

Angina

Introduction

Who is affected by angina

Angina is a common condition among older adults.

It is estimated that 1 in every 12 men and 1 in every 30 women between 55 and 64 years of age have angina. This figure rises to 1 in every 7 men and 1 in every 12 women who are over 65 years of age.

Angina is more common in men than women.

Angina is chest pain that occurs when the blood supply to the muscles of the heart is restricted. It usually happens because the arteries supplying the heart become hardened and narrowed.

The pain and discomfort of angina feels like a dull, heavy or tight pain in the chest that can sometimes spread to the left arm, neck, jaw or back. The pain is usually triggered by physical activity or stress and typically only lasts for a few minutes. This is often referred to as an angina attack.

When to seek medical help

Call an ambulance if you experience chest pain and you haven't previously been diagnosed with a heart problem.

If you have an angina attack and you've previously been diagnosed with the condition, take the medication prescribed for you (glyceryl trinitrate). A second dose can be taken after five minutes if the first dose is ineffective. If there's no improvement five minutes after the second dose, call and ask for an ambulance.

Types of angina

The two main types of angina are stable angina and unstable angina. stable angina - where angina attacks occur due to an obvious trigger (such as exercise) and improve with medication and rest

unstable angina - where angina attacks are more unpredictable, occurring with no obvious trigger and continuing despite resting
Stable angina is not life-threatening on its own. However, it is a serious warning sign that you have an increased risk of life-threatening problems, such as a heart attack or stroke.

You may experience symptoms of unstable angina after previously having symptoms of stable angina. However, unstable angina can also occur in people who do not have a previous history of stable angina. Unstable angina should be regarded as a medical emergency because it is a sign that the function of your heart has suddenly and rapidly deteriorated, increasing your risk of having a heart attack or stroke.

Why angina happens

Most cases of angina are caused by atherosclerosis, which is the hardening and narrowing of arteries due to a build-up of fatty substances known as plaques. This can restrict the blood supply to the heart and trigger the symptoms of angina.

Advanced age, smoking, obesity and eating a high-fat diet all increase your risk of developing atherosclerosis.

Treating angina

Treatment for angina aims to to relieve the symptoms during an angina attack, reduce the number of angina attacks that a person has and reduce the risk of further complications.

A number of medications can be used to try to achieve this. Some of these are only taken when needed, while others are taken everyday.

Surgery to widen or bypass the narrowed arteries may be recommended if the symptoms do not respond to medication

Complications

A major concern for people with angina is that their atherosclerosis will continue to get worse. This can lead to the blood supply to their heart

becoming blocked, which could trigger a heart attack. Similarly, a blockage of the blood supply to the brain could trigger a stroke. Each year it is estimated that 1 in every 100 people with stable angina will have a fatal heart attack or stroke and as many as 1 in 40 people will have a non-fatal heart attack or stroke. You can considerably reduce your risk of developing these complications by making lifestyle changes. For example, if you are obese and you smoke, you can significantly reduce your risk by stopping smoking and achieving a healthy weight.

Symptoms of angina

The most common symptom of angina is a feeling of pain or discomfort in your chest. The pain can feel tight, dull or heavy.

The pain can spread from your chest to your left arm, neck, jaw and back. In some cases, the pain is similar to indigestion.

Chest pain may also occur with:

breathlessness

feeling sick

feeling unusually tired

dizziness

restlessness

Some people may experience breathlessness without any obvious chest pain.

Triggers

There are two types of angina, called stable and unstable angina. The symptoms of these two types are similar, but there are some important differences.

Attacks of stable angina usually occur when the heart is forced to work harder, for example during physical activity or emotional stress. In some cases, the pain can also develop after eating a meal or during cold weather. These are known as angina triggers. The symptoms of stable angina usually improve if you rest for a few minutes.

Unstable angina is more unpredictable. It can develop without any obvious triggers and can persist even when you are resting. Attacks of unstable angina may last longer than a few minutes and do not always respond to treatments used for stable angina.

When to seek medical help

Request an ambulance if you experience chest pain and you haven't previously been diagnosed with a heart problem.

