

Radiology department

# Embolisation

## Introduction

This leaflet tells you about the procedure known as embolisation. It explains what is involved and what the benefits and risks are. It may help you to think of things that you would like to discuss with your doctor.

## What is an embolisation?

An embolisation is the introduction of blocking material to reduce or obstruct the blood flow to the artery supplying a tumour. This material may be particles, foam or metal coils. Embolisation is most commonly carried out for tumours in the liver, kidneys, pelvis or other organs such as bone. It can also be used to stop bleeding from organs.

## Why do I need an embolisation?

Your doctors know that there is a problem and that the blood supply feeding your tumour needs to be reduced or blocked. This can help to make further treatment more effective or simplify subsequent surgery. It is also used to reduce or stop bleeding.

## Who has made the decision?

Your doctors and the radiologist doing the embolisation will have discussed the situation and feel this is the best treatment option.

## 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).
- 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.

**If you are currently taking any of these medications, please contact your referring doctor or the radiology department on 0161 918 2346 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.**

Aspirin	Enoxaparin
Apixaban	Fragmin
Clopidogrel	Heparin
Clexane	Rivaroxaban
Dabigatran	Warfarin
Dalteparin	



## Who will be doing the embolisation?

A specially trained doctor called a radiologist will carry out the embolisation. Radiologists have special expertise in using X-ray equipment, and also in interpreting the images produced. They need to look at these images while carrying out the procedure.

## Where will the procedure take place?

In the radiology department on the integrated procedures unit (IPU) (department 2).

## How do I prepare for an embolisation?

You need to be an inpatient in the hospital. We will ask you not to eat for 6 hours beforehand, though you will be allowed to drink clear water up to 2 hours before the procedure. You may receive an injection of a painkiller and a sedative to make you more relaxed. You will be asked to put on a hospital gown.

## Agreeing to treatment

The radiologist will explain the procedure and discuss any possible risks. You will be asked 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 specialist doctor. 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, a member of your treating team will discuss the possible consequences with you.

## What actually happens during the embolisation?

- On arrival at the radiology department you will have the opportunity to discuss the procedure with the radiologist.
- They will explain all the benefits and possible risks associated with this procedure and will ask you to sign a consent form.
- You will lie on the X-ray table, generally flat on your back. You will already have a needle in the vein in your arm, so that you can be given a sedative or painkillers as required. You will also have monitoring devices attached to you and will be given oxygen through small tubes in your nose.
- The radiologist needs to keep everything as sterile as possible, and will wear a theatre gown and gloves. The procedure will usually be undertaken through the artery in your wrist, however, sometimes if this is not possible, an artery in the groin will be used instead. The skin around the puncture site will be swabbed with antiseptic and the area will be covered with sterile theatre drapes.
- The skin and deeper tissues over the artery will be anaesthetised with local anaesthetic. Then a needle will be inserted into the artery. Once the radiologist is satisfied that this is in the correct position a guide wire is placed through the needle into the artery. Then the needle is withdrawn and a fine plastic tube, called a catheter, is placed over the wire into the artery.
- The radiologist will use the X-ray equipment and small amounts of dye to make sure that the catheter is moved into the right position, in the chosen artery. The embolising material is injected down the catheter and into the artery. The radiologist will check progress by injecting contrast to show how much of the artery is blocked. Vessels are embolised using particles or special metal coils.

## Will it hurt?

You may feel some discomfort in the skin and deeper tissues during the injection of the local anaesthetic. As the dye passes around your body, you may get a warm feeling. Some people find this unpleasant. However, this soon passes off and should not worry you. After this the procedure should not be too uncomfortable, although you may experience some discomfort or pain from the embolisation. There will be a nurse or another member of clinical staff looking after you. If the procedure does become uncomfortable for you, we will give more painkillers through the needle in your arm.

## How long will it take?

Every patient's situation is different, and it is not always easy to predict how long it will take. As a guide, expect to be in the X-ray department for about 2 hours.

## What will happen afterwards?

You will be taken back to your ward on a stretcher. If the procedure was done using the artery in the wrist you will be able to sit up straight away but remain on bed rest until the sedative has worn off. If the procedure was done using the artery in your groin, you will need to stay flat on your back for 2 hours and remain in bed overnight. Nurses on the ward 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 and you may be on a drip for a few hours. You will often be given antibiotics for approximately 5 days to prevent infection. You will need to stay in hospital for at least 1 night. Your doctors will decide when you are well enough to be discharged.

## What are the benefits of the procedure?

By blocking the blood supply to the tumour you should get some reduction in your symptoms. It can also reduce the tumour size, which may help any further treatment you receive.

If the embolisation has been performed for bleeding, this should be stopped by the procedure.

Your doctors will be able to discuss the possible benefits in greater detail.

## Are there any risks or complications?

As with any operation or procedure, there are some risks and complications that can arise.

- There may occasionally be a bruise, around the site where the needle has been inserted.
- Very rarely, some damage can be caused to the artery by the catheter, and this may need to be treated by surgery or another radiological procedure. Very uncommonly, there may be damage to blood vessels supplying other organs causing damage to those organs.
- You may develop post-embolisation syndrome. This is caused by the body's response to tumour tissue dying and may consist of sickness, tiredness, pain and fever. The ward staff will give you strong painkillers and medicine to control the nausea.

Despite these possible complications, the procedure is normally very safe, and the benefits are likely to outweigh the risks.

## What happens next?

This all depends on how successful the procedure has been and your doctor will discuss this with you.

## 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.org](http://www.bsir.org)

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

Monday to Friday, 9:00am - 5:00pm:

Radiology nurse on **0161 918 2346** or the radiology department on **0161 446 3325**.

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, Salford or Macclesfield. 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