Angina
Understanding chest pain and discomfort
What is angina?

Angina is a temporary chest discomfort or pain that usually happens during physical activity or extreme emotion and goes away after a few minutes of rest. The pain or discomfort associated with angina usually feels tight, gripping or squeezing, and can vary from mild to severe.

You usually feel angina in the centre of your chest, but it may spread to either or both of your shoulders, your back, neck, jaw or arm. You can even feel it in your hands. Sometimes you feel angina in the other areas of your body without feeling it in your chest. Many people do not even feel pain; just an unpleasant sensation or discomfort in their chest. You may also experience angina as shortness of breath, rather than pain.

Is angina the same as a heart attack?

Angina is not the same as a heart attack.

Angina is only a temporary reduction in your heart’s blood supply. A heart attack occurs when there is a complete loss of blood flow to part of your heart muscle. This is usually caused by a blood clot blocking an artery carrying blood to the heart.

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What causes angina?

Angina is caused when the arteries that supply blood to your heart muscle become clogged with fatty material called ‘plaque’. Plaque slowly builds up on the inner wall of the arteries, causing them to become narrow. If your arteries become too narrow, the blood supply to your heart muscle is reduced. Angina occurs when your heart has to work harder than usual, such as during physical activity or extreme emotion, but it can’t get enough blood to meet its needs because of the reduced blood supply.

Angina does not happen all of the time because the blood supply to your heart muscle, although reduced, is usually able to keep up with your heart’s demands.

How do you know if you have angina?

Talk to your doctor to find out if you have angina. Your doctor will ask you about your symptoms, if you smoke, what you eat, how much physical activity you do and your family’s medical history. Your doctor will measure your blood pressure and weight, listen to your heart and chest, and order blood tests to measure your cholesterol and glucose levels. You may have some other tests too, including an ECG (electrocardiogram), a chest X-ray and an exercise stress test.

You may be referred to another doctor to have a coronary angiogram, a procedure involving an X-ray of your arteries carrying blood to the heart, to see if they are narrowed or blocked. If you have angina, this test will also help your doctor to decide the best treatment for you.
How is angina treated?

Angina can be treated and managed with medicines and surgery, and by making healthier lifestyle choices.

Work with your doctor to find the best treatment for you. Agree on a suitable management plan and follow it to help to reduce your angina symptoms and your risk of more heart problems.

You should take your medicines as prescribed by your doctor to help prevent, treat and manage angina and your risk of further heart problems.

Medicines

Taking medicines as prescribed by your doctor can help to prevent, treat and manage angina and your risk of further heart problems.

These medicines work in different ways, and you may need to use a combination of them. However, taking more than one medicine can be confusing and difficult, so talk to your doctor or pharmacist if you have any questions.

Angina medicines

Angina (or ‘nitrate’) medicines work by making the blood vessels in your body bigger (‘dilated’) to increase blood flow to your heart.

If your doctor prescribes this type of nitrate medicine, make sure that you carry it with you all the time.

What to do when you have angina

1. As soon as you have an episode of angina, immediately stop and rest.

2. If rest alone does not bring rapid or effective relief, take a dose of your angina medicine. Wait 5 minutes. Make sure that you are sitting or lying down before using your spray or tablet, as it can make you feel dizzy. It is best to find the smallest dose that usually works for you (e.g. a full, a half or even a quarter of a tablet).

   - Spray: one spray under the tongue will relieve angina quickly in most people.

   - Tablets: place the tablet under your tongue, do not swallow it. When your angina symptoms stop, spit out what is left of the tablet.

3. If the angina is not relieved within 5 minutes, take another dose of your angina medicine. Wait another 5 minutes.

4. If the angina:
   - is not completely relieved within 10 minutes, or
   - is severe, or
   - gets worse quickly

   Call Triple Zero (000)* now! Ask for an ambulance. Don’t hang up. Wait for advice from the operator. If you have Aspirin, chew 300mg unless you have an allergy or your doctor has told you not to.

If you are having a heart attack, getting to hospital quickly can reduce the damage to your heart and increase your chance of survival. Don’t ignore the warning signs! Get help fast. Every minute counts.

It is always better to go to hospital and be told it’s not a heart attack than to stay at home until it is too late.
Long-acting nitrate medicines are different from short-acting nitrate medicines because they are used to reduce angina symptoms over time, rather than relieve an angina episode within a few minutes.

Long-acting nitrate medicines often come as tablets that you swallow (not put under your tongue like short-acting nitrate medicines). You may need to take several doses a day to get the best effect, but always follow your doctor’s directions.

This type of nitrate medicine also comes as patches that let the medicine gradually absorb through your skin. Patches should only be worn for 10–12 hours every day (during the day or night, whenever you are most likely to get angina), so your body doesn’t build up resistance to medicine. You can put the patches anywhere on your body, but change their position regularly so that you don’t get a skin irritation.

Storing medicine

Angina tablets can lose their effect if they aren’t stored properly.

- Store tablets in their original glass container and protect them from moisture, light and heat.
- Don’t throw out the cotton wool-like substance in the top of the container as it stops the tablets deteriorating.
- Don’t carry tablets close to your body because the heat of your body will make them deteriorate. Instead, carry them in their container in a bag or put them in a special container that will help to protect them against heat. You can buy one of these containers from a chemist.
- Throw away tablets three months after you open the bottle. Spray angina medicines must be ‘primed’ when opened and if they haven’t been used for some time. To prime a spray, press the nozzle five times and spray it into the air. If you don’t use the spray regularly, prime it once a week.