If aspirin is easily available and you are not allergic to it, take one tablet while you are waiting for the ambulance to arrive. Chewable aspirin is best because it works faster than other forms. Aspirin helps to prevent blood clots and will reduce your risk of experiencing a heart attack or a stroke.

If you have an angina attack and you've previously been diagnosed with the condition, take the medication prescribed for you (called glyceryl trinitrate). A second dose can be taken after five minutes if the first dose is ineffective. If there is no improvement five minutes after the second dose, call and ask for an ambulance.

Causes of angina

Angina occurs when the heart is not supplied with enough blood.

Like all of the body's organs and tissues, your heart needs a constant supply of oxygen-rich blood to function normally.

Blood is supplied to the heart by two large blood vessels known as the coronary arteries. Angina most often occurs when the coronary arteries become narrow and hardened due to a condition called atherosclerosis.

When you are resting, the muscles of your heart only need a relatively small supply of blood. However, when you exercise or feel stressed, your heart muscles have to work harder and the demand for blood increases. If the coronary arteries are narrowed, the required amount of blood is unable to reach the heart in time, triggering the symptoms of angina.

In some cases, angina occurs when the blood supply is blocked by a piece of fatty deposit (plaque) that has broken away from the lining of the arteries. Plaque can build up in the arteries due to atherosclerosis.

Increased risk

Anything that causes the coronary arteries to narrow can increase your risk of angina. For example:

high blood pressure

a diet that is high in fat and cholesterol

a lack of exercise

smoking

type 1 diabetes and type 2 diabetes

age

family history

These risk factors can often be inter-related. They are explained below in more detail.

High blood pressure

Your arteries are designed to pump blood at a certain pressure. If that pressure is exceeded, the artery walls will be damaged. High blood pressure can be caused by:

being overweight

drinking excessive amounts of alcohol

smoking

stress

a lack of exercise

For reasons that are not fully understood, high blood pressure is more common among people of Afro-Caribbean and south Asian (Indian, Pakistani and Bangladeshi) origin. A tendency to develop high blood pressure also often runs in families.

High-fat diet and cholesterol

Cholesterol is a type of fat that is essential for the functioning of the body. It helps produce hormones, protects nerve endings and makes up

cell membranes (the walls that protect individual cells). There are two main types of cholesterol:

low density lipoprotein (LDL) - is mostly made up of fat, plus a small amount of protein; this type of cholesterol can block your arteries so it is often referred to as 'bad cholesterol'

high density lipoprotein (HDL) - is mostly made up of protein, plus a small amount of fat; this type of cholesterol can help reduce a blockage in your arteries so it is often referred to as 'good cholesterol'

Most of the cholesterol that the body needs is manufactured by the liver. However, eating foods that are high in saturated fat results in cholesterol being broken down into LDL (bad cholesterol).

Lack of exercise

A lack of regular exercise can raise your blood pressure and increase your risk of developing type 2 diabetes. Both of these increase your risk of developing angina.

Smoking

Smoking can damage the walls of your arteries. If your arteries are damaged by smoking, blood cells called platelets will form at the site of the damage in an attempt to repair it. This can cause your arteries to narrow.

Smoking also decreases your blood's ability to carry oxygen around your body, which increases the chances of a blood clot occurring.

Diabetes

If you have poorly controlled diabetes, the excess amount of glucose in your blood can damage the walls of your arteries.

Age

Arteries tend to get narrower over time. Therefore, the older you are, the more likely it is that your arteries will have narrowed, increasing your risk of developing angina.

Family history

Heart disease can run in families, so if you have a first degree relative (mother, father, brother or sister) with a history of heart disease or angina, your risk of developing angina is increased.

Diagnosing angina

If you see your DOCTOR after experiencing chest pain, they will probably start by asking about the pattern of your symptoms, such as whether you have noticed any particular triggers.

Your DOCTOR will then assess whether you have any signs and symptoms that could suggest you are at increased risk of developing atherosclerosis. This is where the arteries become clogged by fatty substances, which can lead to the symptoms of angina.

