

Stable Angina

An information guide



Stable Angina

About Angina

Angina is a condition where people experience chest, stomach, jaw or arm pain that comes from the heart.

Some people find the symptoms mild, and rather than having pain may experience discomfort, tightness, and aching, or have symptoms similar to indigestion.

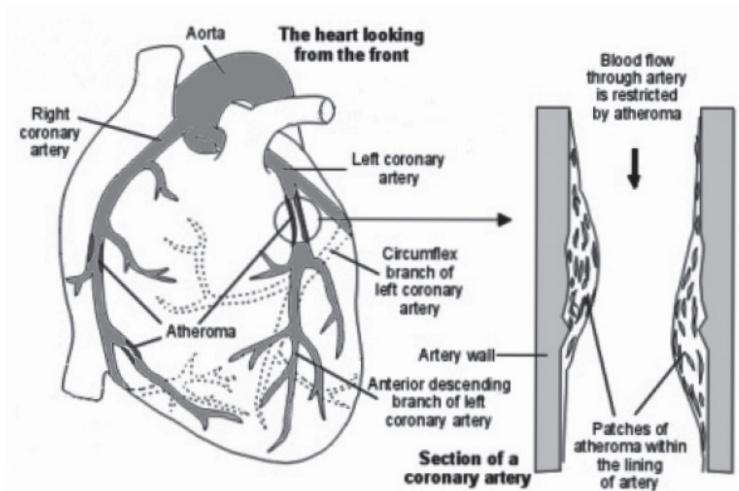
It is usually caused by narrowing of the arteries that give blood and oxygen to the heart. This narrowing can be caused by fatty areas in the arteries, called atheroma, which build up over a number of years.

When you are resting, your heart doesn't need as much blood and oxygen, so the pain won't occur.

However, when walking, climbing stairs or doing other activity your heart rate goes up, and this means the heart needs more blood and oxygen, which can't get through the narrowed arteries as quickly - this is when people with angina experience symptoms.

Things that can bring on angina include physical activity, emotional stress, cold weather and eating a heavy meal.

Coronary Arteries



Diagnosing Angina

In many cases angina is diagnosed from symptoms alone.

Tests are used to confirm the diagnosis, assess the severity of the condition and determine what kind of treatment is required.

One or more tests may be advised, these include:

Electrocardiograph (ECG)

This test is also known as a heart tracing.

This is a simple 5 minute test to check the heart's rhythm and electrical activity. Electrodes (sensors) are placed across the chest and detect electrical signals from the heart, recording them onto paper.

This is a very useful test but can still be normal even if you have angina.

Exercise Tolerance Test

This test is performed on a treadmill and measures how the heart responds to exercise.

Electrodes are placed across the chest to monitor the heart rate and electrical activity. Blood pressure is checked before, during and after the test.

Echocardiogram

An echocardiogram ('echo') uses sound waves to examine the structure (walls, chambers and valves) and motion of the heart.

Gel is applied to the chest or directly onto the ultrasound probe and this is moved across the chest.

Myocardial Perfusion Imaging (MPI)

This test is also known as a Myoview or Nuclear Medicine Heart Scan.

This test uses a small amount of radioactive material to obtain pictures of the blood flow to the heart.

The test compares the blood flow when the heart is at rest with the blood flow when the heart is under stress. The heart is briefly put under stress using medication during the test.

Stress Echocardiogram

This ultrasound test is performed in order to assess how well the heart works under stress.

This uses sound waves to examine the heart's structure and motion when stressed. The stress can be brought about through exercise on a stationary bike or with medication (dobutamine) injected into a vein in the arm.

A special dye is also injected to help see the heart more clearly.

Coronary Angiogram

A thin catheter (tube) is inserted into the artery in the groin or wrist and passed to the heart. Contrast (dye) is injected via the catheter into the coronary arteries.

A series of x-rays are taken as the dye flows through the arteries. This can identify the exact location and severity of narrowing and blockages so that the medical team can decide on the best treatment.

This could be with medication only or by cardiac stent(s), which are small tubes that are placed inside the arteries to keep them open. Cardiac surgery may be offered if the disease is severe.

CT Coronary Angiography Scan

This is a specialised scan using x-rays to take detailed images of the heart and coronary arteries.

Contrast (dye) is injected into a vein in the arm to produce clearer images. This allows us to see any narrowing or blockages of the arteries.

Treatment

Medicines

You will have been prescribed a glyceryl trinitrate (GTN) spray or tablet, which you use under the tongue when you have pain. You can also use this just before any planned exercise or exertion.

Side effects can include flushing, headache and light-headedness, so it is a good idea to sit down or find something to hold whilst using it if you experience these effects.

