CONDITION

Migraine

Migraine is a neurological condition that causes repeated attacks of headache and other symptoms.

WHAT IT IS
Neurological condition causing repeated symptom attacks

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Headache, nausea, light sensitivity, sound sensitivity

WHAT CAUSES IT
Inherited susceptibility and altered brain signalling

HOW IT IS DIAGNOSED
Symptom history and neurological examination

MAIN TREATMENT
Attack-relief medicines, preventive treatment, and trigger management

CAN IT BE CURED?
No - attacks can often be controlled

IS IT AN EMERGENCY?
Sometimes - sudden severe headache or new neurological symptoms

LONG-TERM OUTLOOK
Often manageable, though attack patterns may change over time

Overview

Migraine is a neurological condition. It affects how the brain processes pain, sensation, and other signals. It can cause repeated attacks involving headache, nausea, sensitivity to light or sound, and changes in vision or other senses.

Migraine is more than a bad headache. An attack can affect concentration, speech, balance, digestion, mood, and energy. Some people have migraine symptoms without much head pain.

Attacks can last from several hours to several days. They may happen rarely, several times a month, or very often. Symptoms and frequency can also change over time.

Migraine is described as episodic when headache occurs on fewer than 15 days each month. Chronic migraine means headache occurs on at least 15 days a month for more than three

months, with migraine features on at least eight of those days. These terms describe frequency rather than how painful an individual attack feels.

Migraine does not usually cause permanent brain damage. However, frequent or poorly controlled attacks can disrupt work, education, relationships, sleep, and everyday activities. Recognising the pattern can help you find suitable treatment and identify symptoms that need further assessment.

Symptoms

Migraine attacks may have several phases, but not everyone experiences every phase. The order and intensity can differ between attacks.

Possible early symptoms, sometimes beginning hours or a day before the headache, include tiredness, food cravings, mood changes, neck stiffness, frequent yawning, and difficulty concentrating.

Common symptoms during an attack include:

Some people have aura. Aura is a group of temporary nervous system symptoms that usually develops gradually and lasts less than an hour. Visual aura may cause flashing lights, zigzag lines, blind spots, or shimmering shapes. Other forms can cause tingling, numbness, trouble finding words, or less commonly weakness.

Aura may happen before or during head pain, or without a headache. New aura-like symptoms still need medical assessment because stroke and other conditions can cause similar changes.

After the main symptoms ease, you may feel drained, confused, unusually energetic, or sensitive to movement for up to a day.

- Throbbing or pulsing head pain, often but not always on one side
- Pain that becomes worse with routine movement
- Nausea or vomiting
- Sensitivity to light, sound, smells, or touch
- Dizziness, blurred vision, or difficulty concentrating
- A need to rest in a quiet, dark place

Causes and risk factors

The exact cause of migraine is not fully understood. Research suggests that inherited

susceptibility combines with changes in brain, nerve, and blood-vessel signalling. The trigeminal nerve, which carries sensation from the face and head, and a signalling molecule called calcitonin gene-related peptide, or CGRP, are involved in many attacks.

Migraine often runs in families, but there is no single usual "migraine gene." Having a relative with migraine can increase susceptibility without making attacks inevitable.

Certain factors can make an attack more likely in someone who is susceptible. These are often called triggers. Commonly reported examples include stress, disrupted sleep, missed meals, dehydration, alcohol, hormonal changes, bright or flickering light, strong smells, and changes in routine.

Triggers are not the root cause of migraine. They also differ between people. Sometimes what seems to be a trigger, such as a food craving or neck discomfort, is actually an early symptom of an attack.

Hormonal changes can influence migraine. Some people notice attacks around menstruation, during pregnancy, after giving birth, or around menopause. Patterns are not predictable for everyone.

Diagnosis

There is no blood test or scan that confirms migraine. Diagnosis is usually based on your symptoms, how attacks develop, how long they last, and whether your neurological examination is normal.

A clinician may ask about headache frequency, pain features, nausea, sensory sensitivity, aura, medicines, family history, and how symptoms affect your activities. A headache diary can help record:

Brain imaging is not routinely needed when symptoms follow a typical, stable migraine pattern and the examination is normal. A CT or MRI scan may be recommended if there are unusual features, a major change in pattern, an abnormal examination, or concern about another cause.

Other conditions can resemble migraine, including tension-type headache, cluster headache, infection, eye problems, medication-overuse headache, and, less commonly, bleeding or a blood clot in the brain. Assessment is especially important for a first severe headache or new neurological symptoms.

- Headache and migraine days
- Symptoms and possible triggers
- Menstrual timing, if relevant

- Medicines taken and whether they helped
- Effects on sleep, work, school, or daily activities

Treatment and management

Treatment aims to reduce symptoms during attacks and, when needed, lower how often attacks happen. The best approach depends on your symptoms, other health conditions, pregnancy status, and medicines you already use.

Treatments taken during an attack are called acute or abortive treatments. They may include simple pain relievers, non-steroidal anti-inflammatory drugs like ibuprofen or naproxen , migraine-specific triptans like sumatriptan or rizatriptan , CGRP-blocking medicines called gepants, or medicines for nausea. Availability differs by country.

Acute treatment often works best when taken early in the headache phase. People with aura may receive specific advice about when to take particular medicines. Frequent use of some acute treatments can lead to medication-overuse headache, so discuss repeated use during routine follow-up rather than increasing it on your own.

Opioid pain medicines are generally avoided for migraine. They may be less effective than migraine-specific options and can increase the risk of dependence and medication-overuse headache.

