



Heart Attacks, Cardiac Arrests or Strokes – Is there a difference?

People often get confused about the difference between a heart attack, cardiac arrest, and stroke. Put simply, a heart attack and cardiac arrest involve the heart, while a stroke involves the brain.

A **Heart Attack** occurs when blood flow to the heart is blocked. A **Cardiac Arrest** occurs when the heart malfunctions and suddenly, with little or no warning, stops beating. A **Stroke** occurs when the blood supply to part of your brain is interrupted or reduced, depriving brain tissue of essential oxygen and nutrients.

What is a Heart Attack?

A heart attack occurs when a blocked artery prevents blood from reaching a section of your heart. The blocked artery needs to be reopened quickly or the heart nourished by that artery begins to die. The longer a person goes without treatment, the greater the damage that will be suffered.

Heart attack symptoms can be immediate and can be intense. Symptoms can also start slowly and can persist for hours, days or weeks before a heart attack. Heart attack symptoms in men can be different than in women, as explained below.

Heart Attack Symptoms for Men

- Most heart attacks involve uncomfortable pressure, squeezing, or pain in the centre of the chest that can last for minutes. This discomfort can go away and return.
- Upper body pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs can include a cold sweat, nausea or light-headedness.

Heart Attack Symptoms for Women

- Women can experience the same symptoms as men.
- The most common heart attack symptom for women is chest pain or discomfort. They are more likely to experience shortness of breath, nausea, vomiting, and back or jaw pain.



Caution: No articles published by us, regardless of date, should ever be used as a substitute for direct medical advice from your doctor other qualified clinician/medical practitioner.

What is a Cardiac Arrest?

A cardiac arrest occurs suddenly and often without warning. A cardiac arrest is when your heart suddenly stops pumping blood around your body. When your heart stops pumping blood, your brain is starved of oxygen. This causes you to fall unconscious and stop breathing. It is an abrupt loss of heart function. It may be caused by an irregular heartbeat (called *arrhythmia*). A common arrhythmia associated with cardiac arrest is ventricular fibrillation. Ventricular fibrillation is when the heart's lower chambers suddenly start beating chaotically and don't pump blood to the brain, lungs and other organs. Seconds later, a person loses consciousness and has no pulse.

A cardiac arrest usually happens without warning. If someone is in cardiac arrest, they collapse suddenly and:

- will be unconscious
- will be unresponsive and
- won't be breathing or breathing normally - not breathing normally may mean they're making gasping noises.



Without immediate treatment or medical attention, the person will die. If the person is having a cardiac arrest, someone should phone 999 immediately and start CPR (cardiopulmonary resuscitation) if possible.

Cardiac arrest may be reversed if CPR is carried out and a defibrillator is used to shock the heart and restores a normal heart rhythm within a few minutes. Death can result quickly if proper steps aren't taken immediately.

Picture Credit: "[Norwich Junior Doctors showing CPR outside on The Haymarket Norwich A3](#)" by [Roger Blackwell](#) is licensed under [CC BY 2.0](#)

What is a Stroke?

A stroke can occur with little warning. A stroke occurs when there's bleeding in the brain, or the blood supply to part of your brain is interrupted or reduced, depriving brain tissue of oxygen and nutrients. Within minutes, brain cells begin to die. Timely treatment is crucial to minimise brain damage and potential complications. Be in no doubt - strokes are dangerous and deadly.

Anyone can suffer a stroke. It's a common misconception that strokes only happen to older people, but a stroke can strike anyone and at any time. A stroke usually occurs because of a blood clot in the brain but can also result from bleeding from a burst blood vessel. While most people who have a stroke are older, younger people can have strokes too - even **children**. One in four strokes in the UK happens to people of working age.

The Stroke Association says there are many things you can do to reduce your risk of a stroke. With simple checks, your GP should help you understand your risk of stroke and support you to make the changes necessary to reduce that risk. As we get older, our arteries naturally become narrower and harder. They are also more likely to become clogged with fatty material, known as atherosclerosis.

