### Headache pathway (adults)

**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** (COPC 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

### 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

**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.

### Abbreviations:
- OTC – over the counter
- MOH – medication overuse headache
- COPC- 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

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**Walton Centre advice line:**
Weekdays 11.30-1.30 (07860 481429)

- Open access MR scan if available
- Refer
- Admit

(As clinically appropriate)
Headache (adults) – primary care guidance

**Migraine** (usual cause of chronic headaches)
- Diagnosis: At least 5 attacks fulfilling these criteria;
  - Last 4-72 hours untreated
  - At least 2 of the following:
    - Unilateral location
    - Pulsating quality
    - Moderate/severe pain
    - Nausea/vomiting and/or photophobia
    - No other cause identified
  - Can occur in combination with other headaches

**Migraine with Aura**
- Occurs in 1/3 of migraine patients
- Aura 5-60 minutes prior to/ with headache
- Usually visual- note blurring & spots not diagnostic
- Can be speech/ motor/ sensory
- Full recovery after attacks
- Usually episodic
- Can be chronic (15% of cases) with both featureless and migrainous headaches on .15 days a month; of which 8 migrainous

**Medication overuse**
- Medication history is crucial especially use of over the counter analgesia
  - Triptans/opioids >10 days a month
  - Simple analgesics >15 days a month
  - Usually underlying migraine
  - Usual acute migraine therapy ineffective

**Tension type headache**
- Usually episodic
- Can be chronic; can be chronic
- Deemed chronic if >15 days per month
- Featureless, bilateral, mild or moderate
- Not worse with activity
- Mild–moderate intensity
- Can occur in combination with migraine

**Cluster headache**
- Affects M:F (3:1 ratio)
- 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, rhinorrhea +/- Ptosis

**Trigeminal neuralgia**
- Triggered unilateral facial pain
- Sudden paroxysmal
- Not continuous

**Cluster headache**
- Similar to TN (but frontal area)
- Autonomic ocular features
  - Ice pick/ Stabbing
  - Sudden brief head pains
  - Various locations

**Chronic Paroxysmal Hemicrania**
- Unilateral periorbital
- Autonomic (red eye, lacrimation, nasal congestion, ptosis)
- 15-30 mins; multiple/day

**Migraine Acute therapy**
- Simple analgesia (aspirin, paracetamol, NSAID) or
  - Simple analgesia + triptan if not effective or
  - Simple analgesia + triptan + prokinetic antiemetic
  - Triptan options- oral, orodispersible, nasal, injection
  - Oral absorption can be unreliable in acute migraine
  - Avoid COCP if any aura/ Severe migraine
  - NO triptan DURING aura

**Migraine therapy may be needed if intermittent migrainous features persist or emerge**

**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)

**Acutely**
- Nasal or sc triptan prn
- 100% oxygen 15L/Min (consult neurology; not if patient is a smoker/ uses & cigarettes

**Termination of cluster**
- 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**

**Others**

**Medication overuse**
- Usual acute migraine therapy
- Usually underlying migraine
- Can occur in combination with migraine

**Triptan options**
- Oral absorption can be unreliable in acute migraine

**Usual cause of chronic headaches**
- Can be intermittent or continuous
- Usual underlying migraine
- Full recovery after attacks

**Withdraw analgesics and caffeine**
- Prn ibuprofen/naproxen very sparingly
- Consider low dose amitriptyline 10-75mg nocte (unlicensed)

**Headaches will worsen for 7-10 days (weeks if coming off opioids)**

**Migraine** (usual cause of chronic headaches)
Headache (adults) – primary care guidance

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 preventive 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.