

Fainting

Introduction

Fainting or stroke?

Fainting can be mistaken for a serious medical condition, such as a stroke. A stroke is a medical emergency that occurs when the blood supply to the brain is interrupted.

You should dial immediately to request an ambulance if you suspect that you or someone else is having a stroke.

The main symptoms of stroke can be remembered with the word FAST, which stands for Face-Arms-Speech-Time.

Face: the face may have fallen on one side, the person may not be able to smile, or their mouth or eye may have drooped.

Arms: the person with a suspected stroke may not be able to raise both arms and keep them there due to arm weakness or numbness.

Speech: the person may have slurred speech.

Time: it is time to dial immediately if you see any of these signs or symptoms.

You should also dial to request an ambulance if someone faints and does not regain consciousness after a minute or two.

Fainting is a sudden, temporary loss of consciousness that usually results in a fall.

Healthcare professionals often use the term 'syncope' when referring to fainting because it distinguishes fainting from other causes of temporary unconsciousness, such as seizures (fits) or concussion.

In most cases of fainting, the person who has fainted regains consciousness within a minute or two.

But less common types of fainting can be medical emergencies. You should call and request an ambulance if a person who has fainted does not regain consciousness within two minutes.

Why fainting happens

To function properly, the brain relies on oxygen that is carried in the blood. Fainting can occur when the blood flow to the brain is reduced.

Reduced blood flow to the brain is usually quickly corrected, but it can cause people to feel odd, sweaty and dizzy. If it lasts long enough, they may fall down. This is called a faint. See symptoms of fainting for more information.

The reason for the reduced blood supply to the brain that causes fainting can vary. Usually, the cause is related to a temporary malfunction in the autonomic nervous system, which regulates many of the body's automatic functions, including heartbeat and maintenance of blood pressure. This kind of fainting is called neurally mediated syncope.

This kind of fainting can be triggered by emotional stress, pain, prolonged standing, and other experiences or circumstances. It can also be caused by physical processes such as coughing, sneezing, or laughing.

What you should do

If you know or suspect that you are going to faint, you should lie down, preferably in a position where your head is low and your legs are raised. This will encourage blood flow to the brain.

If it is not possible to lie down, sit down with your head between your knees.

If you suspect someone else is about to faint, you should help them to lie down or sit down in this way.

If a person faints and does not regain consciousness within one or two minutes, you should put them into the recovery position. To do this, you should:

place the person on their side so they are supported by one leg and one arm

open their airway by tilting their head back and lifting their chin

monitor their breathing and pulse continuously

You should then dial to request an ambulance and stay with the person until medical help arrives.

Treatment of fainting

In many cases of fainting you will return to normal within a few minutes, and no further treatment is needed.

In cases of repeated fainting and some other cases, it is important that a healthcare professional investigates the cause of the fainting episode. See diagnosis of fainting for more information.

Treatment for fainting will depend on the kind of fainting you are experiencing.

In many cases of neurally mediated syncope, no further treatment is needed.

If you have had a fainting episode, advice to deal with possible future episodes includes:

avoiding the triggers for your fainting, such as hot and crowded environments, or emotional stress

being prepared to spot the warning signs of fainting, such as feeling lightheaded, and lying down to increase blood flow to the brain

Who is affected?

Fainting is very common. Around 50% of women will faint during their lives, and around 25% of men.

Around a third of people who have fainted will faint again within three years. In general, the more someone faints, the more likely they are to faint again.

Symptoms of fainting

When you faint, you will feel weak and unsteady before passing out for a short period of time, usually only a few seconds.

Fainting can happen when you are sitting down, standing up or when you get up too quickly.

Warning symptoms

You may not experience any warning symptoms before you lose consciousness, and if you do experience them it may be only for a few seconds.

Just before losing consciousness, you may experience the following symptoms:

yawning

a sudden, clammy sweat

nausea (feeling sick)

fast, deep breathing

confusion

feeling lightheaded

blurred vision or spots in front of your eyes

ringing in your ears

This is followed by a loss of strength and a loss of consciousness.

