

Key Points

- Most headache is migraine (intermittent or chronic) – probably up to 90%
- Stress, sinuses, eyesight are not usually causes of headaches
- MOH is common – and underdiagnosed; if suspected stop analgesics and caffeine intake
- Review medication (COCP in migraine, medication overuse headache - MOH)
- Consider age of patient (>50) – temporal arteritis
- Ask about activity in attacks – rest in migraine; restless in cluster headache
- Ask about duration – continuous, intermittent, paroxysmal
- If continuous – was it intermittent first or continuous from onset (new daily persistent headache – NDPH)
- NB – NDPH is usually recent and continuous (see red flags)
- Chronic migraine is usually longstanding and continuous – and previously intermittent
- Trigeminal neuralgia is paroxysmal
- Tailor medication to diagnosis
- Do not use opioids in headaches
- Few headaches respond to regular analgesics or triptans

Refer:

- Cases with red flags (see opposite)
- New daily persistent headache
- Trigeminal neuralgia;
- SUNCT/SUNA
- Cluster headache
- HC / CPH
- Refractory / chronic migraine
- Unclassifiable, atypical headache or failure to respond to standard migraine therapies.

Patient presents with Headache

Take full history, including OTC medication; COCP
Examine patient including vision: acuity and fields to confrontation (pituitary lesions); blood pressure
Temporal arteries (if >50 years)
Fundi

Check red flags

No

Likely primary headache – usually migraine / medication overuse - attempt initial primary care management rather than referral

Abbreviations:
OTC – over the counter
MOH – medication overuse headache
COCP- combined oral contraceptive pill
NDPH – new daily persistent headache
SUNCT – severe unilateral neuralgiform headache with conjunctival injection + tearing
SUNA - severe unilateral neuralgiform headache with autonomic features (peri-ocular swelling usually)
CPH – chronic paroxysmal hemicrania
HC - hemicrania continua
SAH – subarachnoid haemorrhage
ICP – intracranial pressure
TN – trigeminal neuralgia

Red Flags

- Thunderclap headache (intense headache of “explosive” onset suggest **SAH**)
- Visual loss - ? **pituitary lesions, raised ICP**
- papilloedema
- Age >50 / Scalp tender / Jaw claudication: check urgent ESR /CRP (if suspected **temporal arteritis** - refer & start steroids immediately, prednisolone 40-60mg daily, 60mg if visual symptoms; see BNF) + aspirin 75mg if no contraindication
- Headache with atypical aura (duration >1 hour, or including significant / prolonged motor weakness)
- Headache associated with postural change (bending), straining, exertion or coughing or waking from sleep (possible **raised ICP**)
- Pain worse / occurring upright (postural) – **low CSF pressure headache**
- New daily persistent headache**
- Unilateral red eye – consider angle closure **glaucoma**
- Remember **carbon monoxide** poisoning (also causes lethargy + nausea)
- Rapid progression of sub-acute focal neurological deficit
- Rapid progression of unexplained personality / cognitive / behavioural change
- New onset headache in a patient with a history of cancer / immunosuppression
- Progressive headache, worsening over weeks or longer
- Refractory headache
- Unclassified headache

Yes

Walton Centre advice line:
Weekdays 11.30-1.30 (07860 481429)
Open access MR scan if available
Refer
Admit
(As clinically appropriate)

