

Radiology department

# Angiogram

## Introduction

This leaflet tells you about the procedure known as angiogram. It explains what is involved and the benefits and risks. It may make you think of the things you would like to discuss with your doctor/s.

## What is an angiogram?

An angiogram is a special X-ray examination designed to show the arteries in your body relevant to your problems. A dye (contrast agent), which usually contains iodine, is injected directly into the artery through a fine tube (catheter). The dye fills the arteries and makes them more visible on an X-ray screen. Your doctor needs detailed images of the arteries to determine the most appropriate treatment for you.

## Why do I need an angiogram?

Angiograms are most commonly performed to investigate blockages, areas of bleeding and to depict the blood supply to abnormal areas. Your doctors may want to have detailed pictures of specific blood vessels prior to an operation.

## What to tell the doctor

- If you have any allergies.
- If you have had a previous reaction to intravenous contrast medium (the dye used for some X-rays and CT scanning).
- It is important to tell the doctor or the radiology department before attending for admission if you are taking medication to prevent blood clots. Below is a list of some of the medications which are used to thin the blood and help to prevent blood clots.

Apixaban	Dabigatran	Rivaroxaban
Aspirin	Dalteparin	Warfarin
Clexane	Enoxaparin	
Clopidogrel	Fragmin	

If you are currently taking any of these medications, please contact your referring doctor or the radiology department on 0161 446 3325 as soon as possible, as these may need to be stopped prior to your procedure. Failure to do so may result in your procedure being postponed.



## What happens on the day of admission?

### On your ward:

You will be asked to attend the Integrated Procedure Unit (IPU). Most patients will be discharged home on the day of the procedure, however it is sometimes necessary for you to stay overnight.

## What happens on the day of the procedure?

### In the Radiology department:

- A nurse will check that you have understood what is going to happen and that you have signed a consent form and are happy for the procedure to go ahead.
- You will be asked to get changed into a hospital gown and remove your underwear.
- We will ask you to lie on the X-ray table on your back.
- You will have oxygen through a small plastic tube into your nose.
- We will connect you to monitors to check your blood pressure, pulse and oxygen levels
- Your nurse will attach an extension line to the cannula so if any medication is required it can be given to you.
- You will be in the department for approximately 1 hour but this varies between patients.

## Agreeing to treatment

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you. Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.

## What actually happens during the procedure?

An angiogram is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure.

Your skin near the point of insertion, usually the groin or the wrist, will be swabbed with antiseptic and you will be covered with sterile drapes. The skin and deeper tissues over the artery will be numbed with local anaesthetic. Using ultrasound guidance a needle, followed by a wire and catheter (fine plastic tube) will be inserted into the artery and guided to the correct position to obtain the images required. This involves injecting small quantities of the dye (contrast agent) into the blood vessels.

## Will it hurt?

You may feel some discomfort in the skin during the injection of the local anaesthetic but this soon wears off, and the skin and deeper tissues should then become numb. You may feel slight discomfort and the feeling of pushing when the doctor first accesses your artery.

There will be a nurse or another member of clinical staff looking after you. They can give you more sedation and painkillers if you are uncomfortable in any way. You may feel a warm sensation for a few seconds when the dye is injected and it may feel like you are passing urine.

## What will happen after the procedure?

The staff will take you back to the recovery bay on IPU. The nurses there will carry out routine observations, such as your blood pressure and pulse at regular intervals. They will also look at the puncture site to make sure there is no bleeding from it.

If there are no complications, you will be discharged home after a couple of hours.

## What are the risks and complications of this procedure?

Angiography is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

**Bruising:** A small bruise (haematoma) around the site of the needle can occur, but this is quite normal. The bruise might be sore for a few days but will disappear in a few weeks. Rarely a large bruise may develop and require a small operation to drain it.

**Swelling:** Occasionally, a tender pulsating swelling called a false aneurysm may develop over a few days due to ongoing leakage from the arterial puncture site. This can usually be treated by an injection of a blood-clotting agent under ultrasound guidance.

**Damage to artery:** Very rarely, some damage can be caused to the artery by the catheter or by displacement of the material causing a blockage in other arteries (an embolus). This may require a small operation or another procedure.

**Allergic reaction:** The dye (contrast agent) used during the procedure is very safe, but occasionally can cause damage to the kidneys. This occurs mainly in patients whose kidney function is abnormal already and this will be identified on the blood tests that are performed before the procedure. Allergic reactions to the dye are also possible, but are very rarely serious.

**If you have had a previous reaction to intravenous contrast medium (the dye used for some X-rays and CT scanning), please inform the Radiology department before your appointment.**

## Further information

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## Further information

This is available from the radiology department on the phone numbers below or from the following websites:

Macmillan Cancer Support: [www.macmillan.org.uk](http://www.macmillan.org.uk)

British Society of Interventional Radiology: [www.bsir/patients](http://www.bsir/patients)

**If you have any problems or worries, please contact:**

From 9:00am to 5:00pm:

Radiology department on **0161 918 2346**

Out of hours and weekends (for emergencies):

Ring The Christie on **0161 446 3000** and ask for the on-call radiologist

The Christie Hotline **0161 446 3658** (24 hours)

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **[the-christie.patient.information@nhs.net](mailto:the-christie.patient.information@nhs.net)**

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for  
urgent support and specialist advice  
**The Christie Hotline: 0161 446 3658**  
Open 24 hours a day, 7 days a week