As part of the assessment you will have:

blood pressure tests

your weight and waist size measured

blood tests to measure the amount of cholesterol and glucose (if you are diabetic) in your blood and also to determine how well your liver is working

a urine test to determine how well your kidneys are working

Tests are necessary because some angina medications are not suitable for people with liver or kidney disease.

You are also likely to discuss whether you smoke, if you drink and how much, whether you have a high fat diet and any family history of heart disease.

If angina is suspected, it is likely you will be referred to a specialist cardiology department or clinic for further assessment to confirm or disprove a suspected diagnosis of angina, and assess your risk of having a heart attack or stroke in the future.

You may be prescribed a medication called glyceryl trinitrate to provide immediate relief for possible angina attacks while you wait to see a specialist (see treating angina for more information).

The assessment involves a series of tests that are explained below.

Electrocardiogram (ECG)

An electrocardiogram (ECG) records the rhythms and electrical activity of your heart. A number of electrodes (small metallic discs) are placed on your arms, legs and chest. The electrodes are connected to a machine that records the electrical signals of each heartbeat.

An abnormal ECG reading may indicate the muscles of your heart are not receiving enough blood.

Exercise tolerance test (ETT)

An exercise tolerance test (ETT) is similar to an ECG but it is carried out when you are exercising, usually on a treadmill or an exercise bike.

An ETT can be used to measure how much exercise your heart is able to tolerate before the symptoms of angina are triggered. This information is useful for assessing how severe your angina is likely to be.

Myocardial perfusion scintigraphy (MPS)

A myocardial perfusion scintigraphy (MPS) is an alternative test to an ETT used if a person is unable to exercise or when the results of an ETT are unclear.

MPS involves injecting a small amount of a radioactive substance into your blood. A special camera, known as a gamma camera, is used to track the substance as it moves through your blood vessels and into your heart. This allows healthcare professionals to determine how well blood is reaching your heart.

MPS is usually carried out both at rest and when you are exercising. If you are unable to exercise, medication can be used to replicate the effects of exercise on your heart.

Coronary angiography

A coronary angiography is a test to identify whether your coronary arteries are narrowed and determine how severe any blockages are. During an angiography, a thin, flexible tube called a catheter is passed into a vein or artery in your groin or arm, and X-rays are used to guide it into your coronary arteries. A dye is injected into the catheter to highlight the arteries supplying blood to your heart. A number of X-ray images (angiograms) are taken that will highlight any blockages. Coronary angiographies carry a small risk of serious complications, such as a stroke or a heart attack, which is estimated to be around 1 in 500. Although this risk is small, healthcare professionals are usually unwilling to perform an angiogram unless the benefits of the procedure outweigh potential risks.

Therefore, it is likely you will only be referred for a coronary angiogram if:

the diagnosis of angina remains unclear
your angina symptoms persist despite treatment and/or you are thought to be at significant risk of having a heart attack or stroke and surgery is being considered

Unstable angina

If it is suspected you may have unstable angina, you will be admitted to hospital. Depending on the severity of your symptoms, you may be placed in a general ward or in the intensive care unit (ICU). You will be given an ECG as soon as you arrive at hospital to quickly assess whether your heart has been significantly damaged. Blood tests will also be carried out to help identify increased enzyme levels known to be released when the heart is damaged. A coronary angiography may also be performed to assess the size and location of the blockage in your coronary artery. Due to the urgent need to prevent serious complications arising from unstable angina, treatment may be started before all of the test results are known.

Global Registry of Acute Cardiac Events (GRACE)

After receiving suitable treatment for symptoms of unstable angina, it will be necessary to assess your likelihood of developing recurring symptoms, or possibly the symptoms of a heart attack, in the next six months. The outcome will have an important bearing on your recommended treatment plan.

The Global Registry of Acute Cardiac Events (GRACE) is a widely used method of assessing the risk of further heart problems occurring.

GRACE is essentially a scoring system based on factors such as:

your age

the number of times your heart beats every minute

your blood pressure

how much of a substance called creatinine is present in your blood - higher than expected levels can be a sign of heart damage

whether you have any signs and symptoms of heart failure, such as excess fluid inside your lungs (heart failure is where your heart is unable to meet your body's need for oxygen-rich blood)

Your GRACE score will provide a relatively accurate predictor of your risk of developing further heart problems. The score can range from very low (less than 1 in 65) to the highest (more than 1 in 10).

