

# Having a coronary angioplasty

This leaflet explains more about having a coronary angioplasty, including the benefits, risks and any alternatives, and what you can expect when you come to hospital

If you have any further questions, please speak to a doctor or nurse caring for you.

## What is a coronary angioplasty?

A coronary angioplasty is a procedure used to treat a narrowing or blockage in one or more of your coronary arteries (the vessels that supply blood to the heart muscle). This treatment is done by using a small balloon to stretch open a narrowed or blocked artery, and usually also involves inserting a small wire mesh tube that stays in place to keep the artery open. Coronary angioplasty may also be referred to as stent insertion.

## Why am I having a coronary angioplasty?

You may have already been diagnosed with (or are suspected of having) a narrowing or blockage in one or more of your coronary arteries. This may be restricting the flow of blood to your heart muscle. You may have also heard this called heart disease, and this may be giving you symptoms of angina (chest pain). Your cardiologist (specialist heart doctor) has decided that this needs to be treated, and a coronary angioplasty is the best way to do this. It can help relieve your symptoms of angina and reduce your risk of having a heart attack.

## How can I prepare for a coronary angioplasty?

You should continue to take your regular medicines as usual. We will tell you in your admission letter if you need to adjust the dose or stop taking any of them temporarily. In particular, you may need to stop taking or adjust your doses of:

- anticoagulation medicines (including warfarin and the newer oral anticoagulants, for example rivaroxaban)
- metformin-containing medicines and other medicines for diabetes (including insulin).

If you take any of these medicines but have received no instructions, **please contact the admissions office on 020 1788 8005** for further information.

Please bring all of the medicines that you currently take or use with you, including anything that you get from your doctor on prescription, medicines you have bought yourself over the counter, and any alternative medicines, such as herbal remedies.

You should have a light breakfast **before 6am** on the morning of your procedure but you must not eat after that. You can drink fluids freely.

You need to have a shower or a bath on the morning of the procedure to reduce your risk of infection.

## **Giving my consent (permission)**

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

## **What happens during a coronary angioplasty?**

The procedure is carried out in a cardiac catheter laboratory. It may take anything from around 45 minutes to a couple of hours. You will need to lie flat on a table for at least this length of time, plus any recovery time you may need. Please tell your doctor if you have any difficulty with lying flat.

You will have some local anaesthetic via an injection. We will then make a small cut in your wrist or groin and insert a hollow tube called a sheath. A long, thin, flexible tube (catheter) is then passed through the sheath and into a blood vessel. Using X-ray images as a guide, we will pass the tip of the catheter up to the heart and coronary arteries. We will inject a dye called 'contrast medium' into the catheter and take X-ray images (angiograms), which will show if your coronary arteries are narrowed anywhere, and if so, where. This catheter will then be removed.

If your doctor thinks it is suitable to treat the narrowed arteries, we will pass a catheter with a small inflatable balloon at the tip up via the sheath into the artery where the narrowing is, and gently inflate the balloon. This widens the artery so the blood flow to your heart muscle is improved. In almost all coronary angioplasties, a small metal mesh tube called a stent is inserted while the balloon is inflated, and is left in place to hold the artery open. You may require a couple of balloons or stents depending on how long the narrowing is.

You will be awake during the procedure. We may give you a light sedation and pain relief.

## **Will I feel any pain?**

A coronary angiogram is not a painful procedure, although it may at times feel a little uncomfortable and you may experience some chest pain. If you do experience any pain or feel unwell, please let the team looking after you know straight away.

## **What happens after a coronary angioplasty?**

After your coronary angiogram, we will look after you in the recovery unit before we transfer you back to the ward. We will check and record your pulse and blood pressure during this time.

If the sheath was inserted into your groin, a nurse or doctor may apply pressure for up to 10 minutes to stop the bleeding after the sheath has been removed. This can sometimes be uncomfortable. Sometimes the doctor carrying out the procedure will insert a small surgical plug to seal the wound, or a special stitch or other closure device, in which case it will not be necessary to apply pressure to the wound. This is not always possible if you have had lots of blood-thinning medication, and the sheath may have to remain in place for anything up to a couple of hours after the procedure until it can be taken out. You will be asked to lie flat until at

least a couple of hours after the sheath is removed and the bleeding has stopped. If all is well, you will be asked to sit up after a few hours and you should be able to get up and walk around shortly after. You can eat and drink as normal after the procedure.