Preventive treatment may be considered when attacks are frequent, prolonged, disabling, or difficult to treat. Options include certain blood-pressure medicines, antiseizure medicines, antidepressants like sertraline or fluoxetine , CGRP-targeting medicines, and botulinum toxin injections for some people with chronic migraine. These treatments are used because of their effect on migraine, not necessarily because you have the condition they were originally designed to treat.

Preventive treatment usually needs time before its effect can be judged. Regular review helps assess benefits, side effects, and whether treatment is still needed.

Practical measures during an attack may include resting in a dark, quiet room, using a cool pack, drinking fluids if tolerated, and reducing strong sensory input.

Migraine treatment during pregnancy or breastfeeding needs particular care. Some commonly used medicines are unsuitable, while others may be considered after an individual risk assessment. Do not stop a prescribed medicine suddenly without medical advice.

Medicines commonly used for this include dihydroergotamine , eletriptan , propranolol and rizatriptan . Which one suits you, if any, is a decision for you and your doctor.

Complications

Migraine can cause substantial disruption even when it does not lead to another medical condition. Frequent attacks may contribute to missed work or school, reduced physical activity, poor sleep, anxiety, or low mood.

Medication-overuse headache can develop when acute headache medicines are used too often. The headache may become more frequent or persistent, creating a cycle of repeated medicine use and short-lived relief. This can improve with a planned change in treatment, although symptoms may temporarily worsen.

An unusually prolonged disabling migraine attack lasting more than 72 hours is called status migrainosus. It may require medical treatment, especially if vomiting prevents you from drinking or taking medicine.

Migraine with aura is associated with a small increase in ischaemic stroke risk. The absolute risk remains low for most people. Smoking and oestrogen-containing combined hormonal contraception can add to this risk. If you have aura, discuss contraception and other vascular risk factors during routine care.

Prevention

Migraine cannot always be prevented. Inherited susceptibility cannot be changed, and attacks sometimes happen without a clear trigger.

A regular routine may reduce attacks for some people. This can include consistent sleep, regular meals, enough fluid, gradual exercise, and managing stress in a realistic way. Extreme restrictions or trying to avoid every possible trigger may make daily life harder without preventing migraine.

A diary can help identify repeatable patterns. Focus on triggers that are consistent and practical to address rather than blaming a single food or activity after one attack.

If lifestyle measures are not enough, preventive medicines or treatments may reduce attack frequency or severity. They do not guarantee that migraine will stop completely. Regular review is useful because needs can change over time.

Living with it and what to expect

Migraine is often a long-term condition, but its pattern is not fixed. You may have long periods

with few attacks, followed by periods when symptoms are more frequent. Hormonal changes, illness, sleep disruption, stress, and life-stage changes can affect the pattern.

For many people, combining an effective attack plan with preventive care makes migraine more manageable. Finding the right approach may take time because treatment response differs between people.

A written plan can make attacks less disruptive. It may cover how to recognise early symptoms, which treatment to use, when to rest, and when to seek help. Keeping suitable medicine available can be useful if this is safe for you.

Migraine can qualify as a disability when it substantially limits daily activities, although legal definitions differ. Adjustments such as flexible breaks, reduced glare, access to water, or a quiet recovery space may help at work or school.

Arrange routine follow-up if attacks become more frequent, treatment stops working, side effects are troublesome, or you are using acute medicine repeatedly. Review is also appropriate before pregnancy, when choosing contraception if you have aura, or when symptoms change around menopause.

When to get medical help

Arrange a routine appointment if headaches are recurring, interfering with daily life, or difficult to control. You should also seek assessment for a new headache pattern, new aura symptoms, headaches that are steadily becoming more frequent, or headache that begins after starting a new medicine.

Seek urgent medical advice if an attack lasts longer than usual, repeated vomiting makes it hard to keep fluids down, or neurological symptoms are different from your established aura.

Call emergency services for:

Do not assume sudden or unfamiliar neurological symptoms are migraine, even if you have had aura before.

- A headache that reaches maximum intensity within seconds or minutes
- New weakness, facial drooping, confusion, fainting, or persistent speech trouble
- New loss of vision or severe difficulty walking
- Headache with fever, a stiff neck, marked drowsiness, or a seizure
- Severe headache after a significant head injury
- A new severe headache during pregnancy or soon after giving birth

Common questions

Is migraine just a severe headache?

No. Migraine is a neurological condition that can affect vision, sensation, digestion, concentration, and energy as well as causing head pain. Some attacks involve little or no headache.

How long does a migraine attack last?

The headache phase commonly lasts between 4 and 72 hours when untreated, but the full attack may be longer because early and recovery symptoms can occur before and after it. Seek advice if an attack is unusually prolonged or different from your normal pattern.

Can migraine be cured permanently?

There is currently no permanent cure. Treatment can often reduce attack frequency, severity, and disruption. Some people also have long periods with few or no attacks.

What is the difference between migraine with aura and without aura?

Migraine with aura includes temporary neurological symptoms, most often visual changes, that usually develop gradually. Migraine without aura has no such warning phase. A person can experience both types at different times.

Can certain foods cause migraine?

Some people identify consistent food or alcohol triggers, but no single food causes migraine in everyone. Cravings may also be an early migraine symptom rather than a trigger. A diary is more useful than broad food restrictions.

Can I have migraine without a headache?

Yes. Aura and other migraine symptoms can occur without significant head pain. Because stroke and eye conditions can cause similar symptoms, first-time or unusual episodes need medical assessment.

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