

Headaches

Almost everyone gets an occasional headache at some time or another. Some people get frequent headaches. Most people do not worry about headaches and learn to live with them and manage them without help.

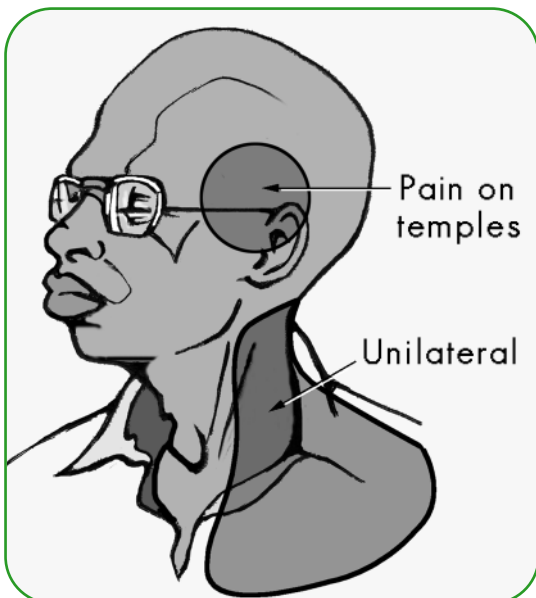
PHCW's see many people who have difficulty managing their headaches themselves. It is important to be aware of the different causes of headaches. Some headaches are a sign of a more serious neurological disorder and these patients need referral to a doctor. Many headaches are associated with stress and anxiety.

This chapter will discuss:

- **Common causes of headaches**
- **Uncommon causes of headaches**
- **Clinical assessment of patients with headaches**
- **When to refer patients with headaches**
- **How to manage patients with headaches**

Common causes of headaches

Stress, anxiety and psychological strain



Many people's lives are very stressful, from hard work and psychological worry and tension. This is the most common cause of headaches. Such headaches are called **tension headaches**. These headaches usually occur towards the end of the day. They are usually dull and ache on both sides of the head. There may be pain over the occipital area of the skull. The neck muscles are often very tense and spasm of these muscles is responsible for the pain.

Areas that are effected by tension headaches are shown left

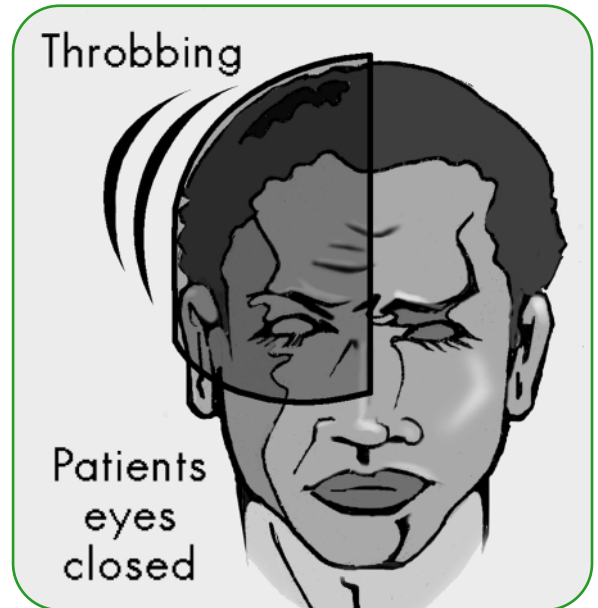
Vascular headaches and migraines

Migraines are very severe vascular headaches which usually affect adults. Characteristics of migraines include:

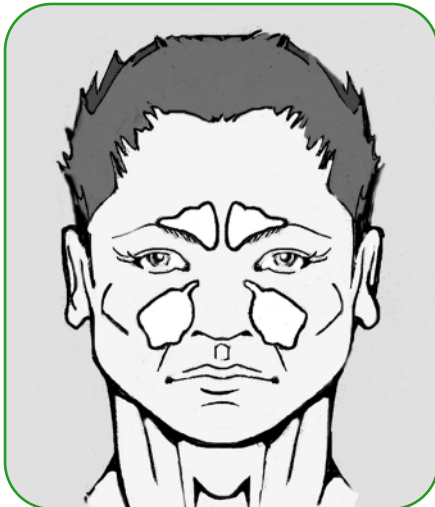
- the pain is often on one side only
- there may be severe throbbing
- nausea and photophobia (discomfort when looking at the light) are often present

- untreated migraines usually last 12-24 hours or longer
- some patients may see stars, colours or flaring lights in front of their eyes before the migraine begins
- between attacks the patient usually feels normal
- stress and emotional upset often bring on the migraine
- occasionally women get migraines during menstrual periods

Migraines are often debilitating in the pain they cause. Note the effected areas



Sinusitis and other upper respiratory tract infections



Sinuses are air-filled spaces located just beneath the front facial bones. Infection causes a build up of fluid and inflammatory cells in these spaces, and leads to painful pressure. Headaches from these infections are usually throbbing and get worse when the person bends forward. The headache may be present in the early morning or on waking. There is often tenderness over the sinuses above or below the eye. The tenderness often gets worse if you percuss over the top of the infected sinus.