When you collapse to the ground, your head and heart are on the same level. This means that your heart does not have to work as hard to push blood up to your brain. You should return to consciousness after about 20 seconds.

You should call and request an ambulance if a person faints and does not regain consciousness within two minutes.

Afterwards

After fainting, you may feel confused and weak for about 20 to 30 minutes. You may also feel tired. Sometimes, you may not be able to remember what you were doing just before you fainted.

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Causes of fainting

Fainting (syncope) is caused by a temporary reduction in blood flow to the brain.

The blood flow to the brain can be interrupted for a number of reasons. The different causes of fainting are explained below.

Autonomic nervous system malfunction

Fainting is most commonly caused by a temporary malfunction in the autonomic nervous system. This type of fainting is sometimes called a 'neurally mediated syncope'.

The autonomic nervous system consists of the brain, nerves and spinal cord. It regulates automatic bodily functions, such as heart rate and blood pressure.

An external trigger, such as an unpleasant sight, heat or sudden pain, can temporarily cause the autonomic nervous system to stop working properly, resulting in a fall in blood pressure and fainting.

It may also cause your heartbeat to slow down or pause for a few seconds, causing a temporary interruption to the brain's blood supply (vasovagal syncope).

Coughing, sneezing or laughing can sometimes place a sudden strain on the autonomic nervous system, which can also cause you to faint (situational syncope).

The autonomic nervous system can also sometimes respond abnormally to upright posture. Normally, when you stand your heart rate remains the same. However, standing upright can occasionally cause a person's heart rate to increase by more than 30 beats a minute, resulting in symptoms such as light-headedness, breathlessness, palpitations and fainting. This is known as postural orthostatic tachycardia (POTs).

Low blood pressure

Fainting can also be caused by a fall in blood pressure when you stand up. This is called orthostatic hypotension and it tends to affect older people, particularly those over 65 years of age. It's a common cause of falls in older people.

When you stand up after sitting or lying down, gravity pulls blood down into your legs, which reduces your blood pressure. The nervous system usually counteracts this by making your heart beat faster and narrowing your blood vessels. This stabilises your blood pressure.

However, in cases of orthostatic hypotension this doesn't happen, leading to the brain's blood supply being interrupted, causing you to faint.

Possible triggers of orthostatic hypotension include:

dehydration - if you're dehydrated, the amount of fluid in your blood will be reduced and your blood pressure will decrease; this makes it harder for your nervous system to stabilise your blood pressure and increases your risk of fainting

diabetes - uncontrolled diabetes causes frequent urination which can lead to dehydration; excess blood sugar levels can also damage the nerves that help regulate blood pressure

medication - some medicines can cause orthostatic hypotension; these include diuretics, beta-blockers and some types of antidepressants

neurological conditions - conditions that affect the nervous system, such as Parkinson's disease, can trigger orthostatic hypotension in some people

Heart problems

Heart problems can also interrupt the brain's blood supply and cause fainting. This type of fainting is called cardiac syncope.

The risk of developing cardiac syncope increases with age. You're also at increased risk if you have:

narrowed or blocked blood vessels to the heart (coronary artery disease)

chest pain (angina)

had a heart attack in the past

weakened heart chambers (ventricular dysfunction)

structural problems with the muscles of the heart (cardiomyopathy)

an abnormal electrocardiogram (a test used to check for abnormal heart rhythms)

repeated episodes of fainting that come on suddenly without warning

See your DOCTOR if you think fainting is due to a heart problem.

Reflex anoxic seizures (RAS)

Reflex anoxic seizures (RAS) is a type of fainting that occurs when the heart briefly pauses due to excessive activity of the vagus nerve.

The vagus nerve is one of 12 nerves in your head. It runs down the side of your head, passes through your neck and into your chest and abdomen.

RAS tends to be more common in small children and often occurs when they're upset.

