Headache Management Guideline for Adults

Greater Manchester Version 11.7 FINAL post-consultation DRAFT: 22/04/22 (superseding version 11, June 2015)

Numbers in superscript refer to information on page 2

Adult with headache

Emergency symptoms?[1] — Yes → Refer to appropriate on-call hospital team

No → Giant cell arteritis?[2] — Yes → Check FBC, ESR and CRP; Prednisolone **60mg** od immediately → **If visual symptoms**: Emergency ophthalmology referral. If not: Urgent referral to rheumatology[2] (needs temporal artery biopsy / ultrasound within 2 weeks of starting prednisolone)

No → 2WW?[3] — Yes → **2WW** referral (use Neurology 2WW form)

No → Red flags?[4] — Yes → **Refer to neurology**

No → **Migraine**[6] or **tension headache**?[7]

Yes → Advise or prescribe acute treatment (≤9days/month)[6]
Avoid opiates, or analgesic/triptan overuse[5]

No → Cluster headache?[9] — Yes → Rx acute treatments[9] → Refer to neurology

No → Secondary headache?
e.g. sinusitis, TMJ pain
Check: FBC, Ca^{2+}, TFT,ESR, CRP
Review lifestyle & medication
Treat as necessary

→ **Is it:**
- Medication overuse headache (MOH)?[5]
- Drug induced?

Yes → Stop offending medication (for 2 months if MOH) → Still troublesome?

No → No further treatment

Yes → **Migraine** or **tension headache**?[6-7] — Yes → Advise or prescribe acute treatment (≤9days/month)[6]
Avoid opiates, or analgesic/triptan overuse[5]

No → **Still troublesome?**
Inadequate response to ≥**3** migraine preventatives at maximally tolerated doses for 3 months each?[8]
(*NICE criterion for botulinum toxin or CGRP inhibitor treatment*)

Yes → Refer to neurology

No → Continue preventative for 6-12 months

Patient education: NHS Health A to Z: Tension-type headaches, Migraine, and Headaches and www.migrainetrust.org

- If relevant, consider stopping combined oral contraceptive (COC pill contraindicated in migraine **with aura**)
- **Avoid analgesic or triptan overuse**[7]
  - Triptan overuse headache usually improves 2 weeks after ceasing triptan, but can take up to 3 months
  - Analgesic overuse headache improves/resolves within 3 months of analgesic cessation
- **Modify lifestyle** (adequate sleep, exercise, hydration; cut out caffeine, trigger avoidance, address psychosocial factors if possible)
- **Headache diary:** Record total headache days per month (mild/moderate/severe) to monitor outcome (more on diary and example)

Preventatives: Increase to maximum tolerated dose for **3 months** before judging efficacy; aim for ≥50% reduction in headache days.

a) **Propranolol** MR 80mg o.d. increasing gradually to a maximum of 240mg o.d. (metoprolol less likely to exacerbate asthma)

b) **Topiramate** 25mg od increasing by 25mg every **fortnight** aiming for a target of 50 mg b.d. **NOTE**: Teratogenic and reduces effectiveness of oral contraceptives. 15mg increments can enhance tolerability. Often causes paraesthesia (warn patients — not usually a reason to cease) and sometimes weight loss, depression and cognitive slowing. Rare: kidney stones and rarely angle-closure glaucoma). If can't tolerate, zonisamide is similar but better tolerated at 25 mg o.d. increasing weekly by 25 mg up to 100 mg b.d.

c) **Amitriptyline** 10mg o.n increasing by 10mg a week up to 100 mg o.n (nortriptyline less sedating if can't tolerate amitriptyline)

d) **Candesartan** 4 mg o.n building up to 16 mg (monitor U&E and eGFR whilst titrating) BASH 2019, SIGN 155 2018

Tension-type headache: Amitriptyline as above. Acupuncture, if available.

For drug choice see GMMMG formulary Chapter 4[10]

Headache Management Guideline for Adults – Notes

1) Emergency symptoms/signs

Thunderclap onset
Accelerated/Malignant hypertension
Acute onset with papilloedema
Acute onset with focal neurological signs
Head trauma with raised ICP headache
Photophobia + nuchal rigidity + fever +/-rash
Reduced consciousness
Acute red eye: ?acute angle closure glaucoma
New onset headache in:

- 3rd trimester pregnancy/early postpartum
- Significant head injury – especially elderly patients, alcohol dependency, people taking anticoagulants