When you have pain, you should:

1. Use the spray/tablet as directed.
2. Repeat the dose after 5 minutes if the pain has not gone.
3. Call an emergency ambulance if the pain has not gone 5 minutes after taking a second dose.

Other medications we use are:

Anti-platelets (e.g. Aspirin, Clopidogrel, Ticagrelor) - These thin the blood to allow it to pass through the arteries easier and reduce the risk of clots in the arteries of the heart.

Side-effects: Anti-platelet tablets can irritate the stomach lining and occasionally cause bleeding from the stomach. Some people also experience shortness of breath when taking Ticagrelor. If you notice this contact your GP or cardiologist to discuss an alternative.

Statins (e.g. Atorvastatin, Simvastatin) - These lower cholesterol, to reduce the risk of more fatty areas forming in the arteries.

Side-effects: Statins can cause muscle aches and pains, if these occur you should consult your GP.

Both anti-platelets and statins work to decrease the risk of heart attack.

Anti-anginals (e.g. Amlodipine, Bisoprolol, Diltiazem, Isosorbide Mononitrate, Ivabradine, Nicorandil, Ranolazine) – These medicines work in different ways. Some slow the heart rate and reduce the heart’s workload, while others relax the walls of the arteries to improve blood flow and reduce the amount of angina pain you get.

Side effects of all these medicines can be explained by your doctor or pharmacist.

You may be given a prescription for these medicines at your first hospital appointment, or be asked to get them from your GP.

Your GP will continue the medications on prescription after the first course, and it is important to continue the medicines unless you are told to stop them by your doctor.

If you miss a dose of your medication at the usual time you can take it later in the day (if it is a once-a-day tablet), or wait until your next dose is due.

Immunisations: You will need to have vaccines to protect you against some common bugs - these are the pneumococcal vaccine and the influenza vaccine. Your GP practice will provide these for you if you contact them.

Lifestyle changes

Exercise, diet and weight control can have a big impact on your symptoms and the progression of your angina. General advice is to have a balanced diet, and to limit the amount of saturated fat, sugar and salt you eat.

A Mediterranean-style diet incorporating plenty of fruit and vegetables, fish, beans and wholegrain carbohydrates has been shown to improve heart health.

Most people should aim to do some exercise 3 times a week, whether that be walking, cycling or more strenuous activities if you are used to them.

Your Cardiologist or Specialist Nurse can give you more specific advice if needed, or The British Heart Foundation website (<https://www.bhf.org.uk>) has useful information.

If you smoke then we strongly recommend that you stop, as this will worsen your angina and greatly increase your risk of having a heart attack. Your GP can provide smoking cessation help in the form of counseling sessions, patches and inhalators.

Angina and your daily activities

Physical activity is helpful for people with angina, as it will keep the heart muscle fit and improve the blood supply. However, it is important to pace your activity.

If you get angina during an activity then you may need to rest for a few minutes or use your GTN spray - this does not mean the activity should be avoided.

You should speak to your GP if; your symptoms increase in severity or frequency, you have to use your GTN spray more often, or you are not able to do the same amount of exercise as usual.

Sex - Some people worry that having sex will damage the heart due to physical exertion, which is not correct, and you do not need to stop having sex.

If you do experience angina pain during sex it may be useful to use your GTN spray beforehand. However, if you take medication for erectile dysfunction you should avoid using these together and should discuss with your GP.

Driving - Usually you should be able to continue driving your own car, unless you get pain while driving, resting, or with emotion.

You do need to tell your insurance company that you have angina. If you have a Group 2 (lorry or bus) driving license you need to stop driving those vehicles and contact the DVLA immediately.

Flying - If you have angina and your symptoms are stable and well controlled, you should be fit to fly as a passenger.

If you have frequent pain or unstable angina (when you get pain whilst resting) you should avoid flying. If you are in any doubt about driving or flying speak to your GP or Cardiologist.

Stress, anxiety and depression - Some people with angina find that if they are stressed or their mood is low then their pains become more frequent.

It is natural to become stressed or low at times and it does not mean this is causing damage to the heart, however it may help your symptoms if you can avoid situations that you find particularly stressful.

If anxiety or low mood are having a big effect on your lifestyle or your angina we would advise you to talk to your GP as there are treatments that you might find helpful.

Progression of Angina

Many people have angina for years and with treatment we can often prevent a lot of the symptoms.

The medicines we use are aimed to reduce your risk of having a heart attack, and it is important to try and reduce this risk further with lifestyle changes such as diet and exercise.

If you have any questions about your angina or the treatment you are receiving then please ask your cardiology doctor or specialist nurse at your next appointment, or your GP.

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Date of publication: June 2017

Date of review: August 2021

Date of next review: October 2023

Ref: PI(M)1036

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