Diagnosing fainting

In some cases of fainting it is important to see a health professional after the fainting episode, to ensure there is no underlying health condition.

Your DOCTOR will be able to diagnose the type of fainting you have, and determine whether further treatment is needed.

When to see your DOCTOR

Most cases of fainting are not a cause for concern, and require no treatment.

But if you are concerned by your fainting episode, see your DOCTOR.

You should see your DOCTOR after you have fainted if you:

have no previous history of fainting

experience repeated episodes of fainting

injure yourself during a faint

have diabetes, which is a condition that is caused by too much glucose in the blood

are pregnant

have a history of heart disease, which is where your heart's blood supply is blocked or interrupted

experienced chest pains, an irregular heartbeat or a pounding heartbeat before you lost consciousness

experienced a loss of bladder or bowel control

took longer than a few minutes to regain consciousness

Assessment

During an assessment after a fainting episode, your DOCTOR will ask about the circumstances surrounding your fainting episodes and your recent medical history. They may:

Measure your blood pressure.

Listen to your heartbeat using a stethoscope.

Electrocardiogram (ECG)

If your DOCTOR suspects your fainting episode may have been caused by a problem with your heart, they may suggest an ECG.

An ECG records the rhythm and electrical activity of your heart. A number of small, sticky patches called electrodes are placed on your arms, legs and chest. Wires connect the electrodes to an ECG machine.

Every time your heart beats, it produces tiny electrical signals. The ECG machine traces these signals on paper, recording any abnormalities in your heartbeat.

An ECG is usually carried out at a hospital or DOCTOR surgery. The procedure takes about five minutes and is painless.

Carotid sinus test

If your DOCTOR suspects your fainting episode was associated with carotid sinus syndrome, they may massage your carotid sinus to see whether it makes you feel faint or lightheaded. Your carotid sinus is a collection of sensors in the carotid artery, which is the main artery in your neck that supplies blood to your brain.

If the carotid sinus massage causes symptoms, it may indicate that you have carotid sinus syndrome. See causes of fainting for more information.

Blood tests

Blood tests may be carried out to rule out conditions such as diabetes or anaemia. Anaemia is a condition where the body does not produce enough oxygen-rich red blood cells.

Tilt-table test

If your DOCTOR suspects that your fainting episode was associated with low blood pressure, they may suggest a tilt-table test.

If your DOCTOR does not have access to a tilt-table, you may be referred to a specialist, for example at a hospital, to have this test.

During the test you will be strapped to a table that is tilted upwards. If the sudden move from a horizontal to a vertical position makes you feel lightheaded, it is likely that you have orthostatic hypotension.

Alternatively, your DOCTOR may measure your blood pressure while you are lying down and again after you stand up. You may have orthostatic hypotension if your blood pressure falls after you stand up.

If you have orthostatic hypotension, you may be asked further questions to help determine the cause. For example, it can sometimes occur as a side effect of some medications.

Next steps

If tests reveal that there is an underlying cause of your fainting, such as a heart problem or orthostatic hypotension, your DOCTOR may recommend treatment.

See treatment for fainting for more information.

Treating fainting

Treatment for fainting (syncope) will depend on the type of fainting you experienced, and whether there is an underlying cause for the fainting.

There are also steps you should take if you think you or someone else is about to faint, and if someone else has fainted.

If someone has fainted

If a person faints and does not regain consciousness within two minutes, you should put them into the recovery position. To do this, you should:

place the person on their side so they are supported by one leg and one arm

open their airway by tilting their head back and lifting their chin

monitor their breathing and pulse continuously

You should then dial to request an ambulance and stay with the person until medical help arrives.

If you or someone else is about to faint

If you know or suspect that you are going to faint, you should lie down, preferably in a position where your head is low and your legs are raised. This will encourage blood flow to the brain.

If it is not possible to lie down, sit down with your head between your knees.

If you suspect someone else is about to faint, you should help them to lie down or sit down in this way.

