

## Management of migraine (with or without aura)

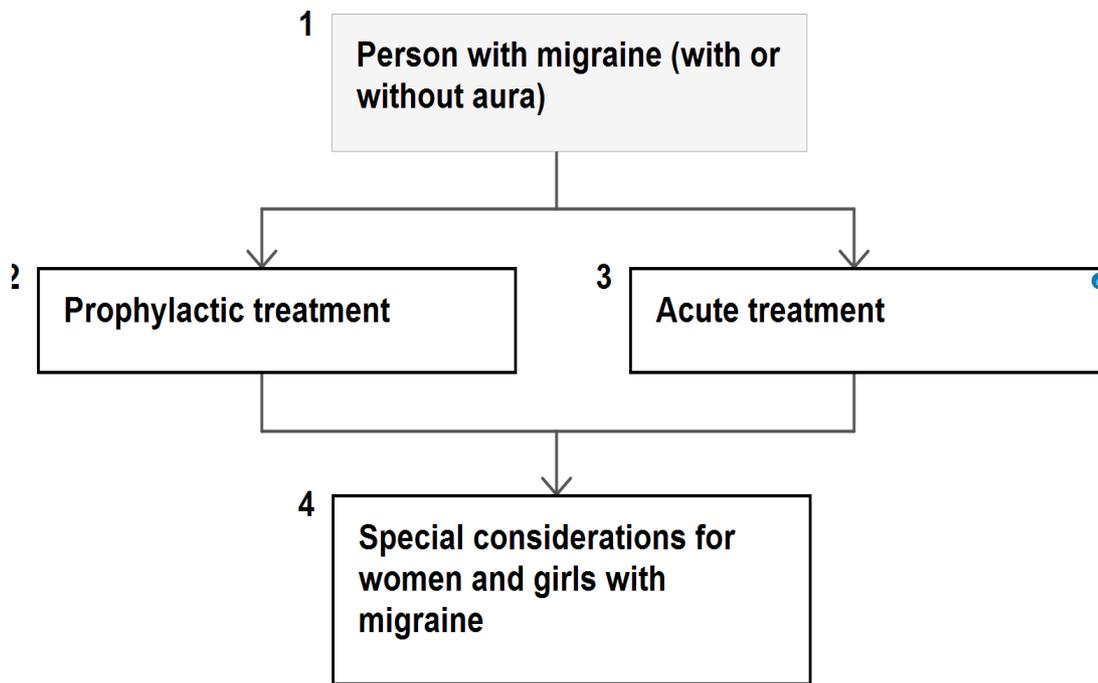
NICE Pathways bring together all NICE guidance, quality standards and other NICE information on a specific topic.

NICE Pathways are interactive and designed to be used online. They are updated regularly as new NICE guidance is published. To view the latest version of this pathway see:

<http://pathways.nice.org.uk/pathways/headaches>

Pathway last updated: 24 November 2015

This document contains a single pathway diagram and uses numbering to link the boxes to the associated recommendations.



## 1 Person with migraine (with or without aura)

No additional information

## 2 Prophylactic treatment

Discuss the benefits and risks of prophylactic treatment for migraine with the person, taking into account the person's preference, comorbidities, risk of adverse events and the impact of the headache on their quality of life.

Offer topiramate or propranolol<sup>1</sup> for the prophylactic treatment of migraine according to the person's preference, comorbidities and risk of adverse events. Advise women and girls of childbearing potential that topiramate is associated with a risk of fetal malformations and can impair the effectiveness of hormonal contraceptives. Ensure they are offered suitable contraception if needed.

NICE has produced a pathway on [contraception](#).

Consider amitriptyline<sup>2</sup> for the prophylactic treatment of migraine according to the person's preference, comorbidities and risk of adverse events.

**Do not offer** gabapentin for the prophylactic treatment of migraine.

If both topiramate and propranolol are unsuitable or ineffective, consider a course of up to 10 sessions of acupuncture over 5–8 weeks according to the person's preference, comorbidities and risk of adverse events.

For people who are already having treatment with another form of prophylaxis and whose migraine is well controlled, continue the current treatment as required.

Review the need for continuing migraine prophylaxis 6 months after the start of prophylactic treatment.

Advise people with migraine that riboflavin (400 mg<sup>3</sup> once a day) may be effective in reducing migraine frequency and intensity for some people.