Migraine (usual cause of chronic headaches)	Migraine with Aura	Medication overuse	Tension type headache	Cluster headache	Others
<p>Diagnosis-at least 5 attacks fulfilling these criteria;</p> <ul style="list-style-type: none"> Last 4-72 hours untreated <p>At least 2 of the following;</p> <ul style="list-style-type: none"> Unilateral location Pulsating quality Moderate/severe pain Nausea/ vomiting and/ or photophobia No other cause identified <p>Usually episodic Can be chronic (15% of cases) with both featureless and migrainous headaches on .15 days a month; of which 8 migrainous</p>	<p>Occurs in 1/3 of migraine patients</p> <p>Aura 5-60 minutes prior to/ with headache</p> <p>Usually visual- note blurring & spots not diagnostic</p> <p>Can be speech/ motor/ sensory</p> <p>Full recovery after attacks</p>	<p>Medication history is crucial especially use of over the counter analgesia</p> <ul style="list-style-type: none"> Triptans/opioids >10 days a month for >3 months Simple analgesics >15 days a month for >3 months Usually underlying migraine Usual acute migraine therapy ineffective 	<p>Usually episodic; can be chronic</p> <p>Deemed chronic if >15 days per month</p> <p>Featureless, <u>bilateral</u>, mild or moderate</p> <p>Not worse with activity</p> <p>Mild- moderate intensity</p> <p>Can occur in combination with migraine</p>	<p>Affects M:F (3:1 ratio)</p> <ul style="list-style-type: none"> Usually aged 20+ years Bouts last 6-12 weeks Usually occur 1-2x year Rarely chronic throughout year. Very severe- often at night & lasts 30-60 mins- rarely up to 120 mins Restless, agitated Triggered by alcohol Unilateral periorbital Ipsilateral conjunctival injection, rhinorrhoea +/- Ptosis 	<p>Trigeminal neuralgia</p> <ul style="list-style-type: none"> Triggered <u>unilateral</u> facial pain Sudden paroxysmal Not continuous <p>SUNCT/SUNA</p> <ul style="list-style-type: none"> Similar to TN (but frontal area) Autonomic ocular features <p>Ice pick/ Stabbing</p> <ul style="list-style-type: none"> Sudden brief head pains Various locations <p>Chronic Paroxysmal Hemicrania</p> <ul style="list-style-type: none"> Unilateral periorbital Autonomic (red eye, lacrimation, nasal congestion, ptosis 15-30 mins; multiple/day <p>Hemicrania Continua (HC)</p> <ul style="list-style-type: none"> Unilateral 'side locked' constant headache >3 month +/- autonomic features Restlessness
<p>Migraine Acute therapy</p> <ul style="list-style-type: none"> Simple analgesia (aspirin, paracetamol, NSAID) or <ul style="list-style-type: none"> Simple analgesia + triptan if not effective or Simple analgesia + triptan + prokinetic antiemetic <p>Triptan options- oral, orodispersible, nasal, injection</p> <p>Oral absorption can be unreliable in acute migraine</p> <p>Avoid COCP if any aura/ Severe migraine</p> <p>NO triptan DURING aura</p>		<p>Withdraw analgesics and caffeine</p> <ul style="list-style-type: none"> Prn ibuprofen/naproxen very sparingly Consider low dose amitriptyline 10-75mg nocte (unlicensed) <p>Headaches will worsen for 7-10 days (weeks if coming off opioids)</p> <p>Migraine therapy may be needed if intermittent migrainous features persist or emerge</p>	<ul style="list-style-type: none"> Simple analgesics but avoid medication overuse (>15 days/month) Treat any medication overuse Acupuncture- 10 sessions over 5-8 weeks if available Amitriptyline 10-75mg nocte- limited evidence of effectiveness (unlicensed) 	<p>Acutely</p> <ul style="list-style-type: none"> Nasal or sc triptan prn 100% oxygen 15L/Min (consult neurology; not if patient is a smoker/ uses E cigarettes) <p>Termination of cluster</p> <ul style="list-style-type: none"> Prednisolone 60mg daily- reduce by 10mg every 3 days Verapamil 80mg tds increased to 120mg tds if needed (may need 240 mg tds or more; start at same time as steroids) ECG initially, after dose increases and weekly if >120 tds (hospital if not possible in primary care) Refer all cluster cases for specialist review + MRI 	<p><u>TN</u>; carbamazepine 100-200mg daily; gradually increased to effect; lamotrigine (unlicensed) or phenytoin if allergic to carbamazepine</p> <p><u>SUNCT/SUNA</u>; Lamotrigine increased to 200mg daily (unlicensed). <u>Ice-pick/hemicrania continua/CPH</u>:</p> <p>Indometacin 25-50mg tds (unlicensed) with PPI cover</p>

Migraine – Prophylactic therapy options (try for 3 months):

- Stop caffeine intake; avoid excess analgesics (medication overuse)
- **Propranolol** - 80-240mg daily
- **Topiramate** - 25mg od 2 weeks; 25mg bd 2 weeks; then 50mg bd
 - **Males**
 - **Females of childbearing potential aged 10-55yrs (SEE ADJACENT WARNING)**
- **Candesartan** - 8-16mg daily
- **Amitriptyline** - 10-75mg (nortriptyline if better tolerated)
- **Cranial acupuncture if available**
- **Sodium valproate** - up to 1600mg daily
 - **Males**
 - **Females of childbearing potential aged 10-55yrs (SEE ADJACENT WARNING)**
- **Botulinum toxin** - in chronic refractory cases (3 failed preventatives; no analgesic overuse)
- **New CGRP antagonists**

The preventative medication dose should be escalated up until the best tolerated dose is reached. As a practical rule start at a low dose and gradually increase the dose aiming for the mid point of the therapeutic dose range. Then the drug should be continued for at least 2-3 months to assess benefit, using headache diaries to monitor.

If the medication is not beneficial it should be tapered off and the same strategy applied for the next preventative medication.

If the medication is found to be effective – it should be continued for a further 6-9 months. Provided the patient's symptoms remain well controlled, an attempt can be made to withdraw and stop the medication at that stage. If symptoms recur, the patient has to go back on the medication.

NB; Valproate medicines must not be used in women of childbearing potential, aged 10-55yrs, unless the Pregnancy Prevention Programme is in place and only if other treatments are ineffective or not tolerated, as judged by an experienced specialist. Pregnancy should be excluded before treatment initiation and highly effective contraception* must be used during treatment. For details, see the 'Antimigraine Drugs' section of the local CNS formulary.

*** Methods of contraception considered 'highly effective' in this context include the long-acting reversible contraceptives (LARC): copper intrauterine device (Cu-IUD), levonorgestrel intrauterine system (LNG-IUS), and progestogen-only implant (IMP).**

Topiramate is contraindicated in pregnancy - highly effective contraception is required prior to initiation and during treatment. Advise women and girls of childbearing potential that topiramate is associated with a risk of foetal malformations and can impair the effectiveness of any hormonal contraceptives including implants and injectable options.**

**** combined oral contraception, progestogen only pill, progesterone only implant / injections and hormonal emergency contraception will be unreliable.**

GREEN- All drugs listed above are classified as green and maybe initiated in primary care, except where individually stated otherwise.

RED- Hospital Only Prescribing

A-Ret- Amber retained. Maybe prescribed in primary care but patient remains under the care of specialist (i.e. not discharged) as occasional specialist input may be required.