NICE National Institute for Health and Care Excellence

NICE Pathways

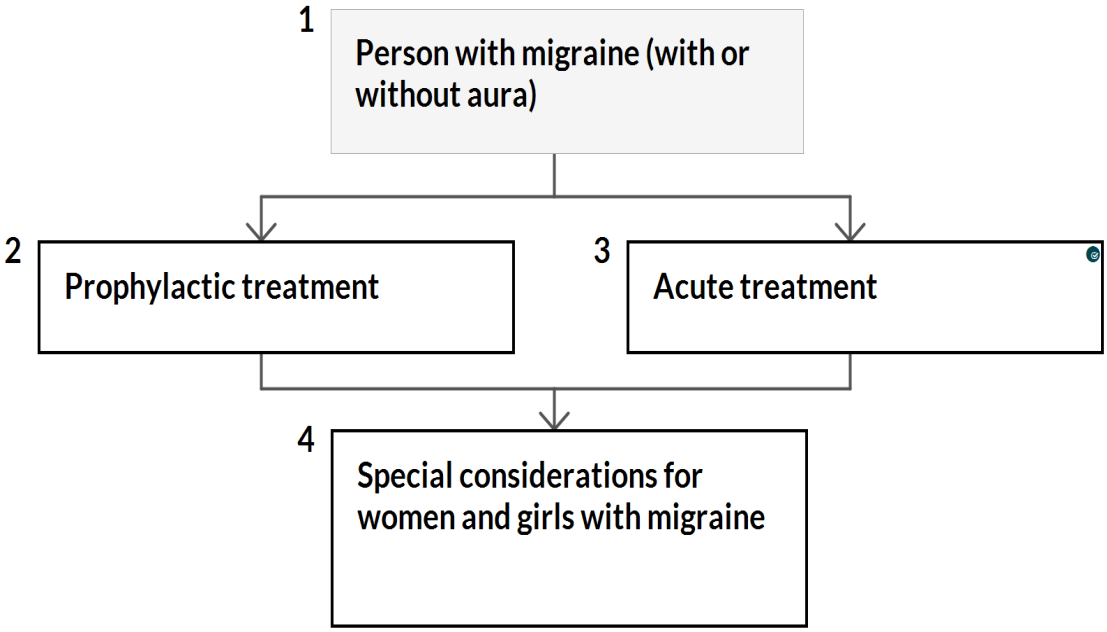
Management of migraine (with or without aura)

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. 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 NICE Pathway see:

http://pathways.nice.org.uk/pathways/headaches
NICE Pathway last updated: 12 May 2021

This document contains a single flowchart 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.

For the prophylaxis of migraine, offer topiramate or propranolol after a full discussion of the benefits and risks of each option. Include in the discussion:

- the potential benefit in reducing migraine recurrence and severity
- the risk of fetal malformations with topiramate
- the risk of reduced effectiveness of hormonal contraceptives with topiramate
- the importance of effective contraception for women and girls of childbearing potential who are taking topiramate (for example, by using medroxyprogesterone acetate depot injection, an intrauterine method or combined hormonal contraception with a barrier method).

Follow the MHRA safety advice on antiepileptic drugs in pregnancy.

In November 2015, this was an off-label use of topiramate in children and young people. See prescribing medicines at NICE website.

People with depression and migraine could be at an increased risk of using propranolol for self-harm. Use caution when prescribing propranolol, in line with the Healthcare Safety Investigation Branch's report on the under-recognised risk of harm from propranolol.

For further information, see the NICE Pathway on contraception.

Consider amitriptyline for the prophylactic treatment of migraine according to the person's preference, comorbidities and risk of adverse events. In November 2015, this was an off-label use of amitriptyline. See prescribing medicines at NICE website.

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 to 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 once a day) may be effective in reducing migraine frequency and intensity for some people. In November 2015, this was an off-label use of riboflavin, but this is available as a food supplement.

Erenumab

The following recommendations are from NICE technology appraisal guidance on erenumab for preventing migraine.

Erenumab is recommended as an option for preventing migraine in adults, only if:

- they have 4 or more migraine days a month
- at least 3 preventive drug treatments have failed
- the 140 mg dose of erenumab is used and
- the company provides it according to the commercial arrangement.

Stop erenumab after 12 weeks of treatment if:

- in episodic migraine (less than 15 headache days a month) the frequency does not reduce by at least 50%
- in chronic migraine (15 headache days a month or more with at least 8 of those having features of migraine) the frequency does not reduce by at least 30%.

These recommendations are not intended to affect treatment with erenumab that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

See why we made the recommendations on erenumab.

NICE has written information for the public on erenumab.

