress, physical exertion, fatigue, lack of sleep, hunger, menstrual periods, oral contraceptives, certain medications, chemicals with a strong odour and certain foods or drinks. Keeping a headache diary can help patients identify their triggers and factors that relieve the headache.

## Chronic daily headache

When patients experience any type of headache (usually tension or migraine headaches) for more than 15 days a month for at least three months, they are considered to have chronic daily headache. Using headache medication too often can lead to rebound headaches when the medicine wears off, resulting in a vicious circle and medication-overuse headache. Patients with chronic daily headache or using headache medication on a regular basis should be referred to the doctor.

## Cluster headache

Cluster headaches can start at any age and tend to run in families. The pain is always on one side of the face and the eye on the side of the pain is usually red and teary. Consumption of alcohol can trigger a cluster headache.

Table II. Characteristics of common headache types

	Tension headache	Migraine headache	Cluster headache	Sinus headache
Location	Involves both sides of the head and base of the skull	Most cases involve only one side of the head, especially over the forehead, 30% may involve both sides or all over the head	Only involves one side of the head usually starting around the eye or temple	Behind the brow bone and/or cheekbones
Characteristics	Pressure or tightness which waxes and wanes, dull pain described as having a band around the head	Gradual onset, builds up over time to moderate or severe pulsating pain, aggravated by routine activity	Sudden onset reaching peak intensity within minutes, deep continuous, excruciating pain	Pressure and fullness experienced in the front of the face, forehead and behind the eyes
Activity	Pain is not worsened by daily activities	Prefers to rest in dark, quiet room	Remains active, may pace or rock back and forth	Pain worsens on bending forwards or lying down
Duration	Variable	4–72 hours	15 min to 3 hours repeatedly for weeks to months followed by periods with no headache	Lasts for several days
Associated symptoms	May be tenderness in muscles of the head, neck or shoulders	Nausea, vomiting, sensitive to light and sound, may have aura (usually visual but may also cause tingling sensation or affect speech)	Tearing and redness of eye on the side of the headache, stuffy runny nose, paleness, sweating, eye drooping	Runny nose or nasal congestion

#### Sinus headache

Sinus headaches occur when the mucosal lining of the sinuses becomes inflamed and swollen, following a viral infection or associated with allergic rhinitis (hay fever). Mucus production increases and cannot drain, leading to pressure building up, causing pain. The affected sinus often feels tender when pressure is applied to the area.

## **Treatment**

# General measures

Some simple lifestyle changes can help reduce the incidence of headaches and these include:

- Stop smoking
- Reduce or stop drinking alcohol and caffeine-containing drinks
- · Eat and sleep on a regular schedule
- · Exercise several times per week
- · Use a different pillow or different sleeping positions
- · Practice good posture whilst reading or working
- Avoid triggers for migraine headaches (as mentioned above)

### **Acute treatment**

Headaches that occur on less than 15 days a month can be treated with a pain reliever. Products containing aspirin, paracetamol or a nonsteroidal anti-inflammatory drug (NSAID) such as ibuprofen or diclofenac are available over-the-counter (OTC) in single-ingredient products and in combination. Some headache medications also contain other active ingredients such as caffeine, doxylamine (an antihistamine) and codeine (an opioid-type analgesic) for treatment of acute pain associated with headaches.

Aspirin improves headache in around half of migraine sufferers within two hours after administration. It should not be used in children under 16 years of age due to the risk of Reye's syndrome. Both aspirin and NSAIDs can cause irritation of the gastrointestinal tract and should be taken with or after meals. Taking aspirin as a dispersible tablet reduces the risk of gastric irritation and also improves efficacy when treating migraine headaches. Aspirin can also cause bleeding and should be avoided in patients with a history of stomach ulcer and those who also take anticoagulants (blood thinning medicines). Some patients may be sensitive to aspirin and may develop allergic skin reactions or breathing problems. These patients should avoid using aspirin and since there may be some cross-sensitivity, they should also avoid the use of NSAIDs.

Paracetamol is a suitable choice for treating headache in most patients, including those patients who cannot take aspirin or NSAIDs. The use of excessive amounts of paracetamol can cause liver toxicity and overdoses of paracetamol should be taken seriously. Patients should be referred for immediate medical attention. Patients should be advised not to exceed the recommended daily dose of paracetamol.

Muscle relaxants in combination with an analgesic may be useful when treating tension headaches. Patients may also need treatment for nausea and vomiting that may occur with migraine headaches. Where vomiting is severe, it may be necessary to treat pain and nausea with suppositories or with injections in hospital.

When patients suffer from frequent or long-lasting tension type headaches, migraine or cluster headaches, they should be referred to a doctor to discuss treatment options.

# When to refer

Patients should be referred for urgent medical attention if:

- They experience the "worst headache of their life"
- Headache is also associated with speech, vision and balance or movement problems, personality changes and confusion, especially if they have not had these symptoms before with a headache
- · The headache starts very suddenly
- · The headache is accompanied by repeated vomiting
- · The patient has a high fever or stiff neck with the headache

Patients should see their doctor if the medication they normally use does not help anymore or if the headache patterns change. Patients should also discuss with their doctor any adverse effects of treatment, such as extreme sleepiness, depression, fatigue, nausea, vomiting, diarrhoea, constipation, stomach cramps or pains, dry mouth or extreme thirst.

## **Bibliography**

- Langdorf M, Bright A. Headache (mild) emedicinehealth. Updated 9/11/2017, Accessed 7/5/2018. Available from: https://www.emedicinehealth.com/mild\_headache/topic-guide.htm
- Bajwa ZH, Wootten RJ. Patient education: Headache causes and diagnosis in adults (Beyond the Basics). In: UpToDate. Updated: 21 June 2017; Accessed: 7 May 2018. Available from: https://www.uptodate.com/contents/headache-causes-and-diagnosis-in-adults-beyond-the-basics
- Bajwa ZH, Wootten RJ. Patient education: Headache treatment in adults (Beyond the Basics) In: UpToDate Updated: 21 July 2017; Accessed: 7 May 2018. Available from: https://www.uptodate.com/contents/headache-treatment-in-adults-beyond-the-basics
- Bonthius DJ, Lee AG, Hershey AD. Patient education: Headache in children (Beyond the Basics) In: UpToDate. Updated: 18 Aug 2017; Accessed: 7 May 2018. Available from: https://www.uptodate.com/contents/headache-inchildren-beyond-the-basics
- Blenkinsopp A, Paxton P, Blenkinsopp J. Symptoms in the Pharmacy:
   A guide to the management of common illness. Seventh Edition. 2014:193-209.
- Campellone JV.Tension headache. Medline Plus Updated 1/5/2016. Accessed 17/5/2018. Available from: https://medlineplus.gov/ency/article/000797.htm
- Bajwa ZH, Wootten RJ. Patient education: Migraine headaches in adults (Beyond the Basics). In: UpToDate. Updated 11 July 2017, Accessed: 7 May 2018. Available from: https://www.uptodate.com/contents/migraine-headaches-in-adults-beyond-the-basics