Information about Heart Attacks, Cardiac Arrests & Strokes

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You can read more about how **atherosclerosis** can lead to an ischaemic stroke. Remember - it's never too late to **reduce your risk of a stroke**.

There are three main types of stroke: *ischemic stroke*, *haemorrhagic stroke*, and *transient ischemic attack*:

- **Ischemic Stroke (Clots)** – An ischemic stroke occurs when a vessel supplying blood to the brain is obstructed or clots. It accounts for about 87% of all strokes. Fatty deposits lining the vessel walls, called atherosclerosis, are the leading cause of an ischemic stroke.
- **Haemorrhagic Stroke (Bleeds)** – A Haemorrhagic Stroke occurs when a weakened blood vessel ruptures and bleeds. The two types of weakened blood vessels that usually cause haemorrhagic stroke are aneurysms and arteriovenous malformations (AVMs). The most common causes of haemorrhagic stroke are uncontrolled high blood pressure and taking too much blood thinner medicine.
- **TIA (Transient Ischemic Attack)** – A TIA is a temporary blockage of blood flow to the brain. It is sometimes called a mini-stroke and is caused by a serious temporary blood clot. It doesn't cause permanent damage and is often ignored. TIAs may signal a full-blown stroke ahead.

Women are slightly less likely to have a stroke than men of the same age. But women have strokes at a later age, which make them less likely to recover, and they are more likely to die as a result.

According to the NHS, more than 150,000 people have a stroke in the UK, with up to a fifth dying from it every year. The number of strokes throughout the UK is also predicted to rise dramatically, owing to the ageing population.

Medical conditions

Certain medical conditions can increase your risk of having a stroke:

- **High Blood Pressure** is the single biggest risk factor for stroke.
- **Diabetes** can make your arteries more likely to get clogged up.
- **Atrial Fibrillation** (aka AF) - where the heartbeat is irregular - can lead to a clot forming in your heart, causing a stroke.
- **High Cholesterol** can make your arteries more likely to get clogged up.

Help for those with High Cholesterol

A new injection is being rolled out on the NHS to prevent 30,000 deaths from heart attacks and stroke. Around 300,000 at-risk people with high cholesterol who have previously suffered such a cardiovascular event in England will be offered the twice-yearly jab costing £2,000 per dose. **Inclisiran** is the first of a new type of "ground-breaking" drug that boosts the liver's ability to remove harmful cholesterol from the blood. The RNA interference (RNAi) technology will first be targeted at 300,000 people deemed most at risk of dying from another heart attack or stroke, reports **The Mirror**.



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Information about Heart Attacks, Cardiac Arrests & Strokes

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NHS England (reported [HERE](#)) estimates Inclisiran could prevent 55,000 heart attacks and strokes, saving 30,000 lives within the next decade. However, if ongoing trials are successful, the National Institute for Care and Excellence (NICE) could extend approval to millions of more people with high cholesterol who have not yet suffered a cardiovascular event.

Things such as smoking, drinking too much alcohol, being overweight and eating unhealthy foods can damage your blood vessels, increase your blood pressure and make your blood more likely to clot. The message is clear - it's never too late to make a change.

Picture Credit: "[Nurse measuring blood pressure of senior woman at home. Looking at camera, smiling.?](#)" by [agilemktgl](#) is marked with [CC PDM 1.0](#)



High blood pressure is a common problem. There are 9.5 million people with a diagnosis in the UK. And for every ten people diagnosed with high blood pressure, another seven don't know they have it. That is more than 5.5 million people living with untreated high blood pressure in England alone. It usually has no symptoms, so the only way to tell if your blood pressure is high is to measure it.

A cocktail of diabetes and atrial fibrillation can be very dangerous.

Family History

If a close relative (parent, grandparent, brother or sister) has had a stroke, your risk is likely to be higher. Speak to your GP if you have close relatives with stroke or heart attack, as some kinds of high cholesterol can run in families.

Ethnicity

Strokes happen more often in people who are black or from South Asian families. If you're black or South Asian, you may need to get checked at an earlier age for diabetes, especially if you have any risk factors like being overweight. Good advice is to contact your GP surgery to ask for a health check.