If the catheter was inserted into your arm, we may place a small pressurised cuff around your arm, and decrease the pressure gradually over the course of several hours. A nurse will check whether there is any bleeding at the point where the catheter was inserted. You should be able to sit up straight away, but you may have to remain in bed or in a chair for a couple of hours.

You should tell the healthcare professionals treating you if you feel unwell at any time after the procedure.

In some cases you may be able to go home the same day as your procedure, but in most cases you will have to stay in for at least one night to be monitored. You will be informed of this after your procedure. When planning your travel home, please be aware that you are not allowed to drive for one week after the angioplasty. This is a requirement by the Driver and Vehicle Licensing Agency (DVLA).

## **What do I need to do after I go home?**

We will give you a leaflet called **Going home after your coronary angioplasty**, which will explain in detail what you should and should not do when you are discharged and at home. Your nurse will also give advice.

## **Will I have a follow-up appointment?**

Your cardiologist, or one of the doctors performing your procedure, should discuss with you afterwards how it went. Before you go home, we will tell you if and when you will be having a follow-up appointment with your cardiologist. It will usually be after about six weeks, and may be at your local hospital if St Thomas' is not the closest hospital to you.

We will also refer you to a local cardiac rehabilitation service. They should invite you to attend a cardiac rehabilitation programme which you can start a short while after your discharge. This is a programme of exercise and information sessions that help you get back to everyday life as quickly as possible.

## **What are the risks?**

As with all types of medical procedures, having a coronary angioplasty carries a risk of complications. We will discuss these with you when you come in for your procedure, but please bear them in mind. These include the following:

- Bruising or bleeding under the skin at the wound site, known as a haematoma. This may take up to a couple of weeks to heal, and may cause some tenderness or discomfort. This is fairly common but not serious.
- Kidney damage or impairment due to the use of the contrast dye. This is fairly common but is usually short term (although long-term damage is possible).
- Damage to the artery at the wound site, sometimes known as a false aneurysm. You may need another procedure to fix this and it could increase your length of stay in hospital. This is uncommon but is more serious.
- Bleeding around the artery under the skin, leading to significant blood loss.

- Allergic reaction to the contrast dye. It is important to discuss any allergies you do have with your cardiologist or nurse, including food groups. This is uncommon, but can be more serious.

There is a very small chance of a serious complication as a result of a coronary angioplasty, including the following:

- Damage to one of the coronary arteries, or a heart attack caused by blocking off one of the arteries. We would try to repair the artery during the procedure, but in some cases emergency heart bypass surgery may be needed.
- A stroke caused by a small blood clot being displaced and travelling to the brain.

These risks are considered rare, but they are very serious and in very rare circumstances may be fatal.

The risks are higher for those who are already unwell, or who have lots of other health problems or severe heart disease. Please note there may be risks associated with **not** having the procedure, as well such as not investigating or treating your heart disease. This is something your cardiologist will have considered. They will discuss your risks with you prior to the procedure.

There is also the possibility of your artery narrowing again (restenosis). This may happen in around five to ten out of every 100 patients who have a stent inserted. This risk can be reduced with certain medications.

## Are there any alternatives?

In some cases heart disease can be treated with medication alone, but this depends on the individual. Your cardiologist will decide, based on the results of any tests or your symptoms, whether you need to have treatment. You may have had a coronary angiogram or you may be having one at the same time as your coronary angioplasty. This will show your cardiologist where the artery may be narrowed, and how severe this may be. Some people with heart disease will need coronary bypass surgery, or heart bypass, as opposed to coronary angioplasty. The treatment you need will have been determined carefully by your cardiologist, but please discuss your options with them.

## Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

## Contact us

If the date of your admission is not convenient, please contact Cardiac Admissions:

**t:** 020 1788 8005 (9am–5pm Monday–Friday)

The cardiac rehabilitation team are available for further support or to answer questions or concerns about having a coronary angioplasty:

**t:** 020 7188 0946 (Monday to Friday, 9am to 5pm).

## Useful sources of information

If you would like more information on this or any other issues relating to heart disease, please contact the **British Heart Foundation**:

**t:** on 08450 708070 (information line)    **w:** [www.bhf.org.uk](http://www.bhf.org.uk)

We may be able to provide you with information about local support groups or groups in your area. Please ask if this is something you would be interested in.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

## Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS)    **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints)    **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

**t:** 020 7188 8815    **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

## NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

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