Surgery is usually recommended as a precaution for people with a GRACE risk score indicating they have at least a 1 in 33 chance of developing further problems.

Treating angina

Treatment of angina aims to provide immediate relief from the symptoms, prevent future attacks and reduce your risk of further complications.

Specifically, treatment will be used to help reduce your risk of having a heart attack or stroke.

If your risk is thought high, a combination of surgery and medication will probably be recommended. Surgery may also be recommended if medication doesn't work.

If your risk of having a heart attack or stroke is thought low, it should be possible to significantly reduce the risk by using a combination of medication and lifestyle changes (see preventing angina for more information about lifestyle changes).

Immediate relief from symptoms

Glyceryl trinitrate is a medication widely used to provide immediate relief from symptoms of angina. It can also be used as a preventative measure before doing activities known to trigger angina, such as exercise.

Glyceryl trinitrate belongs to a group of medication called nitrates. Nitrates work by relaxing and widening the blood vessels that increase the blood supply to the heart.

Glyceryl trinitrate is available in tablet form, which you dissolve under your tongue, or as a spray. You may experience headaches, flushing and dizziness soon after taking glyceryl trinitrate.

You should avoid drinking alcohol while taking glyceryl trinitrate because it can make the side effects worse. If you experience dizziness, avoid driving and operating complex or heavy machinery.

One dose of glyceryl trinitrate usually eases the pain within two to three minutes. If the first dose does not work, a second dose can be taken after five minutes.

You should request an ambulance if the pain continues for five minutes after taking a second dose of glyceryl trinitrate.

Glyceryl trinitrate tablets usually expire after about eight weeks, at which point you will need a new supply. Therefore, you may prefer to use glyceryl trinitrate spray as it lasts for longer.

Preventing angina attacks

Medication is also used to prevent angina attacks. This will usually involve taking at least one type of medicine every day for the rest of your life.

Your DOCTOR or cardiologist (an expert in treating heart conditions) will usually try one medication first to see if it helps prevent your symptoms. This is known as monotherapy. If this isn't effective, two

medications may be recommended. This is known as combination therapy (see below).

Firstly, a medication called a beta-blocker or a medication called a calcium channel blocker will be used to reduce the frequency of angina attacks. Which medication is prescribed may depend on your level of health and, in some cases, your personal preference.

Beta-blockers

Beta-blockers make the heart beat slower and with less force. This means that the heart needs less blood and oxygen after exercise, which can either prevent angina or cut down how frequent it is.

Common side effects of beta-blockers include tiredness, cold hands and feet, diarrhoea and feeling sick.

Beta-blockers can also interact with other medicines, causing adverse side effects. Check with your DOCTOR or pharmacist before taking other medicines in combination with beta-blockers, including those available over the counter.

Calcium channel blockers

Calcium channel blockers work by relaxing the muscles that make up the walls of your arteries, increasing the blood supply to the heart.

Side effects of calcium channel blockers include flushed face, headaches, dizziness, tiredness and skin rashes. However, these side effects should pass within a few days once your body gets used to the medicine.

You should never drink grapefruit juice if you are taking calcium channel blockers because they can cause a drop in your blood pressure.

If you are unable to take beta-blockers or calcium channel blockers for medical reasons, or if you find the side effects too unpleasant, your DOCTOR or cardiologist may recommend alternative medication.

Long-acting nitrates

Long-acting nitrates are similar to glyceryl trinitrate, except they are designed for the long-term prevention of symptoms.

Side effects include headache and a flushed face, although these should improve with time.

If you are taking long-acting nitrates, you shouldn't take the anti-erectile dysfunction medication known as sildenafil (Viagra). This is because the combination of the two can lead to a dangerous drop in blood pressure.

Ivabradine

Ivabradine is a newer type of medication that has a similar effect to beta-blockers in that it slows down the speed of your heart beat.

However, it works in a different way to beta-blockers, which means it can often be used in people unable to take beta-blockers for medical reasons, such as those with a lung infection.