Sickle Cell Disease

Sickle cell disease (aka SCD) is an inherited condition that affects the red blood cells, which carry oxygen around the body. It can cause painful episodes and other symptoms, and it can also raise the risk of a stroke. Around 10,000 people in the UK have SCD, and it mainly affects people of African, Caribbean, Asian, and Mediterranean origin. The Stroke Association has [more information about SCD](#) and how to get advice and support.

Migraines

There's no research showing that migraines cause stroke, but if you have **migraines with aura**, you have a very slightly higher risk of stroke. Stroke and migraine both take place in the brain, and it's not unusual for the symptoms of a migraine to mimic a stroke, but the causes of the symptoms are different. A stroke arises from damage to the blood supply *inside* the brain, but migraine is thought to be due to problems *with the way brain cells work*. The relationship between migraine and stroke is complex, and while the symptoms can sometimes seem similar, and they may share some underlying risk factors.

Occasionally, migraine and stroke happen together, but there is no evidence to suggest that one causes the other. Migrainous Infarction is the term given to an ischaemic stroke (a stroke due to a clot) that happens during a migraine. Migraine is a common health condition, affecting around one in five women and around one in every 15 men. They usually begin in early adulthood. There are several types of migraine, including:

- **Migraine with aura** – where there are specific warning signs just before the migraine begins, such as seeing flashing lights.
- **Migraine without aura** – the most common type, where the migraine happens without the specific warning signs.
- **Migraine aura without headache, also known as silent migraine** – where an aura or other migraine symptoms are experienced, but a headache does not develop

The exact cause of migraines is unknown, although they are thought to result from temporary changes in the chemicals, nerves and blood vessels in the brain. Interestingly, about half of all people who experience migraines also have a close relative with the condition, suggesting that genes may play a role.

Some people have migraines frequently, up to several times a week, while others only have a migraine occasionally. If you have migraine with aura, you're about twice as likely to have an ischaemic stroke in your lifetime compared to those without migraine, but the overall risk linked to migraine is still very low, and you're far more likely to have a stroke because of other risk factors like smoking, being overweight and having high blood pressure.

It is essential to have a medical diagnosis of migraine and not assume this to be the case. Severe headaches, vomiting etc., are also signs of a space-occupying lesion (tumour) and, although rare, proper diagnosis is vital.

Simple painkillers, such as paracetamol or ibuprofen, can be effective for migraines. You should also make an appointment to see your GP if you have frequent migraines (on more than five days a month), even if they can be controlled with medicines, as you may benefit from preventative treatment. For more on migraines, see [HERE](#) and [HERE](#).

Symptoms of a Stroke

The sudden onset of weakness or numbness on one side of the body, speech difficulty or confusion, difficulty seeing in one or both eyes, the onset of dizziness, trouble walking or loss of balance, and severe headache with no known cause, are all symptoms of a stroke.

By learning and sharing **the FAST** (Face, Arm, Speech, Time) warning signs, you might save someone's life from a stroke.

- **Face** – Does one side of the face droop, or is it numb? Ask the person to smile. Is the person's smile uneven or lopsided?
- **Arm** – Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward, or can they only lift one arm?
- **Speech** – Is the speech slurred or garbled? Ask the person to repeat a simple sentence or say their name. Is the person unable to speak or hard to understand?
- **Time** – Act quickly. If the person shows any of these symptoms, even if the signs disappear, call the emergency services and get the person to the hospital without delay.

Other stroke symptoms include:

- blurred vision, dim vision, or loss of vision, often in one eye
- tingling, weakness, or numbness on one side of the body
- nausea
- loss of bladder or bowel control
- dizziness or light-headedness
- dribbling from the mouth

What is most important is that you should **not** take a wait-and-see approach. Even if the symptoms are subtle or go away, you should take them very seriously. It only takes minutes for brain cells to start dying. The risk of disability decreases if clot-busting drugs are administered within 4.5 hours of the condition's onset.

