

1. Introduction

- Headache is a common condition presenting in pre-hospital care.
- Most headaches are simple and not serious, but care must be taken to ensure that **TIME CRITICAL** conditions are not missed. A **detailed history is vital** when dealing with headache, as aetiology may go back hours, days, months (or even years in relation to family history or childhood illness; for example, tumours).

2. History

- Exclude the following or refer to the specific guidelines for:
 - **stroke**
 - **head injury**
 - **glycaemic episode**.
- Assess the **SOCRATES** of the pain:
 - **S**ite – where exactly is the pain
 - **O**nsset – what was the patient doing when the pain came on
 - **C**haracter – what does the pain feel like
 - **R**adiates – where does the pain spread to
 - **A**ssociated symptoms – e.g. nausea, dizziness
 - **T**iming – how long has the patient had pain
 - **E**xacerbating/relieving factors – what makes it better or worse
 - **S**everity – obtain an initial pain score.
- Key questions for patients with headache:
 - Is this the worst headache ever?
 - Is it different from your usual headache?
 - Is this a new headache?

Headaches can be broadly defined as primary or secondary.

Primary headaches are those which occur spontaneously (simple headache); in response to a lifelong condition (e.g. migraine); 'tension type' headaches (various aetiologies^a) or cluster headache (severe short lasting headache). These should not be considered as being pathophysiological; that being normal for the patient.

Secondary headaches are secondary to illness or injury and are pathological in origin, for instance; head trauma (skull fracture), infective origin (i.e. meningitis); intracranial haemorrhage (i.e. spontaneous subarachnoid bleed or sub dural bleed following trauma) or vascular (i.e. temporal arteritis).

- It is difficult to accurately differentiate between a simple headache, which requires no treatment, and a potentially more serious condition. Table 3.12 lists '**red flag**' symptoms that require the patient to undergo hospital assessment. NB This does not mean that any patient presenting without these symptoms is automatically safe to be left at home.

Consideration should be given to transferring all first presentations of severe headache to the emergency department for further investigation.

^aTension type or chronic daily headaches can be caused by medication overuse or withdrawal. These should be considered to be secondary headache.

Table 3.12 – RED FLAG SIGNS AND SYMPTOMS

Signs and symptoms

- Headache of severe, sudden (thunderclap) onset.
- Headache localised to the vertex (top of head).
- Escalating headache of unusual nature.
- Changed visual acuity.
- Meningeal irritation.
- Changed mental state and inappropriate behaviour.
- Newly presenting ataxia.
- Cranial Nerve Palsy.
- Posture-related headache.
- Headache triggered by cough/valsava manoeuvre.

NB Multiple red flags increase significantly the risk of serious pathology.

3. Incidence

Refer to Table 3.13 for details of the incidence of different types of primary headache.

Table 3.13 – INCIDENCE BY TYPE FOR PRIMARY HEADACHES

| Type | Incidence |
|----------------------------------|--|
| Migraine | 6–8% in Men 15–18% in Women |
| (Episodic) Tension Type Headache | Up to 70% of whole population During life Most prevalent up to age of 30 |
| Cluster Headache | Less than 1 in every 1000 people |

- Secondary headache data is not meaningful in the emergency setting as the intention is not to exclude these potentially more serious presentations in the prehospital environment.

4. Severity and Outcome

- The severity of headaches varies from patient to patient in terms of the pain the patient experiences. Although the pain may be the primary concern of the patient, it may belie the true severity of the underlying cause.
- The outcome for patients presenting through the 999 system for headache will be varied as the cause of the headache, the clinical significance of the headache and the progression are all dependent on the presenting factors.
- Patients may deteriorate rapidly if they have a space occupying condition (e.g. haemorrhage resulting in mass effect).
- Clinicians must ensure that the patient receives the safest pathway of care and it is always better to be cautious, especially in children and those patients who are on their own.