A common side effect of ivabradine is that people experience temporary flashes of brightness in their field of vision. If you have this side-effect, it may not be safe for you to drive at night. You should ask your DOCTOR for advice.

Nicorandil

Nicorandil is a potassium channel activator that works in a similar way to calcium channel blockers, by widening the coronary arteries to increase blood flow to the heart.

However, as potassium channel activators achieve this effect in a different way to calcium channel blockers, they can often be used by people who are unable to take calcium channel blockers for medical reasons.

Side effects of nicorandil include dizziness, headaches and feeling sick.

Ranolazine

Ranolazine works by relaxing the muscles of the heart to improve blood flow and prevent angina attacks.

Unlike the other medications used to prevent angina attacks, ranolazine does not affect the speed at which the heart beats, so it may be a more

suitable alternative treatment for people with heart failure or an abnormal heart rhythm.

Common side effects of ranolazine include constipation, dizziness and feeling weak.

Combination therapy

If a single medication doesn't work for you, a combination of medications will probably be recommended. This is known as combination therapy.

If combination therapy doesn't work, you may be referred for surgical treatment (see below).

In some cases, where people are unable or unwilling to have surgery, or you are waiting for surgery, three different medications may be prescribed.

Three medications are available to help reduce the risk of a heart attack and stroke in people with angina. They are:

Statins

Statins work by blocking the effects of an enzyme in your liver used to make cholesterol. Reducing blood cholesterol levels should prevent further damage to your coronary arteries and should reduce the risk of a heart attack or stroke occurring.

Statins sometimes have mild side effects that can include, constipation, diarrhoea and abdominal pain.

Low-dose aspirin

Low-dose aspirin is a type of medication called an antiplatelet medication. It is used to reduce the 'stickiness' of your blood to prevent blood clots, which can reduce your risk of having a heart attack.

Side effects of low-dose aspirin are uncommon, but can include irritation of the stomach or bowel, indigestion and feeling sick.

If you are allergic to aspirin, or you are unable to take it due to having another health condition that may be aggravated by it, such as stomach ulcer, alternative antiplatelet medications are available.

Angiotensin-converting enzyme (ACE) inhibitors

Angiotensin-converting enzyme (ACE) inhibitors are medicines that can be used to reduce your blood pressure.

ACE inhibitors block the activity of a hormone called angiotensin II, which narrows blood vessels. As well as stopping the heart working so hard, ACE inhibitors improve the flow of blood around the body.

ACE inhibitors have been known to reduce the supply of blood to the kidneys, which can reduce their efficiency. Therefore, blood and urine tests may be carried out before you start taking ACE inhibitors to make sure there are no pre-existing problems with your kidneys.

Annual blood and urine tests may also be required if you continue to use ACE inhibitors.

Side effects of ACE inhibitors include, dizziness, tiredness or weakness and a persistent, dry cough, although these should pass within a few days.

You should check with your DOCTOR or pharmacist before taking any other medication in combination with ACE inhibitors as they can cause side effects.

Surgery

Surgery is usually recommended if your angina symptoms fail to respond to medication. However you will probably need to continue taking some medication after having surgery.

The two main types of surgery used to treat angina are:

coronary artery bypass graft (CABG) - where a section of blood vessel is taken from another part of the body and used to re-route the flow of blood past a blocked or narrow section of artery

percutaneous coronary intervention (PCI), also known as a coronary angioplasty - where a narrowed section of artery is widened using a tiny tube called a stent

Coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI)?

In some circumstances it may not be possible to choose whether you have a CABG or a PCI. For example, PCI may not be suitable for people whose blood vessels have an unusual structure because it can make the PCI technique particularly challenging.

Both PCI and CABG are broadly similar in their effectiveness in treating angina and preventing fatal complications in the long-term, although each technique has its own set of pros and cons.

As PCI does not involve making major incisions in the body, the recovery time from surgery is much quicker and it involves much less post-operative pain.

One main disadvantage of PCI is that there is a higher risk of the unblocked section of artery becoming blocked again which would require further surgery to treat. The most recent data shows that further surgery is required in around 1 in 25 cases.