Strokes are the third leading cause of death across the world. Nearly three-quarters of all strokes occur in people over the age of 65.

Prevention

The prevention of stroke is a three-part process (see [HERE](#)):

- Modification of lifestyle
- Selection of the appropriate prevention medications
- Surgical procedures to remove blockages in arteries that could lead to a stroke

A **stroke** may cause **loss of balance** or **unconsciousness**, which may result in a fall. If you think you or someone around you may be having a stroke, follow these steps:

- Call emergency services. If you're having **stroke symptoms**, have someone else call for you. Stay as calm as possible while waiting for emergency help.
- If you're caring for someone else having a stroke, make sure they're in a safe, comfortable position. Preferably, this should be lying on one side with their head slightly raised and supported in case they vomit.
- Check to see if they're breathing. If they're not breathing, perform **CPR**. If they're having **difficulty breathing**, loosen any constrictive clothing, such as a tie or scarf.
- Talk in a calm, reassuring manner.
- Cover them with a blanket to keep them warm.
- You ought not give them anything to eat or drink
- If the person is showing any **weakness** in a limb, avoid moving them.
- Watch the person carefully for any change in condition. Tell the emergency services about the symptoms and when and in what circumstances they started. Be sure to mention if the person fell or hit their head.

Stroke Prevention

Not many people know, but strokes are the third leading cause of death in the UK (after heart disease and cancer) and the main reason for disability. However, **Blood Pressure UK** (formerly the Blood Pressure Association) reports that nine out of 10 strokes may be preventable.

High blood pressure is the most common cause of a stroke. Besides lowering blood pressure, Blood Pressure UK says the danger of having a stroke can be reduced by:

- Maintaining a healthy, low-salt diet.
- Exercising more (see below).
- Avoiding smoking.
- Limiting alcohol consumption.

Exercise and Diet

Advice from the NHS says combining a healthy diet with regular exercise is the best way to maintain a healthy weight. Regular exercise can also help lower your cholesterol and keep your blood pressure healthy.

- For most people, at least two and a half hours a week of moderate-intensity aerobic activity, such as cycling or fast walking, every week is recommended.
- If you're recovering from a stroke, you should discuss possible exercise plans with the members of your rehabilitation team.
- Regular exercise may not be possible in the first weeks or months after a stroke, but you should be able to begin exercising once your rehabilitation has progressed.

If you have already had a stroke, making these changes can help reduce your risk of having another stroke in the future.

Find out more about health and fitness from the NHS, [HERE](#).

Coping after a Stroke

Lifeline 24 ([HERE](#)) says that a stroke can result in temporary or permanent disabilities, depending on how long the blood supply to your brain is cut off. Brain cells may be damaged or even killed, causing significant mental health and physical damage. Complications after a stroke can include:

- Partial paralysis.
- Difficulty talking or eating.
- Memory loss.
- Emotional problems - including depression.
- Pain or strange sensations in the affected parts of your body.
- Impaired self-care ability.

More people are surviving than ever before. Some recover relatively quickly, while others may need long-term support to help restore their independence.

Atrial Fibrillation (advice from the NHS)

Treatments for atrial fibrillation include medicines to control your heart rate and reduce the risk of stroke and procedures to restore normal heart rhythm. It may be possible for you to be treated by a GP, or you may be referred to a heart specialist (a cardiologist). Some cardiologists, known as electrophysiologists, specialise in the management of abnormalities of heart rhythm.

The NHS say ([HERE](#)) that achieving optimal treatment for people diagnosed with atrial fibrillation has the potential to avert up to 14 220 strokes a year, saving £241m a year.