<sup>1</sup> At the time of publication (November 2015), topiramate did not have a UK marketing authorisation for use in children and young people for this indication. Propranolol did not have a UK marketing authorisation for use in children under 12 years for this indication. The prescriber should follow relevant professional guidance, taking full

responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's [Prescribing guidance: prescribing unlicensed medicines](#) for further information.

<sup>2</sup>At the time of publication (November 2015), amitriptyline did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's [Prescribing guidance: prescribing unlicensed medicines](#) for further information.

<sup>3</sup>At the time of publication (November 2015), riboflavin did not have a UK marketing authorisation for this indication but is available as a food supplement. When advising this option, the prescriber should take relevant professional guidance into account. See the General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

## Botulinum toxin type A

The following recommendations are from NICE technology appraisal guidance on [botulinum toxin type A for the prevention of headaches in adults with chronic migraine](#).

Botulinum toxin type A is recommended as an option for the prophylaxis of headaches in adults with chronic migraine (defined as headaches on at least 15 days per month of which at least 8 days are with migraine):

- that has not responded to at least three prior pharmacological prophylaxis therapies **and**
- whose condition is appropriately managed for medication overuse.

Treatment with botulinum toxin type A that is recommended above should be stopped in people whose condition:

- is not adequately responding to treatment (defined as less than a 30% reduction in headache days per month after two treatment cycles) **or**
- has changed to episodic migraine (defined as fewer than 15 headache days per month) for three consecutive months.

People currently receiving botulinum toxin type A that is not recommended above should have the option to continue treatment until they and their clinician consider it appropriate to stop.

NICE has produced information for the public explaining the guidance on [botulinum toxin type A to prevent chronic migraine headaches](#).

## Interventional procedures

NICE has published interventional procedures guidance on the following procedures with **special arrangements** for clinical governance, consent and audit or research:

- [transcranial magnetic stimulation for treating and preventing migraine](#)
- [occipital nerve stimulation for intractable chronic migraine](#)
- [percutaneous closure of patent foramen ovale for recurrent migraine](#).

## Resources

The following implementation tool is relevant to this part of the pathway.

[Botulinum toxin type A for the prevention of headaches in adults with chronic migraine: costing template](#)

### 3 Acute treatment

Offer combination therapy with an oral triptan<sup>1</sup> and an NSAID, or an oral triptan and paracetamol, for the acute treatment of migraine, taking into account the person's preference, comorbidities and risk of adverse events. For people aged 12–17 years consider a nasal triptan in preference to an oral triptan.

For people who prefer to take only one drug, consider monotherapy with an oral triptan, NSAID, aspirin<sup>2</sup> (900 mg) or paracetamol for the acute treatment of migraine, taking into account the person's preference, comorbidities and risk of adverse events.

When prescribing a triptan, start with the one with the lowest acquisition cost; if this is consistently ineffective, try one or more alternative triptans.

Consider an anti-emetic in addition to other acute treatment for migraine even in the absence of nausea and vomiting.

**Do not offer** ergots or opioids for the acute treatment of migraine.

For people in whom oral preparations (or nasal preparations in young people aged 12–17 years) for the acute treatment of migraine are ineffective or not tolerated:

- offer a non-oral preparation of metoclopramide<sup>3</sup> or prochlorperazine<sup>4</sup> **and**
- consider adding a non-oral NSAID or triptan if these have not been tried.

#### **Interventional procedures**

NICE has published interventional procedures guidance on [transcranial magnetic stimulation for treating and preventing migraine](#) with **special arrangements** for clinical governance, consent and audit or research.

#### **Quality standards**

The following quality statement is relevant to this part of the pathway.

4. Combined treatment for migraine

#### **Resources**

The following implementation tools are relevant to this part of the pathway.

<sup>1</sup> At the time of publication (November 2015), triptans (except nasal sumatriptan) did not have a UK marketing authorisation for this indication in people aged under 18 years. Nasal sumatriptan did not have a UK marketing authorisation for this indication in people aged under 12 years. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. The patient (or their parent or carer) should provide informed consent, which should be documented. See the General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

<sup>2</sup> Because of an association with Reye's syndrome, preparations containing aspirin should not be offered to people aged under 16 years.

<sup>3</sup> At the time of publication (November 2015), metoclopramide did not have a UK marketing authorisation for use in children and young people for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's [Prescribing guidance: prescribing unlicensed medicines](#) for further information.