CABG is usually the preferred surgical option for people who:
have diabetes, and/or

are over 65 years of age, and/or

have blockages in three or more of the blood vessels that supply the heart with blood

Research indicates that using the CABG technique in such circumstances is more likely to prolong lifespan than using the PCI technique. There is also recent evidence that people who have had a CABG usually report a slightly better quality of life in the long-term.

The disadvantage of CABG is that it causes more post-operative pain than PCI and also has a longer recovery time which is usually around 12 weeks compared to about one to two weeks for PCI.

If treatment is ineffective

If the symptoms of angina do not improve despite medication and surgery (or if surgery is unsuitable), a different approach may be adopted. This may involve use of psychological or behavioural treatments, such as cognitive behavioural therapy (CBT).

Treatments such as CBT can help you develop skills to cope with your condition, manage pain and improve your symptoms.

There are some treatments the National Institute for Health and Care Excellence (NICE) says shouldn't be offered to help manage pain in people with stable angina (angina triggered by physical or emotional stress that usually improves with rest), these are:

Transcutaneous electronic nerve stimulation (TENS) - where a small, battery-operated machine is used to deliver electrical impulses into the body in order to relieve pain.

Enhanced external counterpulsation (EECP) - where inflatable cuffs wrapped around the calves, thighs and buttocks are inflated in time with the rhythm of your heart. This is done to help improve blood flow into and out of your heart.

Acupuncture - a form of ancient Chinese medicine in which fine needles are inserted into the skin at certain points on the body.

These treatments are not recommended because there is a lack of evidence concerning their effectiveness and safety when used to help people with stable angina.

Unstable angina

If you have unstable angina (where symptoms develop unpredictably and persist even at rest), upon being admitted to hospital you will be given medication to prevent blood clots developing and reduce your risk of having a heart attack or stroke.

This will usually be aspirin to help thin your blood unless there is a reason you are unable to take it, such as having a history of liver disease. You will probably also be prescribed another blood-thinning medication called clopidogrel, which you may need to take for at least 12 months (if you are unable to take aspirin you will just be prescribed clopidogrel). You may also be given an injection of an additional blood thinning medication such as fondaparinux or heparin.

It is likely you will then have a series of tests to assess your risk of having a heart attack in the future (see diagnosing angina for more information).

If the risk is moderately high, an examination called a coronary angiography may be carried out to assess the size and location of the blockage in your coronary artery. If the blockage is significant, coronary artery bypass graft (CABG) percutaneous coronary intervention or (PCI) surgery can be performed to widen the artery.

Complications of angina

Heart attacks and strokes are the most serious complications that can occur in cases of angina.

However, the stress of living with a long-term condition can also have an impact on your emotional wellbeing and, in some cases, trigger depression. These complications are discussed in more detail below.

Heart attack

The leading cause of angina is when the blood supply to the heart becomes clogged up by fatty deposits called plaques.

When this happens, there is a small chance that one of the plaques will break away (rupture), causing a blood clot to form. The blood clot can then block the supply of oxygen-rich blood to the muscles of the heart, causing extensive damage to the heart muscles and triggering a heart attack.

The risk of having a heart attack depends on a number of things, such as age, blood pressure and the extent of the blockage.

Depending on these factors, the risk of having a heart attack in any given year can range from less than 1 in a 100 to 1 in 12. It is always possible to lower this risk by making lifestyle changes (see preventing angina for more information).

Symptoms of a heart attack include:

chest pain - the pain is usually in the centre of your chest and can feel like a sensation of pressure, tightness or squeezing

pain in other parts of your body - it can feel as if the pain is travelling from your chest to your arms (usually the left arm is affected but it can affect both arms), jaw, neck, back and abdomen

shortness of breath

nausea

an overwhelming sense of anxiety (similar to having a panic attack)

Heart attacks are treated using a combination of medication to improve the blood flow to the heart and surgery to bypass the blockage (coronary artery bypass graft) or widen the artery (percutaneous coronary intervention).

Stroke

If you have fatty plaques clogging up your coronary arteries, you may also have plaques clogging up the main blood vessel that supplies your brain with blood (the carotid artery).

