Healthcare Improvement Scotland

SIGN

107

Diagnosis and management of headache in adults

Quick Reference Guide

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Scottish Intercollegiate Guidelines Network
Elliott House, 8 -10 Hillside Crescent
Edinburgh EH7 5EA

www.sign.ac.uk

DEFINITIONS

Primary headache disorders - those not associated with an underlying pathology, eg migraine, tension-type, and cluster headache.

Secondary headache disorders - headache attributed to an underlying pathological condition. Includes any head pain of infectious, neoplastic, vascular or drug-induced origin.

Chronic headache occurs on more than 15 days per month for more than three months.

DIAGNOSIS OF PRIMARY HEADACHE

An inadequate history is the probable cause of most misdiagnosis of headache type.

D	**Practitioners should consider using headache diaries and appropriate assessment questionnaires to support the diagnosis and management of headache.**

CHARACTERISTICS OF MIGRAINE

bold indicates the most helpful for distinguishing migraine from other headache

- episodic moderate to severe headache that causes disability
- unilateral
- pulsating
- builds up over minutes to hours
- moderate to severe in intensity
- associated with **nausea** and/or vomiting and/or **sensitivity to light** and/or **sensitivity to sound**
- **aggravated by routine physical activity**
- **typical aura** (in 15–33% of patients with migraine)
- exacerbation by physical activity
- **sensitivity to light between attacks**
- **positive family history of migraine.**

C	**Patients who present with a pattern of recurrent episodes of severe disabling headache associated with nausea and sensitivity to light, and who have a normal neurological examination, should be considered to have migraine.**

INVESTIGATIONS OF MIGRAINE

D	**Neuroimaging is not indicated in patients with a clear history of migraine, without red flag features for potential secondary headache, and a normal neurological examination.**

TREATMENT OF PATIENTS WITH MIGRAINE

ACUTE TREATMENT

This section is superseded by SIGN 155: Pharmacological management of migraine

TREATMENT OF PATIENTS WITH MIGRAINE (CONTD.)

PROPHYLAXIS

This section is superseded by SIGN 155: Pharmacological management of migraine.

TENSION-TYPE HEADACHE

Characteristics

- bilateral
- pressing or tightening in quality
- mild to moderate in intensity
- no nausea
- not aggravated by physical activity
- may be pericranial tenderness, sensitivity to light or noise.

C	**A diagnosis of tension-type headache should be considered in a patient presenting with bilateral headache that is non-disabling where there is a normal neurological examination.**

TREATMENT OF PATIENTS WITH TENSION TYPE HEADACHE

ACUTE TREATMENT

A	**Aspirin and paracetamol are recommended for acute treatment in patients with tension-type headache.**

PROPHYLAXIS

A	**Tricyclic antidepressants, particularly amitriptyline, 25-150 mg per day, are recommended as the agents of choice where prophylactic treatment is being considered in a patient with chronic tension-type headache.**

CLUSTER HEADACHE

- cluster headache is the most common trigeminal autonomic cephalalgia, with a prevalence of 1 in 1,000
- characterised by attacks of severe unilateral pain in a trigeminal distribution
- associated with prominent ipsilateral cranial autonomic features.

FEATURES DISTINGUISHING CLUSTER HEADACHE FROM MIGRAINE

	Headache type	
	Cluster headache	Migraine
Duration	15 mins-3 hrs	4-72 hrs
Onset	rapid	gradual
Frequency	1 every other day-8/day	< 1/year-1/day (median 1-2/month)
Restlessness during an attack	100%	0%
Ipsilateral autonomic features	prominent	occasional

D	**When a patient presents with frequent, brief, unilateral headaches with autonomic features a trigeminal autonomic cephalalgia should be considered, and the patient should be referred for specialist assessment.**

ACUTE TREATMENT

A	**Nasal sumatriptan or zolmitriptan is recommended for treatment of acute attacks of cluster headache in patients who cannot tolerate subcutaneous sumatriptan.**
A	**Subcutaneous injection of 6 mg sumatriptan is recommended as the first choice treatment for the relief of acute attacks of cluster headache.**

PROPHYLAXIS

B	**Verapamil, 240-960 mg is recommended for the prophylaxis of cluster headache.**

DIAGNOSIS OF SECONDARY HEADACHE

Consider the diagnosis of secondary headache in patients presenting with new onset headache or headache that differs from their usual headache.