2) Giant cell arteritis

- Consider when new headaches in >50 year olds
- Many headaches respond to high dose steroids so do not use response as the sole diagnostic indicator.
- ESR can be normal in 10% - check CRP and FBC as well
- Features may include: jaw/tongue claudication, visual disturbance, temporal artery: prominent, tender, diminished pulse; other cranial nerve palsies, limb claudication

Referrals:

- Emergency ophthalmology if:
  - Amaurosis fugax / visual loss / diplopia
  - **Not** for typical migraine visual aura
- Rheumatology if diagnosis likely

3) 2WW - suspected cancer referral

❖ **Very few secondary causes of headache have unique headache symptoms**
❖ **A secondary cause is unlikely if solely migraine or tension headache and normal neurological examination**

Headache with:

- **Clear features of raised intracranial pressure:-**
  - Actively wakes a patient from sleep, which eases when arisen, but not migraine or cluster (NB: analgesic/caffeine overuse can cause this pattern)
  - **Precipitated** by Valsalva manoeuvres i.e. cough, straining at stool
  - Papilloedema
  - Other symptoms of raised ICP headache including:
    - Pulse synchronous whooshing tinnitus
    - Episodes of transient visual loss when changing posture e.g. on standing
    - Isolated recurrent unexplained vomiting - significance should be judged in context, as nausea and vomiting are features of migraine
- **New onset seizures or persistent new or progressive neurological deficit**
- **A relevant history of malignancy which might metastasise to the brain**

4) Red flags (for secondary headaches)

- Headache rapidly increasing in severity and frequency despite appropriate treatment
- Undifferentiated headache (not migraine / tension headache) of recent origin and present for >8 weeks
- Recurrent headaches on exertion and not migraine
- Orthostatic headache (headache that occurs in the upright position, suggesting low CSF pressure)
- New onset headache in:-
  - >50 years old (don't forget giant cell arteritis)
  - Immunosuppressed / HIV

5) Medication overuse headache (MOH)

Can be migrainous and/or tension type. Often worse on waking (blood analgesic level drops overnight). Occurs if the following are taken for ≥3 consecutive months:

- **Simple analgesics** ≥15 days / month; or
- **Opiates** ≥10 days / month; or
- **Triptans** ≥10 days / month.

Treatment analgesic overuse: Stop analgesic for 3 months
Treatment triptan overuse: Stop triptan for 2 months

For drug choice see GMMMG formulary Chapter 4

6) Migraine (see NICE CKS for more information)

- Throbbing pain lasting 4 hours - 3 days
- Sensitivity to stimuli: light & sound, sometimes smells
- Nausea
- Aggravated by physical activity (prefers to lie/sit still)
- Aura in 30%: evolves/spreads slowly, lasts ≤ 60 min

Chronic migraine: ≥15 headache days/month of which ≥8 are migraine
Acute treatments (OTC purchase if possible):
Aspirin 900 mg /NSAID, and/or paracetamol, & metoclopramide if necessary
A triptan, ideally ≤6 days/month (higher frequency can lead to overuse)
Don't use opiates; tend to increase nausea and lead to an overuse headache

7) Tension type headache

Band-like ache, mostly featureless
Can have mild photo **OR** phonophobia but NO nausea
Many believe this is a milder form of migraine i.e. same biology and thus similar treatments can be effective

8) Botulinum toxin, CGRP MABs (fremanezumab, galcanezumab, erenumab)

Referral for these high cost drugs can be made to neurology

9) Cluster headache

More common in men. Pain is associated with suicide attempts in 2%.

- Unilateral, side-locked behind one eye
- Attacks of pain last 15 min – 3 hours, recurrent
- Agitation, pacing (**NB** in migraine people prefer to keep still)
- Unilateral cranial autonomic features:- tearing, red conjunctiva, ptosis, miosis, nasal stuffiness

Acute treatments:

- Sumatriptan injection 3 - 6mg s.c. (contraindicated in vascular disease). Ensure sufficient quantity prescribed for a bout (2 doses can be used each 24 hrs). Triptan overuse in cluster headache alone is rare.
- Hi-flow oxygen through a non-rebreathe bag and mask
- Prednisolone 60mg o.d. for 1 week can abort a bout of attacks. Reduce gradually by 10mg every 2 days

Prophylaxis: verapamil, lithium

References (pharmacological interventions): NICE CG150: Headaches in over 12s: diagnosis and management, 2012, last update 2021; SIGN 155: Pharmacological management of migraine, February 2018; BASH, National Headache Management System for adults, 2019; British National Formulary, accessed Nov 2021; Zonisamide GMMMG CRG RAG submission, Dec 2021