Headache Management Guideline for Adults

Greater Manchester FINAL version 12.2 for GMMMG
(superseding version 11.7 2022)

Start → **Emergency symptoms?** No → **Giant cell arteritis?** No → **2WW?** No → Red flags? No

Yes → Refer to appropriate on-call hospital team

Yes → Check FBC, ESR and CRP
Prednisolone **60mg** o.d. immediately

Yes → **2WW** referral to neurology

Yes → **Refer to neurology**

Emergency symptoms & signs

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

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

If visual symptoms: Emergency ophthalmology referral
If not: Seek urgent specialist advice by referral to rheumatology on the day as per NICE CKS for GCA

Giant cell arteritis

- Consider if new headache in >50-year-old
- CRP & FBC important as ESR normal in 10%
- Features may include:
  - jaw/tongue claudication
  - ↓vision: amaurosis fugax, visual loss, diplopia
  - temporal artery: prominent, tender, ↓pulse
  - cranial nerve palsies
  - limb claudication
  - Polymyalgia rheumatica symptoms
- Many headaches respond to high dose steroids so do not use response as the sole diagnostic indicator.

2WW - suspected cancer referral

Secondary headache **unlikely** if solely migraine or tension type, and normal neurological examination

Higher risk symptoms include:

- **Features of raised intracranial pressure:**
  - Wakes from sleep, easing when arisen, but not migraine or cluster (NB: analgesic/caffeine overuse can cause this pattern)
  - Pulse-synchronous whooshing tinnitus
  - Transient visual loss when changing posture e.g. on standing ('transient obscurations')
  - Isolated recurrent unexplained vomiting - judge significance in context, as nausea & vomiting are features of migraine
- **Precipitated** by Valsalva manoeuvres i.e. cough, straining at stool
- **Papilloedema**
- **New onset seizures**
- **Persistent new or progressive neurological deficit**
- **Relevant history of malignancy which might metastasise to the brain**

Other higher risk symptoms

- 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 but not migraine
- Orthostatic headache (headache occurring in the upright position, suggesting low CSF pressure)
- New onset headache in:
  - >50 years old (don't forget giant cell arteritis)
  - Immunosuppressed / HIV

Migraine or **tension headache**?
Go to page 2

No → **Is it cluster headache?**

- Unilateral, side-locked behind one eye
- Attacks of severe pain last 15 min – 3 hours, recurrent ≤8 per 24h
- Agitation, pacing (**cf:** in migraine people prefer to keep still)
- Unilateral cranial autonomic features: tearing, red conjunctiva, ptosis, miosis, nasal stuffiness, periorbital swelling, sweating

Acute treatments:

- Sumatriptan injection 3 - 6mg s.c. (contraindicated in vascular disease). Ensure sufficient prescribed for a bout (2 doses can be used each 24 h). 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

Yes → Rx acute treatments → **Refer to neurology**

No → **Secondary headache?**
e.g. sinusitis, TMJ pain, substance-induced, non-painkiller drug-induced
Check: FBC, bone profile, TFT, ESR, CRP
Review lifestyle & medication.
Treat as necessary

No → **Medication overuse headache (MOH)?**
Can be migrainous and/or tension type. Often worse on waking (analgesic withdrawal overnight). Can occur if the following are taken for ≥3 consecutive months:

- **Simple analgesics** ≥15 days / month
- **Opioids** ≥10 days / month
- **Triptans** ≥10 days / month

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

No → **Reverted to migraine or tension headache**?
Go to page 2

Yes → Still troublesome?

No → No further treatment

Migraine or Tension Headache Pathway

Acute treatment

Advise or prescribe **acute treatment** (≤9 days / month)

- Aspirin 900 mg / NSAID, and/or paracetamol, & metoclopramide or buccal prochlorperazine if necessary
- A triptan ≤ 6 days/month (≥10 days/month causes an overuse headache)
- Rimegepant (RAG green) **only** if triptans are contraindicated or 2 triptans haven't worked (as acute treatment, can be initiated in primary care)

Don't use opioids; avoid analgesic and triptan overuse

Migraine symptoms

- Throbbing pain, 4 hours - 3 days
- Photophobia and phonophobia
- Nausea
- Aggravated by physical activity (prefer to lie / sit still)
- Aura in 30%: evolves/spreads slowly, lasts ≤ 60 min **in most cases**

Tension headache symptoms

- Band-like ache, mostly featureless
- Can have mild photo **OR** phonophobia but NO nausea

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

- **Combined oral contraceptive**: stop if migraine worsens, avoid if migraine aura
- **Avoid analgesic or triptan overuse (**can stop preventatives from working)
  - 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 (if migraine frequent enough)

Increase to maximum tolerated dose for **3 months** before judging efficacy; aim for ≥50% reduction in headache days. **Referral to neurology if ≥3 classes of preventative don't work.**

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

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

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

d) **Topiramate** 25mg od increasing by 25mg every **fortnight** aiming for a target of 50 mg b.d., 15mg increments can enhance tolerability (**zonisamide** may be tolerated better: 25 mg o.d. increasing weekly by 25 mg up to 100 mg b.d.) **Warning: teratogenic and reduces effectiveness of oral contraceptives - pregnancy prevention programme is now in place for** topiramate. Can cause paraesthesia, weight loss, depression and cognitive slowing, rare: kidney stones or angle-closure glaucoma

Tension headache: Amitriptyline as in migraine. Acupuncture, if available

Review preventative treatment every 6-12 months
A good response to treatment is a 50% reduction in the severity and frequency of migraine attacks.

