

**Patient
Information**

Coronary angioplasty

Introduction

This leaflet provides information for patients having coronary angioplasty at Gloucestershire Royal Hospital. This procedure is also known as PCI (Percutaneous Coronary Intervention).

What is coronary artery disease?

Your heart is a muscular pump responsible for maintaining the circulation of blood around the body and lungs. Your heart needs its own blood supply and this is provided by 3 main coronary arteries. Coronary artery disease is a narrowing of the coronary arteries usually caused by atheroma (fatty deposits). Symptoms include angina or myocardial infarction (heart attack).

Coronary angioplasty

Coronary angioplasty is a procedure for treating coronary artery disease. A cardiac catheter (fine tube) is passed into an artery in your wrist or groin until it reaches your heart. Small balloons are passed through the catheter and into the narrowed artery where they are inflated to help open the artery and improve blood flow. A stent (fine mesh) is usually inserted to keep the narrowed artery open once the balloon has been deflated.

What happens before the coronary angioplasty?

The reasons for having coronary angioplasty will have been discussed with you.

Please bring with you all of your medications, a dressing gown and slippers, reading glasses if needed. You may also like to bring a book or magazine to read while you are waiting. Do not bring any valuables, such as jewellery (all neck chains must be removed) or large amounts of money.

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Department

Cardiology

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On the day of your procedure

On the day of your procedure you can have an early light breakfast, for example tea and toast before 6:00am. You may continue to drink clear fluids until your procedure.

Please take all your normal medication. You should have started an antiplatelet medication (such as aspirin, clopidogrel or ticagrelor). This medication will reduce the risk of clots forming within the stent.

If you are taking anticoagulant medication, for example, warfarin, rivaroxaban or dabigatran, instructions for this will be given in your appointment letter. Otherwise please contact your consultant's secretary on the telephone number at the top of your admission letter for advice about medication.

If you have diabetes and are taking metformin, please stop this for 2 days following your procedure. If you take insulin, please do not administer any insulin on the morning of your procedure but you can still have an early light breakfast. Please bring your insulin into hospital.

At lunchtime, we will ask you to administer half of your normal morning dose of insulin with your lunch.

If you have any queries about taking your medication, please phone the Cardiology Day Case Unit (CDCU) on the number provided at the end of this leaflet.

Before your procedure a nurse will go through a checklist with you, explain the procedure and answer any questions you may have. The nurse will also check your blood pressure and ask you to change into a hospital gown.

A cannula will be inserted into a vein in your arm or hand. This will be used to give you any medication needed during or after your procedure. The cannula will be removed before you are discharged.

Your doctor will discuss the procedure with you and ask you to sign a consent form. At this stage the doctor will decide whether to perform the procedure through your wrist or groin. You will be able to ask any further questions at this stage.

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What happens during coronary angioplasty?

You will be asked to lay flat on an X-ray table. Your head will be supported with a pillow. ECG electrodes will be attached to your chest and legs to monitor your heart. If you are feeling anxious you may be given sedation at this point if requested. After the wrist or groin area has been cleaned, you will be covered with a sterile drape from your chest to below your feet.

The skin will be numbed with local anaesthetic and a sheath (small hollow tube) is placed in the artery. Once the sheath is in the artery it is rare to feel anything, although some patients have some discomfort. If you do have pain, please tell the doctor.

A catheter will be passed through the sheath and into your heart, guided by an X-ray machine.

The table and the X-ray machine will be moved during the procedure so that multiple images of your heart arteries can be taken. A contrast medium (dye) is injected via the catheter to allow the coronary arteries and chambers of the heart to be seen clearly. A wire is passed through the catheter and across the narrowed area of the artery. A balloon is inserted over the wire. After one or more balloon inflations a stent will usually then be implanted to keep the artery open.

During balloon inflation it is not uncommon to have some brief chest discomfort; this is while the artery is temporarily blocked. Several stents can be inserted into one artery and occasionally several arteries may be treated during the same procedure.

After your coronary angioplasty

If the procedure was performed via the wrist, you will have a band about the size of a watch strapped around your wrist to apply pressure in order to stop any bleeding. The pressure will gradually be reduced by the nursing staff.

If the procedure was performed via the groin, the sheath will be removed after 2 to 4 hours. During this time you will have to remain lying flat. When the sheath is removed firm pressure will be applied to the puncture site for about 10 minutes. This is to seal the artery and stop any bleeding.

Normally, patients are kept on bed rest for 2 to 3 hours to reduce the risks of bleeding and complications around the puncture site.

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Occasionally, a collagen plug (Angio-Seal™) will be inserted into your groin to seal the artery instead of pressure being applied. In this case you will be required to remain on bed rest for at least 30 minutes. The collagen plug will dissolve in 60 to 90 days. You will be given a card with information about the plug to carry with you for 90 days.

Regular checks of your blood pressure, pulse rate, wound site and the pulses in your wrist or feet will be recorded.

Following the procedure, you will be encouraged to eat and drink. It is important to drink plenty of fluids to help flush the contrast medium/dye from your kidneys.

Discharge from hospital

On discharge you will need a responsible adult to collect you. You must not drive yourself home. If you had your procedure performed as a day case you will need someone to stay with you overnight. If this is not possible, please let us know straight away and we will try to make alternative arrangements for your admission.

A letter will be sent to your GP explaining your results and treatment plan.

Before you are discharged a nurse will give you a discharge leaflet with instructions to follow once you are home. If needed, you will be given medication to take home. You will also be given advice about restarting anticoagulant medication if applicable.

Follow-up appointment

The need for a follow up appointment will be discussed with you before you are discharged.

You will be referred to the Cardiac Rehabilitation Team who will contact you at home. Some of your medications may be changed before discharge; this will be explained to you.

The antiplatelet medicines (clopidogrel, ticagrelor) should be continued for at least 1 year unless you have been told otherwise by the staff. This is very important as these medicines reduce the risk of clots developing in the stent.

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Driving

DVLA regulations indicate that following successful angioplasty you can resume driving after 1 week. Patients who have a vocational (for example HGV) licence will need further assessment before resuming driving. For further information, please visit:

www.gov.uk/angioplasty-and-driving

Risks and benefits

As with any invasive procedure there are a number of small risks. The exact risks are specific to you and differ for every person. Your doctor will explain how these risks apply to you when you sign the consent form. Your doctor will not recommend the procedure unless the benefits outweigh the risks. You should discuss any worries or concerns you have with the doctor.

The benefits of coronary angioplasty include treatment of myocardial infarction (heart attack), reduction in risk of recurrent myocardial infarction, and relief of angina. Angioplasty can be used to help re-open occluded (blocked) grafts following bypass surgery where repeat surgery is not appropriate.

Alternatives to coronary angioplasty include medical therapy (tablets) or coronary artery bypass surgery. The balance between these alternatives depends on the individual and will be discussed with you.

Contact information

If you have any questions or concerns, please contact:

Cardiology Day Case Unit (CDCU)

Gloucestershire Royal Hospital

Tel: 0300 422 2994

Monday to Friday, 7:45am to 5:00pm

Outside of these hours please contact:

Cardiology Ward

Gloucestershire Royal Hospital

Tel: 0300 422 4011 / 8405

Alternatively, please contact your consultant's secretary.

Patient Information

Further information

British Heart Foundation

Website: www.bhf.org.uk

British Cardiovascular Society

Website: www.bcs.com

National Institute for Health and Care Excellence

Website: www.nice.org.uk

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Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation

* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>