Red flag features which should prompt referral for further investigation:

- new onset or change in headache in patients who are aged over 50
- thunderclap: rapid time to peak headache intensity (seconds to 5 mins)
- focal neurological symptoms (eg limb weakness, aura <5 min or >1 hr)
- non-focal neurological symptoms (eg cognitive disturbance)
- change in headache frequency, characteristics or associated symptoms
- abnormal neurological examination
- headache that changes with posture
- headache wakening the patient up (NB migraine is the most frequent cause of morning headache)
- headache precipitated by physical exertion or valsalva manoeuvre (eg coughing, laughing, straining)
- patients with risk factors for cerebral venous sinus thrombosis
- jaw claudication or visual disturbance
- neck stiffness
- fever
- new onset headache in a patient with a history of human immunodeficiency virus (HIV) infection
- new onset headache in a patient with a history of cancer.

D	**Patients presenting with headache for the first time or with headache that differs from their usual headache should have a clinical examination, a neurological examination including fundoscopy, and blood pressure measurement.**
D	**Patients who present with headache and red flag features of potential secondary headache should be referred to an appropriate specialist for further assessment.**
D	**Brain CT should be performed in patients with headache who have unexplained abnormal neurological signs, unless the clinical history suggests MRI is indicated.**
D	**Clinicians requesting neuroimaging should be aware that both MRI and CT can identify incidental neurological abnormalities which may result in patient anxiety as well as practical and ethical dilemmas with regard to management.**

THUNDERCLAP HEADACHE

Described as:

- a high-intensity headache of rapid onset reaching maximum intensity in less than a minute in most, but can take a few minutes in some
- may be primary or secondary (no reliable differentiating features)
- subarachnoid haemorrhage is the commonest secondary cause, although a number of other conditions can also present with thunderclap headache (intracerebral haemorrhage, cerebral venous sinus thrombosis, arterial dissection, pituitary apoplexy).

D	**Patients with a first presentation of thunderclap headache should be referred immediately to hospital for same day specialist assessment.**

INVESTIGATION OF THUNDERCLAP HEADACHE

D	**In patients with thunderclap headache, unenhanced CT of the brain should be performed as soon as possible and preferably within 12 hours of onset.**
C	**Patients with thunderclap headache and a normal CT should have a lumbar puncture.**
D	**In patients who require a lumbar puncture for thunderclap headache, oxyhaemoglobin and bilirubin should be included in cerebrospinal fluid analysis.**
☑	Lumbar puncture in CT negative patients with suspected subarachnoid haemorrhage should be carried out as soon as possible after 12 hours has elapsed from the onset of symptoms. In delayed presentations, lumbar puncture can be performed up to two weeks from onset of symptoms.

MEDICATION OVERUSE HEADACHE

Described as:
headache which is present for 15 days or more per month and which has developed or worsened while taking regular symptomatic medication.

D	**Medication overuse headache must be excluded in all patients with chronic daily headache** *(headache ≥15 days/month for >3 months).*
D	**Clinicians should be aware that patients using any acute or symptomatic headache treatment are at risk of medication overuse headache. Patients with migraine, frequent headache and those using opioid-containing medications or overusing triptans are at most risk.**
C	**When diagnosing medication overuse headache, psychiatric comorbidity and dependence behaviour should be considered.**
C	**Patients with medication overuse headache who have psychiatric comorbidity or dependence behaviour should have these conditions treated independently. Referral to a psychiatrist or a clinical psychologist should be considered.**

TREATMENT

This section is superseded by SIGN 155: Pharmacological management of migraine

PREGNANCY, CONTRACEPTION, MENSTRUATION AND THE MENOPAUSE

PREGNANCY

Where possible, the use of medication in pregnancy should be avoided, particularly in the first trimester. Paracetamol has been used routinely in all stages of pregnancy without apparent harmful effect, and, if drug treatment is essential then paracetamol is the analgesic of choice.

☑	Paracetamol 1,000 mg is the treatment of choice in pregnancy for all patients with migraine and tension-type headache when the pain is sufficient to require analgesia.

☑	If paracetamol provides insufficient analgesia aspirin 300 mg or ibuprofen 400 mg can be used in the first and second trimester of pregnancy.

Aspirin is contraindicated during the third trimester of pregnancy. Long term exposure or exposure to high doses of ibuprofen in late pregnancy is associated with an increased risk of fetal complications.

ORAL CONTRACEPTION

Women with migraine with aura using a COCP have a relative risk of 8.72 (95% CI 5.05 - 15.05) for developing stroke. Women over the age of 35 suffering from migraine without aura also have an increased risk of ischaemic stroke if they take COCP.

B	**Women with migraine with aura should not use a combined oral contraceptive pill.**

D	**Patients with migraine without aura who are over the age of 35 should not use a combined oral contraceptive pill.**

MENSTRUATION

This section is superseded by SIGN 155: Pharmacological management of migraine

This Quick Reference Guide provides a summary of the main recommendations in SIGN Guideline 107, **Diagnosis and management of headache in adults.**

Recommendations are graded **A** **B** **C** **D** to indicate the strength of the supporting evidence. Good practice points ☑ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: **www.sign.ac.uk**

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