Factors that will be taken into consideration for treatment include:

- your age
- your overall health
- the type of atrial fibrillation you have
- your symptoms
- whether you have an underlying cause that needs to be treated

The first step is to try to find the cause of the atrial fibrillation. For example, if you have an **overactive thyroid gland (hyperthyroidism)**, medicine to treat it may also cure atrial fibrillation. If no underlying cause can be found, the treatment options are:

- medicines to reduce the risk of a **stroke**
- medicines to control atrial fibrillation
- cardioversion (electric shock treatment)
- catheter ablation
- having a **pacemaker** fitted

Medicines to control atrial fibrillation

Medicines called anti-arrhythmics can control atrial fibrillation by:

- restoring a normal heart rhythm
- controlling the rate at which the heart beats

The choice of anti-arrhythmic medicine depends on the type of atrial fibrillation, any other medical conditions you have, the side effects of the medicine chosen, and how well the atrial fibrillation responds. Some people with atrial fibrillation may need more than one anti-arrhythmic medicine to control it.

Restoring a normal heart rhythm

A variety of medicines are available to restore normal heart rhythm, including:

- flecainide
- beta-blockers, particularly sotalol

An alternative medicine may be recommended if a particular medicine does not work or the side effects are troublesome.

Controlling the rate of the heartbeat

The aim is to reduce your heart rate to less than 90 beats per minute when you are resting. A **beta-blocker**, such as **bisoprolol** or **atenolol**, or a calcium channel blocker, such as **verapamil** or **diltiazem**, will be prescribed. A medicine called **digoxin** may be added to help control the heart rate further. Normally, only one medicine will be tried before catheter ablation is considered.

Side effects from anti-arrhythmics

As with any medicine, anti-arrhythmics can cause side effects. The most common side effects of anti-arrhythmics are:

- beta-blockers – tiredness, cold hands and feet, low blood pressure, nightmares and impotence
- flecainide – feeling sick, being sick and heart rhythm disorders
- verapamil – **constipation**, low blood pressure, ankle swelling and **heart failure**

Anyone taking medicine for this condition should read the patient information leaflet that comes with the medicine for more details.

Medicines to reduce the risk of a stroke

Find out more about complications of atrial fibrillation [HERE](#).

The way the heart beats in atrial fibrillation means there's a risk of **blood clots** forming in the heart chambers. If these enter the bloodstream, they can cause a stroke.

Your doctor will assess your risk and try to minimise your chance of having a stroke. They'll consider your age and whether you have a history of any of the following:

- stroke or blood clots
- heart valve problems
- **heart failure**
- **high blood pressure (hypertension)**
- **diabetes**
- **heart disease**

You may be given medicine according to your risk of having a stroke. Depending on your level of risk, you may be prescribed Warfarin or an **anticoagulant**, such as **dabigatran**, **rivaroxaban**, **apixaban** or **edoxaban**. If you're prescribed an anticoagulant, your risk of bleeding will be assessed both before you start the medicine and while you're taking it. Taking **Aspirin** to prevent strokes caused by atrial fibrillation is a source of some controversy.

Warfarin

Warfarin is an anticoagulant, which means it stops the blood clotting. People with atrial fibrillation who have a high or moderate risk of having a stroke are usually prescribed **Warfarin** unless there's a reason they cannot take it. There's an increased risk of bleeding in people who take Warfarin, but this small risk is usually outweighed by the benefits of **preventing a stroke**.

It's important to take Warfarin as directed by your doctor. If you're prescribed Warfarin, you need to have regular **blood tests** and, after these, your dose may be changed.

Caution: Many medicines can interact with Warfarin and cause serious problems, so check that any new medicines you're prescribed are safe to take with Warfarin. While taking Warfarin, you should be careful about drinking too much alcohol regularly. Drinking cranberry juice and grapefruit juice can also interact with Warfarin and is not recommended.

Alternative anticoagulants to Warfarin

Rivaroxaban, dabigatran, apixaban and edoxaban are alternatives to warfarin. The **National Institute for Health and Care Excellence (NICE)** has approved these medicines for use in treating atrial fibrillation. NICE also states that you should be offered a choice of anticoagulation and the opportunity to discuss the merits of each medicine.

Unlike Warfarin, rivaroxaban, dabigatran, apixaban and edoxaban do not interact with other medicines and do not require regular blood tests.

Cardioversion

Cardioversion may be recommended for some people with atrial fibrillation. It is believed that former Labour PM Tony Blair had this procedure – it involves giving the heart a controlled electric shock to try to restore a normal rhythm. Cardioversion is usually carried out in hospital so the heart can be carefully monitored.