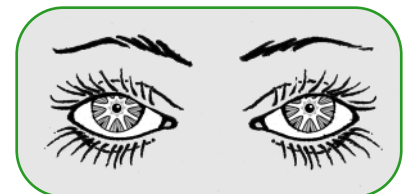
Note the position of the sinus - this is where the pain will occur.

Disorders of the cervical spine

Any problem of the cervical spine can cause chronic spasm of the neck muscles and headache. The pain is usually in the occipital area. It is often caused by pressure on the nerves which exit the spinal area between the cervical vertebrae.

Problems of the eyes

Acute glaucoma can present with a severe headache on the side of the affected eye. See the manual on COMMON EYE PROBLEMS Chapter 5. Problems with **visual acuity** may also present as headaches if the patient does not have corrective lenses. This type of headache is from chronic eye strain and usually located at the front of the head.



Severe hypertension

Severe hypertension may cause headaches. These headaches may be associated with blurred vision, convulsions and confusion. Mild and moderate hypertension does not generally cause headaches.

Meningitis infection

Headaches from meningitis have the following characteristics:

- acute onset
- severe and generalised pain
- constant pain
- the pain gets worse when the patient bends her neck forwards
- vomiting and fever may also be present

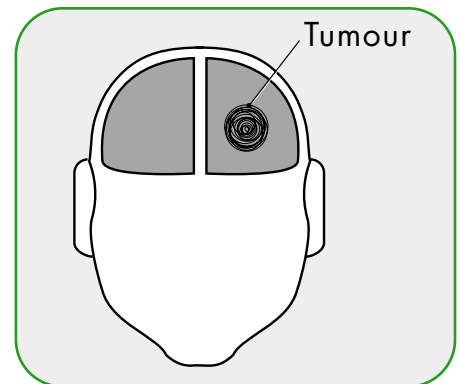
General systemic infection

Viral infections, malaria, typhoid, tick-bite fever and other bacterial illnesses may cause moderate to severe headaches.

Uncommon causes of headaches

Occasionally headaches are caused by brain tumours or head injuries.

A brain tumour is a rare cause of a headache. These headaches begin as one-sided, dull, intermittent pain. Later they become more severe and last longer. They may result in fainting, fitting, one-sided weakness or other neurological signs and symptoms. The headache may be worse when coughing, sneezing or bending forward. Vomiting is associated with brain tumours.



A tumour forms in the brain as shown right

Head injuries sometimes cause headaches. These headaches are often associated with neck pain, emotional disturbance and poor concentration. Sometimes the patient may develop neurological signs and symptoms e.g. fits, defects in eye movements or weakness. This may be due to a chronic collection of blood beneath the dura of the brain (a subdural haemorrhage).

Clinical assessment of patients with headaches

It is important to determine the following:

- Is this headache a symptom of stress or anxiety?
- Is the headache a symptom of a condition or infection elsewhere?
- Is this a migraine?
- Is this headache a symptom of a serious neurological disease e.g. meningitis or a brain tumour?

The following questions will help you determine the cause and seriousness of the headache:

- When did the headache start?
- How long do they last? How often do they come on?
- How severe are the headaches?
- When do the headaches begin - morning or evening?
- Does the pain occur on one side or both sides of the skull? Where is the pain? When is the pain the most severe?
- Type of pain - throbbing, dull ache or tight band?
- Are there any symptoms of nausea, vomiting, flashing lights?
- What starts the headache?
- If the patient is a woman, is she on contraceptive pills?
- Are there any other symptoms to suggest infection, cervical spine disorder, eye disease, upper respiratory tract infection e.g. sinusitis? Does your patient have any major social, financial, or personal problems?
- Does the headache have sudden onset and severe pain?
- Is there any recent history of head injury or onset of convulsions?
- Do simple analgesics like **aspirin** or **paracetamol** usually relieve the headache?

Once you have taken a detailed history of your patient's condition, do a physical examination.

Physical examination

- Take note of the general condition of the patient - blood pressure, pulse, temperature.
- Are there signs of meningitis - a stiff neck, Kernig's sign, pyrexia in an ill patient?
- Are there any signs of a brain tumour?
 - how good is the patient's co-ordination?
 - are the Pupils Equal And Reacting to Light (PEARL)?
 - are all the eye movements normal?
 - is there any weakness?
- Are there any signs of severe hypertension?
- Are there any signs of upper respiratory tract infection, malaria, typhoid or tick bite fever?
- Is the movement of the cervical spine normal?
- Are the eyes normal on examination (including visual activity)?

After taking a history and doing a physical examination, you should have a good idea about the kind of headache that is present. Most headaches are not serious but some may be signs of a more serious disorder which you should refer to a doctor.

When to refer patients with headaches

Patients with certain kinds of headaches need to be referred to a doctor for investigation to rule out a more serious neurological disorder.