Poor response

Good response → **Continue preventative for 6-12 months**
Treatment can be gradually withdrawn in many patients

Inadequate response to ≥**3** migraine preventatives at maximally tolerated doses for 3 months each?

Refer to neurology for advice on further treatment options

Episodic migraine
4-14 headache days each month

1) Oral CGRP-receptor antagonist (gepants), RAG green following specialist advice:
   - Rimegepant ▼ 75mg every other day (for episodic migraine only)
   - Atogepant ▼ 60mg o.d.
2) Parenteral CGRP monoclonal antibodies (specialist only)

Chronic migraine
≥15 headache days/month of which ≥8 are migraine for greater than 3 months

1) Oral CGRP-receptor antagonist (gepants), RAG green following specialist advice:
   - Atogepant ▼ 60mg o.d.
2) Parenteral CGRP monoclonal antibodies (specialist only)
3) Botulinum toxin (specialist only)

References (pharmacological interventions): NICE CG150: Headaches in over 12s: diagnosis and management, 2012, last update 2021; SIGN 155: Pharmacological management of migraine, February 2018 (revised March 2023); BASH, National Headache Management System for adults, 2019; British National Formulary, accessed July 2024; Zonisamide GMMMG CRG RAG submission, Dec 2021; NICE CKS for GCA, July 2024; BSR guideline on diagnosis and treatment of GCA, 2020

Rimegepant ▼ (Vydura®) and atogepant▼ (Aquipta®) – factsheet for primary care clinicians

Rimegepant and atogepant a new class of oral migraine medication. They block the CGRP receptor, which is involved with migraine generation. This is like the mechanism of action of the monoclonal antibody injection treatments already available through secondary care (erenumab, eptinezumab, fremanezumab, galcanezumab).

No special monitoring is required in terms of safety profile, but due to a theoretical risk we suggest monitoring blood pressure 6-monthly when used as a preventative.

Patients **must** keep a headache diary to record the number of migraine and headache days per month to allow review of response at 12 weeks. The review can be done in primary care by a doctor, or a non-medical prescriber such as nurse or pharmacist.

Atogepant and rimegepant are reimbursed on the NHS if criteria stipulated by NICE are met (NICE TA906, TA919 and TA973)

Prescribing criteria – rimegepant (used as acute treatment or preventative)
Current cost is £12.90 per tablet (£180.60 for 28 days as preventative), so prescribing is **only** funded for the following situations:

Acute: Lack of efficacy/tolerability of simple analgesics **and 2** different triptans; **or**
Triptans contraindicated and simple analgesics not effective.
RAG rated **green** (no need for referral if acute treatment)

Preventative: **Episodic** migraine only (4 -14 headache days per month)
Adequate trials of at least **3 different classes** of migraine preventative have not worked (<50% reduction in migraine days per month)
Following recommendation from a specialist (via neurology advice & guidance) (RAG rated **green on specialist advice**)
Rimegepant must be assessed for efficacy, after 12 weeks of use.

Prescribing criteria – atogepant (preventative only)
Current cost is £6.50 per tablet (£182.16 for 28 days), so prescribing is **only** funded for the following situations:

Preventative: **Episodic** migraine (4 -14 headache days per month); **or**
Chronic migraine (≥15 headaches per month, ≥8 are migraine)
Adequate trials of at least **3 different classes** of migraine preventative have not worked (<50% reduction in migraine days per month)
Following recommendation from a specialist (via neurology advice & guidance) (RAG rated **green on specialist advice**)
Atogepant must be assessed for efficacy, after 12 weeks of use.

Atogepant is available at two strengths and price per pack is the same.

Can rimegepant be used for prevention of chronic migraine?
No, it is not licensed for use in chronic migraine

Can atogepant be used to relieve a migraine attack?
No, it is only licensed for prevention of migraine, both episodic and chronic

Interactions
Rimegepant doesn't interact with acute migraine treatments (triptans/analgesics) but does interact with cytochrome p450 3A4 inducers and inhibitors (e.g. erythromycin, diltiazem, itraconazole, verapamil, grapefruit) – see BNF/SPC for specific details also on renal and hepatic impairment.

Interactions
Atogepant interacts with strong cytochrome p450 3A4 inhibitors (e.g. itraconazole, erythromycin) and strong OATP inhibitors (e.g. rifampicin, ciclosporin, ritonavir)
Dose needs to be reduced if co-prescribed - see BNF/SPC for specific details, also on renal and hepatic impairment

When to stop rimegepant?

- **Acute**: If migraine has not responded to a trial of 2 doses for 2 separate attacks
- **Prevention**: After 12 weeks, if the frequency of migraine attacks does not reduce by at least 50%.
- Review the need for continued preventative use at 9 – 12 months

When to stop atogepant?

- After 12 weeks, if the frequency of migraine attacks does not reduce by at least 30% for chronic migraine or 50% for episodic migraine.
- Review the need for continued use at 9 – 12 months

Referral to neurology
Migraine (episodic or chronic) which has not responded satisfactorily to adequate trials of 3 or more classes of conventional migraine preventative. An adequate trial is defined as taken at the recommended target dose, or highest tolerated below that, for 3 months without satisfactory benefit. **Please complete the referral form**, which can help expedite the advice and guidance, or appointment in a nurse-led treatment clinic (not a diagnostic clinic, so any new neurological issues will need addressing in primary care).