If you have had atrial fibrillation for more than two days, cardioversion can increase the risk of a clot forming. In this case, you'll be given an anticoagulant for three to four weeks before cardioversion, and for at least four weeks afterwards to minimise the chance of having a stroke. In an emergency, pictures of the heart can be taken to check for blood clots, and cardioversion can be carried out without going on medicine first.

The good news is that anticoagulation may be stopped if cardioversion is successful. But you may need to continue taking anticoagulation after cardioversion if the risk of atrial fibrillation returning is high and you have an increased risk of having a stroke.

Catheter Ablation

Catheter ablation is a procedure that very carefully destroys the diseased area of your heart and interrupts abnormal electrical circuits. Read about it **HERE**.

Pacemakers

A pacemaker is a small battery-operated device that's usually implanted in your chest, just below your collarbone. It's usually used to stop your heart from beating too slowly, but in atrial fibrillation, it may be used to help your heart beat regularly. Having a pacemaker fitted is usually a minor surgical procedure carried out under a **local anaesthetic** (the area being operated on is numbed, and you're conscious during the procedure). This treatment may be used when medicines are not effective or are unsuitable - this tends to be in people aged 80 or over.

You can find out more about pacemaker implantation **HERE**.

The Big Six Medications

Modern heart drug therapy includes the following "big six" medications:

- 1. Statins — to lower LDL cholesterol:** Statins (first introduced in 1987) now allows seven different medications from which GPs can choose depending on a patient's need. They lower the "bad" LDL cholesterol levels by 20 to 60% and also reduce inflammation. Some patients with a high LDL level but without heart disease should also take statins.
- 2. Aspirin — to prevent blood clots** - Aspirin has been around for a long time and was first discovered to have cardiovascular benefits in the 1960s. Aspirin can help to keep your arteries open because of its anti-clotting and anti-platelet effects.
- 3. Clopidogrel — to prevent blood clots** - This drug is considered a "super-aspirin" because of its effectiveness in preventing platelet clumping, and it's often used in combination with aspirin. For some patients, there is an increased risk of bleeding, and doctors will weigh the benefits versus the risks of this drug. However, if you have a stent, the combination of aspirin and clopidogrel is essential to preventing clotting. It's also often used for patients with worsening Angina. Sometimes, a better option might be Ticagrelor or Prasugrel.
- 4. Warfarin — to prevent blood clots** - This drug is a stronger anti-clotting agent than aspirin and clopidogrel. It works as an anticoagulant – or blood thinner. Warfarin was widely used in the past to prevent the formation of clots if you have atrial fibrillation, an artificial heart valve or if you have blood clots in your legs. Warfarin is no longer the first-line medication choice for AF or a blood clot in the leg or lungs. It's primarily used for heart valve disease. And because it interacts with other medications and diet, it requires close monitoring by a physician.
- 5. Beta-blockers — to treat heart attack and heart failure and sometimes used to lower blood pressure** - Beta-blockers block the effects of adrenaline, which comes on in response to stressful situations. Dosage of these medications must be adjusted for the desired response. Your GP will monitor you for dizziness (due to low heart rate), kidney and liver problems.
- 6. ACE inhibitors — to treat heart failure and lower blood pressure** - ACE (angiotensin-converting enzyme) inhibitors prevent the body from producing the artery-constricting hormone angiotensin. Arteries relax with ACE inhibitors and this lowers blood pressure. They are prescribed for patients with congestive heart failure, a recent heart attack, and those with hypertension.

Collectively, these drugs save lives by preventing heart attacks and strokes.

Source: Excerpted from: <https://health.clevelandclinic.org/the-big-six-heart-medications/>

Closing Comments

First-time stroke affects 230 people per 100,000 of the UK population each year, with over 80,000 people hospitalised in England. Although the death rate has been falling, figures from the Sentinel Stroke National Audit Programme show that 13.6% of people admitted to hospital with a stroke in England and Wales died (either in the hospital or after being discharged from inpatient care) within 30 days. There are approximately 1.2 million stroke survivors in the UK. The risk of recurrent stroke is 26% within five years of a first stroke and 39% within ten years.