Refer patients with the following kinds of headaches:

- any headache which has a **sudden onset** and is severe - also the patient has no history of previous severe headaches
- any headache associated with **pyrexia** and **signs of meningitis** e.g. a stiff neck
- any headache which has symptoms that are definitely **getting worse**
- any headache associated with **other neurological signs** e.g. squint, irregular pupils, fits or confused mental states or changes in personality
- a worsening headache **associated with a recent head injury**
- migraines which **do not respond to simple treatment**
- headaches which **begin when the patient is 50 years or older**
- headaches which have changed from their normal pattern or are no longer responding to simple analgesics
- headaches associated with **severe hypertension**
- headaches that get much worse when patient coughs or bends over

Any patient with headaches and, neck stiffness or vomiting needs urgent attention. Headaches with neck stiffness or vomiting may be signs of infection or bleeding, in or around the brain.

How to manage patients with headaches



Use the following principles to manage patients with headaches:

- Refer patients with headaches that may be a sign of a more serious disorder. See list of these kinds of headaches above.
- If the headache is a symptom of another serious condition e.g. meningitis, cervical spine disorder, upper respiratory tract infection, then manage these conditions as necessary.

Manage uncomplicated or stress-related headaches as follows:

- Give simple analgesics for pain relief e.g., **aspirin 600mg** or **paracetamol 1000mg**. Mixed preparations with **paracetamol, aspirin** and **codeine** may be helpful for some patients. But remember that **codeine** causes constipation.
- Neck massage or warm or cold compresses on the neck may give the patient relief.

Manage patients with migraines as follows:

- Avoid certain foods and environments that may cause the migraine e.g., bright lights, smoke, coffee, red wine, chocolates.
- Take analgesics (as above) at the onset of the migraine. Drugs e.g., **indomethacin** (Indocid) or **ibuprofen** (Brufen) are also helpful.

- Rest in a quiet darkened room.
- A cold damp cloth on the forehead may relieve the pain.
- Some doctors use **ergotamine** for migraine.
- If vomiting is a problem, you may give **metoclopramide** (Maxolon) or **prochlorperazine** (Stemetil). Some antihistamines may be helpful e.g. Phenergan.
- Patients with severe migraines which do not improve with the simple treatment above, may need referral to a doctor for assessment and further management. Patients who get frequent migraines may be placed on medications to prevent the onset of migraines, such as beta-blockers (Propranolol) or anti-depressants (Amitryptiline).

**Remember that most headaches are a result of stress.
A kind sympathetic health worker and a simple analgesic
are often all that is necessary.**

SUMMARY TABLE

Type of Headache	Nature of the Pain	Location of the Pain	Precipitants	Associated Symptoms	Physical Findings	Management
Tension/Stress	Dull ache, band-like Variable duration	Occipital Temporal	Stress	Other stress related symptoms such as low back pain or loose stools/cramps	None usually. May have neck or scalp muscle tenderness.	<ul style="list-style-type: none"> ● Education ● Massage ● Relaxation/meditation ● Aspirin, Panadol ● Ibuprofen
Migraine	Throbbing/pulsating pain. May start unilateral and progress to bilateral. May last hrs-days. * recurrent	May be unilateral in the frontal or temporal areas, or diffuse.	Estrogens (contraceptives), foods (cheese, chocolate, wine)	Nausea, vomiting, photophobia (pain when looking at bright lights)	None	<ul style="list-style-type: none"> ● Avoid triggers ● Aspirin, Panadol ● Ibuprofen ● Codeine, Ergots ● Preventive drugs
Sinusitis	Sensation of fullness or pressure over infected sinus.	Localized Facial – frontal	Allergies (allergic sinusitis with secondary infection)	Nasal discharge that is yellow or green. Fever.	Tender to percuss over sinuses	<ul style="list-style-type: none"> ● Antibiotics ● Nasal steroids ● Antihistamine
Meningitis	Neck pain. Onset fairly sudden (over hours)	Occipital. May become generalised		Nausea and vomiting, photophobia. Fever	Neck stiffness. Unable to touch chin to chest. (Kernigs/Brudzinskis sign). Confusion, seizures, coma.	<ul style="list-style-type: none"> ● IV antibiotics ● Urgent referral
Brain Tumor	Dull at first, becoming gradually more progressive and intense.	Begin in one area and then becomes diffuse.	Worse with coughing, sneezing or bending forward. Worse in the morning.	Nausea and vomiting, especially in the early morning.	Pupils unequal, weakness, clumsiness, visual disturbances. Focal neurological findings.	<ul style="list-style-type: none"> ● Refer for evaluation
Post-traumatic	Dull, may be constant or come and go.	Variable.	May be worse with cough, sneeze or bend forward.	Dizziness, poor concentration, irritability, may have nausea and vomiting	None	<ul style="list-style-type: none"> ● Aspirin, Panadol <p>Must rule out more serious cause such as subdura hematoma</p>