Side effects

You may feel a tingling or burning feeling in your mouth when you take short-acting nitrate medicines. You may also get a headache, a heavy feeling in your head, or a hot and flushed feeling. These are normal reactions and will usually go away.

If your headache is severe, try taking a smaller dose of medicine next time. Spit out any undissolved part of the tablet once your angina symptoms go away.

Nitrate medicines temporarily lower your blood pressure, so you may feel a bit faint. The best thing to do is to sit or lie down before you take it. If you feel faint, you may need to take a smaller dose next time.

Even if you experience side effects, it is still safe to take several sprays or tablets in a day, if you need to, to relieve the symptoms of angina.

Other medicines

Aspirin

Small doses of aspirin are commonly prescribed if you have narrowed arteries carrying blood to the heart. Aspirin can help to prevent clots forming in a narrowed artery.

Aspirin is generally very safe, but like all medicines, it can have side effects. For example, it can make stomach or duodenal ulcers worse. In a small number of people, aspirin can be dangerous. You should only take aspirin to reduce your risk of blood clots if your doctor tells you to.

If you can’t take aspirin, your doctor might prescribe another anti-clotting (anti-coagulant) medicine.
**Surgical treatments**

Some people with angina may need to have surgery to help to relieve their angina symptoms.

**Coronary angioplasty**

Coronary angioplasty is a medical procedure used to treat the arteries carrying blood to your heart (coronary arteries) that have narrowed due to the build-up of fatty tissue. During coronary angioplasty, a small balloon is inflated inside one or more of your coronary arteries to open up the narrowed area. This improves blood flow to your heart.

After angioplasty opens a narrowed artery, a special expandable metal tube (a ‘stent’) is usually put into your artery. The stent is expanded and left in place to keep your artery open.

Coronary angioplasty often improves blood flow to the heart and may relieve angina symptoms. However, some people’s coronary artery might narrow again in the section where their angioplasty was done, often within 3–6 months. Other people might develop narrowing in a different section or in another coronary artery.

Either situation can lead to a return of angina symptoms. Usually this can be treated successfully with another coronary angioplasty and stent procedure.

**Bypass surgery**

Coronary artery bypass graft surgery (often shortened to ‘CABG’ and pronounced ‘cabbage’) is an operation that involves grafting a blood vessel from your chest, leg or forearm to your coronary artery to redirect blood flow around the most narrowed part of the artery. Bypass surgery improves blood flow to your heart muscle and reduces angina.

**Cholesterol-lowering medicines**

If you have angina, ask your doctor to regularly check your cholesterol.

Your doctor is likely to prescribe a cholesterol-lowering medicine, such as a statin, even if your cholesterol is in the ‘normal’ range.

**Beta-blockers**

Beta-blockers lower your heart rate and blood pressure, and can be used to treat irregular heartbeats.

Like all medicines, beta-blockers can have side effects, such as making you feel more tired when you are doing physical activity, so you need to weigh up the risks and benefits of taking them.

**Calcium channel blockers**

Calcium channel blockers work on your heart and blood vessels to lower your blood pressure.

**Remember**

If you have any concerns about side effects, tell your doctor.

It is important that you work closely with your doctor to find the medicine (or medicines) that work best for you.
**Lifestyle changes**

As well as taking your medicines as prescribed and having surgery, you can help to prevent angina and reduce your risk of further heart problems by:

- taking your medicines as directed by your doctor
- being smoke free
- achieving and maintaining a healthy body weight
- being physically active

**Sex**

Most people with angina can still have sex without any problems. This is particularly true if your angina is well managed by medicines and a healthy lifestyle. However, having sex can put strain on your heart, so if you have angina during sex, talk to your partner about finding a way to make sex less strenuous for you.

Remember to stop any activity, including sex, if you have any pain or discomfort in your chest.

If you have any questions, talk to your doctor.

**Working**

Usually there is no medical reason for you to stop working if you have angina, if your angina is well managed by medicines and a healthy lifestyle. If you have angina at work, talk to your doctor and employer.

Your job might need to be adjusted to reduce physical and emotional strain.

**Alcohol**

You are likely to be able to drink some alcohol if you have angina, but check with your doctor first. Overall, drinking too much alcohol is harmful and can interfere with how well some medicines work. If you do choose to drink, it is recommended that adults consume no more than 2 standard drinks a day.
What do I do if my angina gets worse?

Talk to your doctor if your angina:

- becomes more severe
- happens more often
- lasts longer
- doesn’t respond as well to medicine
- happens with less exertion
- happens at night or when you are resting

Also talk to your doctor about any other changing or new symptoms, such as increasing breathlessness, swollen feet or cold limbs.

If your symptoms don’t go away within 10 minutes of rest and using your angina medicine, you may be having a heart attack. Call Triple Zero (000) immediately and ask for an ambulance.

Want to know more?

For more information, call our Heart Foundation Helpline on 13 11 22 (local call cost) and talk to one of our trained health professionals. You can also visit www.heartfoundation.org.au