Stroke is the single biggest cause of disability in adults. The Stroke Association has estimated an annual cost to the NHS in England of £2.98 billion per year. In addition, annual social care costs have been estimated at £4.55 billion, with almost half of that estimated to come from public funds. Of stroke survivors, one in 12 have to move into a care home because of the effects of their stroke. There is also a substantial burden to families of people who have had a stroke in terms of informal, unpaid care.

Source: National Institute for Health & Care Excellence (NICE), [HERE](#). © Copyright acknowledged

Worth reading is The Sussex Community NHS article on post-stroke community patients' experiences of a Secondary Stroke Prevention Package offered by a Community Neurological Rehabilitation Team, and their views on how it could be improved, [HERE](#). It says that after an initial stroke, people are more at risk of having a secondary stroke and that one in four people will experience a secondary stroke within five years – the same statistics as NICE.

A mention should be made about Angina - a pain or discomfort in your chest, arm, neck, stomach or jaw that happens when the blood supply to your heart becomes restricted because your arteries have narrowed. This clogging is called atheroma. Angina is a symptom of coronary heart disease, not an illness in itself. Unstable Angina can be undiagnosed chest pain or a sudden worsening of existing Angina. It happens when the blood supply to the heart is severely restricted, and Angina attacks occur more frequently, with less and less activity. These attacks may even occur at rest or wake you from sleep. They can last up to 10 minutes. You should see your doctor urgently, and you may be admitted to the hospital. Until tests confirm the diagnosis, this is sometimes called Acute Coronary Syndrome (ACS). You can read more about Angina [HERE](#).

References, Sources, Acknowledgements and Further Information:

Excerpted or extracted from:

1. <https://www.fcneurology.net/heart-attack-cardiac-arrest-and-stroke/>
2. <https://www.think-ahead.org.uk/my-stroke-information>
3. <https://health.ucsd.edu/specialties/stroke/pages/about-stroke.aspx>
4. <https://www.bhf.org.uk/information-support/conditions/cardiac-arrest>
5. <https://www.bhf.org.uk/information-support/conditions/stroke>
6. <https://www.nuffieldtrust.org.uk/resource/stroke-and-heart-attack-mortality>
7. <https://www.nhs.uk/conditions/heart-attack/>
8. <https://www.nhs.uk/conditions/heart-attack/causes/>
9. <https://www.nhs.uk/conditions/stroke/prevention/>
10. https://www.stroke.org.uk/sites/default/files/ltp_stroke_content.pdf
11. <https://www.stroke.org.uk/what-is-stroke/are-you-at-risk-of-stroke>
12. <https://www.webmd.com/stroke/guide/stroke-causes-risks>
13. <https://www.verywellhealth.com/heart-problems-that-occur-with-strokes-1746119>
14. <https://hcavirginia.com/blog/entry/the-difference-between-heart-attacks-cardiac-arrest-and-strokes>
15. <https://www.england.nhs.uk/2017/09/nhs-launches-new-drive-to-save-thousands-of-people-from-heart-attacks-and-strokes/>
16. <https://www.google.com/amp/s/www.chroniclive.co.uk/news/health/job-heart-attacks-stroke-nhs-21451775.amp>
17. https://pro.novonordisk.com/disease-information/cv-ascvd-T2D.html?cid=pse-1992883280&congress_id=escu
18. <https://www.healthline.com/health/stroke/stroke-first-aid>
19. <https://www.sja.org.uk/get-advice/first-aid-advice/stroke/>
20. <https://www.redcross.org.uk/first-aid/learn-first-aid/stroke>
21. <https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2018/february/average-age-of-stroke-victims-is-getting-younger-according-to-new-figures-released-today-by-phe>
22. <https://www.gov.uk/government/news/new-figures-show-larger-proportion-of-strokes-in-the-middle-aged>

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