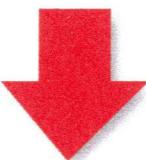


## Does the patient suffer more than 2 attacks per month?



**NO**

### Acute treatment pathway



Simple analgesic Eg paracetamol, aspirin, ibuprofen With Anti-emetic, if required (eg domperidone, metoclopramide, proprietary brands)



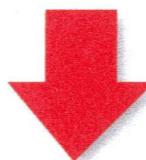
potent NSAID, eg ketoprofen\*, tolafenamic acid



Oral triptan (5HT1 agonist; tablet or wafer)  
Try several triptans, if necessary. Response and side-effects may vary. See overview of triptans



If nausea/vomiting a problem, or severe attacks on waking, or rapid response needed  
Sumatriptan 6mg s/c injection (maximum dose 12mg in 24h)

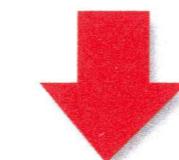


**YES**

### Consider prophylactic drug, in addition to acute treatment



propranolol  
80mg daily  
increase monthly by 80mg increments.  
Maximum 240 mg daily  
(Nadolol, timolol and metoprolol are alternatives.)  
consider switching other betablockers



amitriptyline\*  
10mg at night  
increase monthly by 10mg increments maximum 50 mg daily  
nortriptyline\* or dosulepin are alternatives  
Low dose tricyclics may be used with SSRIs

A 50% reduction in migraine attacks is a realistic goal. Response to acute drugs may improve in patients on preventative treatment.

### Other agents to consider

- Calcium antagonists – verapamil\*
- SSRIs - paroxetine\*, fluoxetine\*
- Anticonvulsants – sodium valproate\*, topiramate
  - NSAIDs – aspirin\*, ketoprofen\*, naproxen\*
- Specialist only options – botulinum toxin, methysergide, flunarizine, olanzapine

N.B. research suggests that clonidine and pizotifen are of low effectiveness

## Notes

Drugs denoted\* are not licensed in the UK for migraine treatment.

### Acute treatment

- All medications should be tried over 3 attacks in order to adequately judge response
- Simple analgesics may work best at full dosages (eg 600mg ibuprofen), and as dispersible formulations
- Opiate analgesics should be avoided where possible as they increase nausea, and often lead to MOH
- Triptans should not be used in pregnancy
- There is no widely accepted effective acute drug for aura symptoms
- In patients with migraine with aura, acute drugs may work best given at headache onset (ie as aura resolves)

### Prophylactic treatment

- Propranolol is contraindicated in asthma, and is best avoided in significant Raynaud's disease. Common side effects are fatigue, insomnia and nightmares
- Sodium valproate should not be used in pregnancy, and often causes weight gain
- Patients should be informed that preventative drugs rarely stop all attacks. A migraine diary may be helpful to quantify response. Acute treatment will need to be continued
- Withdrawal of effective preventative treatment may be considered after about 6 months to assess remission of migraine
- Preventative drugs of different classes may be combined to increase response
- Tricyclics may be the most appropriate preventative drug in patients with mixed headache disorders, eg migraine and tension-type headache

## Overview of triptans

**almotriptan (Almogran) B**

**eletriptan (Relpax) A, D, E, L**

**frovatriptan (Migard) B, C (branded), LL**

**naratriptan (Naramig) B, L**

**rizatriptan (Maxalt) A, E, I (propranolol), M**

**sumatriptan (Imigran and generics) A (injection), C (generic only), D, M, N, S**

**zolmitriptan (Zomig) A, E, I, M, N**

**A** more rapid onset of action

**B** low incidence of side effects (most often nausea, dizziness, somnolence, upper body flushing/tightness)

**C** cheapest

**D** variable licensed dosing options

**E** higher headache response in trials

**I** significant interactions

**L** long half-life/ longer duration of action/ (possibly less migraine recurrence)

**M** "melt" formulation available (absorption is gastric, as tablets)

**N** nasal spray formulation available

**S** subcutaneous injection formulation available

### Frequency of attacks

Most studies have shown that the majority of migraineurs suffer attacks on no more than 24 days per year, or an average of 14 attacks yearly.

### Management in primary care

Most adult sufferers can be successfully diagnosed and rewardingly managed in general practice. Referral should be needed only if problems with diagnosis or management arise. The prevalence of migraine is around 15% - more common than many other chronic disorders.

### Migraine with aura

Only about 10% of migraine patients report aura, which usually comprises visual, sensory or dysphasic focal neurological symptoms. There is more potential for misdiagnosis if focal symptoms occur without headache. Migraine attacks often change in nature through the lifetime of a patient.

### Trigger factors

Many dietary and lifestyle factors have been identified as potential triggers for migraine attacks, but often a combination of these, taking patients over a threshold for an attack, is required. Some symptoms, such as food cravings, may be a prodrome to the migraine attack, rather than triggers. A regular lifestyle, especially in regard to eating and sleeping patterns, may reduce migraine frequency.

### Complementary therapies

Many patients try these, or prefer them to conventional medicines. Some show evidence of efficacy, eg feverfew. Interactions may be significant, eg with St Johns Wort.

### Medication overuse headache (MOH)

Chronic daily headache is a descriptive term, rather than a diagnosis, and occurs in 4% of Western populations. Most often episodic headache, especially migraine, escalates in frequency to a daily pattern, associated with frequent use of acute headache drugs (simple and compound analgesics, triptans or ergotamine). This is the typical presentation of MOH, which is defined if more than 10 doses monthly of a triptan or opiate/compound analgesic, or 15 doses monthly of a simple analgesic are being taken. It is vital that the acute drugs are stopped (usually abruptly, in the community) to allow headache to revert to an episodic pattern, and restore the effectiveness of preventative therapies (which should be introduced if not taken). GPs should ensure that acute headache drugs are not being over-prescribed. Caffeine withdrawal may also be important. Patients with MOH should be managed in primary care, but referred if analgesic withdrawal is unhelpful (about 20% in studies).

### Brain Imaging in headache

Brain scans are not of use in diagnosing primary headache disorders, and should be reserved for headache patients with potential structural brain lesions. This includes cough headache, new headache in patients over 50 years of age, raised intracranial pressure headache, and headache in association with seizures or focal neurological (especially cranial nerve) symptoms and/or signs. Imaging is generally indicated in new daily persistent headache, in which daily headache arises *de novo*, without prior episodic headache. Typical migraine aura is not an indication for imaging. Incidental findings are common, especially with MRI (up to 13%), and may cause anxiety and unnecessary referrals.

### Hormonal considerations

Combined oral contraceptives are contraindicated in women with migraine with aura, due to increased stroke risk. Oestrogen supplements (eg HRT), or continuous progestagen therapy may help a small minority of women with clear patterns of attacks related to hormonal changes.

Guideline updated by Dr P Tidswell, October 2010 Printed with an unconditional grant from Allergan pharmaceuticals.

## MANAGEMENT OF MIGRAINE

# GUIDELINES FOR GENERAL PRACTITIONERS

Prof JD Mitchell  
Dr P Tidswell  
Dr T Majeed  
Dr BR Boothman  
Dr SD Shaunak  
Dr J Nixon  
Dr KS Rauvala  
Dr H Emsley  
Dr J Kowaleska-Zietek

### Goals in migraine treatment

Understand the impact of migraine

Avoid disruption to patient's daily life, and enable rapid return to normal activities, where possible

Avoid complications of drugs, including medication overuse headache

Establish the most effective treatment regime

Recognise and avoid triggers where possible