If one of the plaques ruptures, it could cause a blood clot to develop, blocking the supply of blood to your brain and triggering a stroke.

As with a heart attack, you can also reduce your risk of having a stroke by making lifestyle changes.

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

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

Arms - the person with suspected stroke may not be able to lift one or both arms and keep them there because of arm weakness or numbness

Speech - the person's speech may be slurred or garbled or they may not be able to talk at all despite appearing to be awake

A stroke can be treated using medication to dissolve the blood clot and surgery to unblock the carotid artery.

Depression

Living with a condition such as angina can cause feelings of stress and anxiety in some people, which can lead to symptoms of depression. You may be feeling depressed if during the last month:

you have often felt down, depressed or hopeless

you have little interest or pleasure in doing things

It is important that you speak to your DOCTOR if you think that you have depression. Depression does not only affect your mental health, it can also have an adverse affect on your physical health as well.

Treatments for depression include antidepressant medications and a type of talking therapy called cognitive behavioural therapy (CBT).

Preventing angina

Having a healthy lifestyle is the most effective way of reducing your risk of angina.

If you already have angina, making lifestyle changes will also help prevent your symptoms getting worse and reduce your risk of having a heart attack or stroke.

The best way to achieve this is to eat a healthy, balanced diet, try to keep your blood pressure at a healthy level and avoid smoking. This will lower your blood pressure, reduce your cholesterol levels and strengthen your heart.

Eating a healthy diet

Eating an unhealthy diet high in fat and salt will increase your risk of developing angina, and increase your risk of a heart attack or stroke.

Eating a diet that includes lots of fibre, such as wholegrain rice, bread and pasta, and plenty of fruit and vegetables can help reduce this risk. Fruit and vegetables are full of vitamins, minerals and fibre and help keep your body in good condition. You should aim to eat five 80g portions of fruit and vegetables every day.

Read more about good food, healthy eating and getting your 5 a Day.

Cutting down on fat

Eating high-fat foods can cause fatty plaques to build up in your arteries. You can help prevent this by avoiding foods containing saturated fats.

Foods high in saturated fat include:
meat

sausages and fatty cuts of meat
butter
ghee (a type of butter often used in Indian cooking)
lard
cream
hard cheese
cakes and biscuits
food that contains coconut or palm oil

Eating a small amount of unsaturated fat will increase the level of good cholesterol and help reduce any blockage in your arteries. Foods high in unsaturated fat include:

oily fish
avocados
nuts and seeds
sunflower, rapeseed and olive oil

For more information, see facts about fat and eat less saturated fat.

Cutting down on salt

In addition, you should cut down on the amount of salt in your food as it can raise your blood pressure.

You should aim to eat less than 6g (0.2oz) of salt a day, which is about a teaspoonful. For more information, see tips for a lower salt diet.

Stopping smoking

Smoking can significantly increase your risk of both heart attacks and strokes because it causes your arteries to narrow and raises your blood pressure.

Reducing your alcohol consumption

Regularly drinking alcohol above the maximum recommended limits can raise your blood pressure.

Alcohol is also high in calories, so you will gain weight if you drink regularly, which can further increase your blood pressure (see below).

Therefore, staying within the recommended levels is the best way to reduce your risk of developing high blood pressure. The recommended limits for alcohol consumption are:

3-4 units a day for men

2-3 units a day for women

Read more about alcohol units and tips on cutting down.

Maintaining a healthy weight

Being overweight forces your heart to work harder to pump blood around your body which can raise your blood pressure. Find out if you need to lose weight with the BMI healthy weight calculator.

If you do need to lose weight, it is worth remembering that just losing a few pounds will make a big difference to your blood pressure and overall health.

Exercising

Being active and taking regular exercise will help keep your heart and blood vessels in good condition. Regular exercise can also help you lose weight and help lower your blood pressure.

Starting an exercise programme when you have angina can be challenging because physical activity may trigger the symptoms of an angina attack. However, the more you exercise, the less likely you will have an angina attack.

Low-impact activities, such as walking, swimming and cycling are recommended, whereas more strenuous activities, such as playing football and squash, are not.

Find out more about walking for health, swimming for fitness and the benefits of cycling.