<sup>4</sup> At the time of publication (November 2015), prochlorperazine (except a buccal preparation) did not have a UK marketing authorisation for this indication but was licensed for the relief of nausea and vomiting. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. The patient (or their parent or carer) should provide informed consent, which should be documented. See the General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

[Headaches: combination therapy for first-line treatment of acute migraine: academic detailing aid](#)

[Headaches: costing report](#)

[Headaches: costing template](#)

## 4 Special considerations for women and girls with migraine

### Menstrual-related migraine

For women and girls with predictable menstrual-related migraine that does not respond adequately to standard acute treatment, consider treatment with frovatriptan<sup>1</sup> (2.5 mg twice a day) or zolmitriptan<sup>2</sup> (2.5 mg twice or three times a day) on the days migraine is expected.

### Combined hormonal contraceptive use

**Do not routinely offer** combined hormonal contraceptives for contraception to women and girls who have migraine with aura.

### Treatment of migraine during pregnancy

Offer pregnant women paracetamol for the acute treatment of migraine. Consider the use of a triptan<sup>3</sup> or an NSAID after discussing the woman's need for treatment and the risks associated with the use of each medication during pregnancy.

Seek specialist advice if prophylactic treatment for migraine is needed during pregnancy.

For the prophylactic treatment of migraine in women and girls of childbearing potential, see [prophylactic treatment \[See page 3\]](#) in this pathway.

<sup>1</sup> At the time of publication (November 2015), frovatriptan did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. The patient (or their parent or carer) should provide informed consent, which should be documented. See the General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

<sup>2</sup> At the time of publication (November 2015), zolmitriptan did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. The patient (or their parent or carer) should provide informed consent, which should be documented. See the

General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

<sup>3</sup>At the time of publication (November 2015), triptans (except nasal sumatriptan) did not have a UK marketing authorisation for this indication in people aged under 18 years. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. The patient (or their parent or carer) should provide informed consent, which should be documented. See the General Medical Council's [Good practice in prescribing medicines – guidance for doctors](#) and the [prescribing advice](#) provided by the Joint Standing Committee on Medicines (a joint committee of the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group) for further information.

## Glossary

### Acute narrow-angle glaucoma

an uncommon eye condition that results from blockage of the drainage of fluid from the eye. Symptoms of acute glaucoma may include headache with a painful red eye and misty vision or haloes, and in some cases nausea. Acute glaucoma may be differentiated from cluster headache by the presence of a semi-dilated pupil compared with the presence of a constricted pupil in cluster headache

### Bout of cluster headache

the duration over which recurrent cluster headaches occur, usually lasting weeks or months. Headaches occur from 1 every other day to 8 times per day

### Giant cell arteritis

also known as temporal arteritis, giant cell arteritis is characterised by the inflammation of the walls of medium and large arteries. Branches of the carotid artery and the ophthalmic artery are preferentially involved, giving rise to symptoms of headache, visual disturbances and jaw claudication

### NSAID

non-steroidal anti-inflammatory drug

### Positive diagnosis

a diagnosis based on the typical clinical picture that does not require any further investigations to exclude alternative explanations for a patient's symptoms

### Young people

people aged 12 to 17 years

## Sources

[Headaches in over 12s](#) (2012 updated 2015) NICE guideline CG150

Botulinum toxin type A for the prevention of headaches in adults with chronic migraine (2012)  
NICE technology appraisal guidance 260

Transcranial magnetic stimulation for treating and preventing migraine (2014) NICE  
interventional procedure guidance 477

Occipital nerve stimulation for intractable chronic migraine (2013) NICE interventional procedure  
guidance 452

Percutaneous closure of patent foramen ovale for recurrent migraine (2010) NICE interventional  
procedure guidance 370

## **Your responsibility**

The guidance in this pathway represents the view of NICE, which was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties. Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

## **Copyright**

Copyright © National Institute for Health and Care Excellence 2015. All rights reserved. NICE copyright material can be downloaded for private research and study, and may be reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the written permission of NICE.

## **Contact NICE**

National Institute for Health and Care Excellence  
Level 1A, City Tower  
Piccadilly Plaza  
Manchester  
M1 4BT

[www.nice.org.uk](http://www.nice.org.uk)

[nice@nice.org.uk](mailto:nice@nice.org.uk)

0845 003 7781