Treating the underlying cause

When you visit the DOCTOR after a fainting episode, they will investigate the type of fainting you experienced, and whether there is an underlying cause for it. See diagnosis of fainting for more information.

If your DOCTOR finds an underlying cause for your fainting, treating it should help prevent further fainting episodes.

For example, if you are diagnosed with type 2 diabetes you may be advised to take regular exercise and eat a healthy diet to help control the condition.

If you are diagnosed with a heart condition, you may need to have further tests and treatment. For example, there are several different medicines that can be used to treat heart disease, which is where your heart's blood supply is blocked by a build-up of fatty substances in the main blood vessels.

Treating fainting associated with the nervous system

Most fainting episodes are associated with a temporary malfunction of the autonomic nervous system, which regulates heartbeat and maintenance of blood pressure.

This type of fainting is called neurally mediated syncope.

Treatment for this kind of fainting involves avoiding any possible triggers. If you are not sure what caused your fainting episode, your DOCTOR may suggest that you keep a diary of any symptoms you experience and what you were doing at the time that you fainted, to help identify possible causes.

There are also steps that you can take to avoid losing consciousness if you think that you may be about to faint. See above for more information.

Fainting associated with an external trigger

Fainting can occur when an external trigger, such as a stressful situation, causes a temporary malfunction in your autonomic nervous system. This is called vasovagal syncope.

In most cases of this kind of fainting, further treatment is not required. However, you may find it useful to avoid potential triggers, which can include stress or excitement, hot and stuff environments, and spending a long time standing.

If you know that injections or medical procedures (such as blood tests) make you feel faint, you should tell the doctor or nurse beforehand. They will then be able to make sure you are lying down during the procedure.

Fainting associated with bodily functions

Fainting can occur when a bodily function or activity places a sudden strain on the autonomic nervous system. This is called situational syncope.

There is no specific treatment, but avoiding the triggers may help. For example, if coughing has caused you to faint, it may be possible to suppress your urge to cough and therefore avoid fainting.

Carotid sinus syndrome

Carotid sinus syndrome is where pressure on your carotid sinus causes you to faint. Your carotid sinus is a collection of sensors in the carotid artery, which is the main artery in your neck that supplies blood to your brain.

You can avoid fainting by not putting any pressure on your carotid sinus, for example, by not wearing shirts with tight collars.

In some people, carotid sinus syndrome can be treated by having a pacemaker fitted. A pacemaker is a small, battery-operated device that is inserted into your chest to help your heart beat regularly.

Treating fainting associated with low blood pressure

Fainting can occur when your blood pressure drops as you stand up. This drop in blood pressure is called orthostatic hypotension.

By avoiding anything that lowers your blood pressure you should be able to prevent fainting. For example, you should:

make sure you do not get dehydrated, for example, by limiting how much alcohol you drink

avoid medication that can lower your blood pressure, but do not stop taking a prescribed medication unless you are advised to do so by your DOCTOR or another qualified healthcare professional who is responsible for your care

See treatment for low blood pressure for more information and advice about orthostatic hypotension.

Physical counterpressure manoeuvres

Physical counterpressure manoeuvres are movements that are designed to raise your blood pressure and prevent you losing consciousness. One study found that training in physical counterpressure manoeuvres can reduce fainting in some people.

Physical counterpressure manoeuvres include:

crossing your legs

clenching the muscles in your lower body

squeezing your hands into a fist

tensing your arm muscles

You need to be trained in how to carry out these movements correctly. You can then carry them out if you experience any symptoms that suggest you are about to faint, such as feeling lightheaded.

Medication

Several different medications have been tested for the treatment of fainting. Guidelines for treating fainting from the European Society of Cardiology found that most medications had disappointing results.

Midodrine is a medicine used to raise blood pressure in some people who experience low blood pressure upon standing up. Some doctors also prescribe midodrine to people who experience fainting associated with this low blood pressure, to help reduce or stop fainting.

At the moment the benefit of giving midodrine to people who experience this type of fainting has not been proven.