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The term headache is a generalised term given to any pain in the region of head above the level of eye.\(^1\) The pain associated with headache may be sharp, throbbing, dull, or vice-like in nature and may occur on one or both sides of the head, be isolated to a single location, or extend as a band across the skull. Headaches may be classified into two distinct categories based on their underlying cause as either primary or secondary:

- **Primary headaches** – no underlying cause is demonstrable and the problem is due to an abnormality at the molecular level. Primary headaches account for approximately 90% of all presentations with common diagnoses including Migraines, Tension, and Cluster headache.

- **Secondary headaches** – there is a clearly identifiable underlying cause, many with life-threatening or catastrophic consequences if not appropriately treated. Common diagnoses of secondary headaches include intracranial haemorrhages, tumours, and infections.\(^2,3\)

The evaluation and differential diagnosis of headache should include a detailed history followed by a thorough general and neurological examination including the role of psychological factors, life events and stressful incidences.\(^4,5\) Headaches by their very nature and complexity can make diagnosis and management difficult and paramedics therefore should have a low threshold for referring to further medical assessment and care.

### Clinical features

#### Headache Red Flags:\(^3\)
- Thunderclap headache (intense, exploding, and hyperacute onset)
- Headaches associated with fever, rash or ALOC
- Meningeal signs (stiff neck, photophobia, or vomiting)
- New onset headache in patients > 50 or < 10
- Persistent morning headache with nausea
- New onset of headache in patient with cancer or HIV
- Progressive headache, worsening over weeks
- Headaches associated with postural changes
- Aura (warning sensation) that lasts longer than an hour, is different from previous aura, or occurs for first time on using oral contraceptive

#### Headache Yellow Flags:

#### Headache Green Flags:

- Symptoms associated with influenza
- Known headache with ‘usual’ symptoms and triggers
- Normal vital signs, normal assessment using the FAST technique and able to walk normally
**Risk assessment**

- Relief of symptoms with analgesia is not evidence of a benign cause.
- Officers are not to administer narcotics to patients with a history of chronic headaches as it has not been proven to be a successful intervention and may potentially increase the risk of reliance on such medication.

<table>
<thead>
<tr>
<th>Description</th>
<th>Diagnosis</th>
<th>Clinical Features</th>
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<tbody>
<tr>
<td><strong>Secondary headache</strong></td>
<td>Meningitis</td>
<td>Fever, photophobia, stiff neck, rash, limb pain, cold peripheries, mottled skin and bulging fontanelle (babies)</td>
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<tr>
<td></td>
<td>Encephalitis</td>
<td>Fever, confusion and reduced conscious level</td>
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<td></td>
<td>Subarachnoid haemorrhage</td>
<td>‘Thunder-clap’ or very sudden onset headache +/- stiff neck</td>
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<tr>
<td></td>
<td>Head injury</td>
<td>Bruising and/or history of injury, reduced conscious level, periods of lucidity and amnesia</td>
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<tr>
<td></td>
<td>Acute febrile illness</td>
<td>Fever and symptoms or underlying cause for example upper respiratory tract infection and tonsillitis</td>
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<tr>
<td></td>
<td>Raised intracranial pressure</td>
<td>Worse on waking/sneezing, neurological signs), raised blood pressure and reduced pulse rate</td>
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<tr>
<td></td>
<td>Medication overuse headache</td>
<td>Rebound headache on stopping analgesics</td>
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<td>Exertional or coital headache</td>
<td>Suggested by history of association</td>
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<td>Tension type headache</td>
<td>Band around the head, stress and low mood</td>
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<td></td>
<td>Cervicogenic (referred pain from neck) headache</td>
<td>Unilateral or bilateral; band from neck to forehead and scalp tenderness</td>
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<tr>
<td></td>
<td>Cluster headache</td>
<td>Usually male. Often a smoker. Nightly pain in 1 eye for 2–3 months then pain free for at least a year</td>
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<tr>
<td></td>
<td>Migraine</td>
<td>Aura, visual disturbance, unilateral headache, nausea/vomiting and trigger</td>
</tr>
</tbody>
</table>
Sudden catastrophic headache/intracranial haemorrhage?

- Analgesia
- Antiemetic

Suspected meningococcal septicaemia?

- Ceftriaxone
- Analgesia
- Antiemetic
- IV fluid

Suspected migraine or other benign headache?

- Analgesia
- Antiemetic
- IV fluid

Transport to hospital
Pre-notify as appropriate

Note: Clinicians are only to perform procedures for which they have received specific training and authorisation by the QAS.