Galcanezumab

The following recommendations are from NICE technology appraisal guidance on galcanezumab for preventing migraine.

Galcanezumab is recommended as an option for preventing migraine in adults, only if:

- they have 4 or more migraine days a month
- at least 3 preventive drug treatments have failed and
- the company provides it according to the commercial arrangement.

Stop galcanezumab after 12 weeks of treatment if:

- in episodic migraine (less than 15 headache days a month) the frequency does not reduce by at least 50%
- in chronic migraine (15 headache days a month or more with at least 8 of those having features of migraine) the frequency does not reduce by at least 30%.

This recommendation is not intended to affect treatment with galcanezumab that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

See why we made the recommendations on galcanezumab.

NICE has written information for the public on galcanezumab.

Fremanezumab

The following recommendations are from NICE technology appraisal guidance on fremanezumab for preventing migraine.

Fremanezumab is recommended as an option for preventing migraine in adults, only if:

- the migraine is chronic, that is, 15 or more headache days a month for more than 3 months with at least 8 of those having features of migraine
- at least 3 preventive drug treatments have failed and
- the company provides it according to the commercial arrangement.

Stop fremanezumab if the migraine frequency does not reduce by at least 30% after 12 weeks

of treatment.

This recommendation is not intended to affect treatment with fremanezumab that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

See why we made the recommendations on fremanezumab.

NICE has written information for the public on fremanezumab.

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 on botulinum toxin type A to prevent chronic migraine headaches.

Interventional procedures

NICE has published guidance on the following procedures with **special arrangements** for

clinical governance, consent and audit or research:

- transcutaneous electrical stimulation of the supraorbital nerve for treating and preventing migraine
- transcutaneous stimulation of the cervical branch of the vagus nerve for cluster headache and migraine
- transcranial magnetic stimulation for treating and preventing migraine
- occipital nerve stimulation for intractable chronic migraine
- percutaneous closure of patent foramen ovale for recurrent migraine.

Flunarizine

NICE has published an evidence summary on migraine prophylaxis: flunarizine.

3 Acute treatment

Offer combination therapy with an oral triptan 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 to 17 years consider a nasal triptan in preference to an oral triptan. In November 2015, this was an off-label use of triptans (except nasal sumatriptan) in under 18s. See prescribing medicines at NICE website.

For people who prefer to take only one drug, consider monotherapy with an oral triptan, NSAID, aspirin (900 mg) or paracetamol for the acute treatment of migraine, taking into account the person's preference, comorbidities and risk of adverse events. In November 2015, this was an off-label use of triptans in under 18s. See prescribing medicines at NICE website. Because of the association with Reye's syndrome, preparations containing aspirin should not be offered to under 16s.

When prescribing a triptan, start with the one with the lowest acquisition cost; if this is consistently ineffective, try one or more alternative triptans. In November 2015, this was an off-label use of triptans in under 18s. See prescribing medicines at NICE website.

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 to 17

years) for the acute treatment of migraine are ineffective or not tolerated:

- offer a non-oral preparation of metoclopramide or prochlorperazine **and**
- consider adding a non-oral NSAID or triptan if these have not been tried.

In November 2015, only a buccal preparation of prochlorperazine was licensed for this indication (prochlorperazine was licensed for the relief of nausea and vomiting); nasal sumatriptan was the only triptan licensed for this indication in under 18s. This was an off-label use of metoclopramide in children and young people. See prescribing medicines at NICE website.

Interventional procedures

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

- transcutaneous electrical stimulation of the supraorbital nerve for treating and preventing migraine
- transcutaneous stimulation of the cervical branch of the vagus nerve for cluster headache and migraine
- transcranial magnetic stimulation for treating and preventing migraine.

Quality standards

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

4. Combined treatment for migraine

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 (2.5 mg twice a day) or zolmitriptan (2.5 mg twice or three times a day) on the days migraine is expected. In November 2015, this was an off-label use of frovatriptan and zolmitriptan. See prescribing medicines at NICE website.

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 or an NSAID after discussing the woman's need for treatment and the risks associated with the use of each medication during pregnancy. In November 2015, this was an off-label use of triptans (except nasal sumatriptan) in under 18s. See prescribing medicines at NICE website.

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].

Glossary

NSAID

non-steroidal anti-inflammatory drug

Sources

Headaches in over 12s: diagnosis and management (2012 updated 2015) NICE guideline CG150

Erenumab for preventing migraine (2021) NICE technology appraisal guidance 682

Galcanezumab for preventing migraine (2020) NICE technology appraisal guidance 659

Fremanezumab for preventing migraine (2020) NICE technology appraisal guidance 631

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

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to

advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with

the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.