The acute treatment of migraine in general practice

Last year, MIPCA launched new, rational, evidence-based guidelines for the management of migraine in primary care, which have since been endorsed internationally. These guidelines are designed for everyday use by primary healthcare professionals; GPs, nurses, pharmacists and other healthcare professionals with an interest in headache.

The MIPCA migraine guidelines are based on several care principles, which can be applied to the management of all subtypes of headache. The principles incorporate screening, diagnosis, tailoring management to the needs of the individual patient and proactive long-term follow-up (Figure 1).

Key features of the guidelines include a diagnostic screening questionnaire and provision of appropriate acute treatments, based on each patient’s individual needs. These issues are discussed on Pages 2–3. One of the areas on which guidance is uncertain is when to prescribe ‘first-line’ acute therapies (e.g. simple analgesics, non-steroidal anti-inflammatory drugs [NSAIDs] and combinations of simple analgesics and anti-emetics). This topic is addressed on Page 4.

Figure 1. The new MIPCA algorithm for migraine management in primary care.
Using this screening questionnaire, the GP can diagnose the common headache subtypes:

- Migraine (Questions 1, 2 and 4)
- ETTH (Question 1)
- CDH (Questions 1, 2 and 3).

The GP can also screen for the rarer headache subtypes:

- Sinister headache should be excluded before asking the questions. Points indicating sinister headaches requiring referral include new-onset, acute headaches associated with a range of other symptoms (e.g. rash, neurological deficit, vomiting and pain or tenderness, accident or head injury, infection or hypertension) and neurological change/deficit does not disappear when the patient is pain-free between headache attacks.
- Once a pattern of chronic headaches is established (Question 2), the physician should investigate whether short-lasting headaches (e.g. cluster headache or short, sharp headaches) are the cause.
Assessment of illness severity for migraine

Divide migraine attacks into mild-to-moderate and moderate-to-severe intensity.

- **Mild-to-moderate**: Low headache impact (HIT / MIDAS Grades 1–2); intermittent headaches (<4/month); mild-to-moderate intensity headache and non-headache symptoms
- **Moderate-to-severe**: High headache impact (HIT / MIDAS Grades 3–4); intermittent headaches (<4/month); moderate-to-severe intensity headache and non-headache symptoms

Initially, such patients require acute medications only. Patients may require prophylaxis, as well as acute medications, if they report frequent headaches (≥4/month), or show lack of efficacy with acute medications, have co-morbidities that preclude effective acute therapies, or are at risk of, or have concurrent CDH.

**Treatment strategies**

- Provide acute medications to all patients and recommend it is taken as early as possible in the attack.
- Provide rescue medication for when the initial therapy fails.
- At follow-up switch patients to alternative acute medications if the initial treatment scheme has failed.

**Goals of therapy**

- To rapidly relieve the headache and other migraine symptoms, and permit the return to normal activities within 2 hours of treatment.

**First-line acute treatments**

**Mild to moderate** intensity attacks:

- Analgesic-based medications: aspirin; NSAIDs; paracetamol plus domperidone; aspirin or paracetamol plus metoclopramide. These drugs should take as early as possible and before the headache develops, including during the aura.

**Moderate to severe** intensity attacks:

- Migraine-specific therapies, of which triptans are now the gold standard. Tablet formulations are usually effective, but more rapidly-acting triptan formulations (nasal sprays and subcutaneous injections) may be sometimes appropriate. Triptans should be taken as soon as possible after the headache starts, preferably when it is mild in intensity.
The appropriate place of analgesic-based medications in migraine treatment

**Analgesic-based migraine therapies available in the UK**

Available on prescription: NSAIDs, combinations of aspirin or paracetamol plus an anti-emetic, the combination of isometheptene and paracetamol, and the combination of buclizine, paracetamol and codeine.

Available over the counter: many analgesics containing aspirin, NSAIDs, paracetamol and codeine, either singly or in combination, are available from pharmacists, some being marketed directly for migraine.

**Challenges to rational prescribing: what is the evidence?**

We are faced with a paucity of evidence as to the true efficacy of analgesic-based acute medications for migraine:

- In most clinical studies, treatment is not given till the headache reaches moderate to severe intensity. Such schemes do not follow recent recommendations that acute medications be taken early in the attack, either before the headache starts (analgesics) or when the headache is mild (triptans).

- Some studies have demonstrated that analgesic-based therapies may be at least as effective as some triptans, e.g. the NSAID diclofenac, aspirin plus metoclopramide and aspirin plus paracetamol plus caffeine. To be fair, many of these studies were flawed methodologically, but they all demonstrated the potential efficacy of non-triptan medications.

- Efficacy of drugs taken orally during a migraine attack is compromised by the presence of gastric stasis, which reduces the absorption of the drug. Some analgesic drugs are formulated to improve gastric absorption, either by including an anti-emetic or by buffering the drug to promote gastric absorption.

**Recommended therapies**

The ideal analgesic-based migraine therapy is absorbed efficiently from the stomach during a migraine attack and has objective evidence of favourable efficacy and tolerability from controlled clinical studies. Of the available UK drugs, certain NSAIDs and combinations of analgesics with anti-emetics best meet these criteria and can be recommended as first-line acute treatments for migraine. We await further studies that will fully define the role of these drugs.

**References**


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