

This leaflet tells you about having a bronchial artery embolisation. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you for the test or the department which is going to perform it.

What is embolisation?

Embolisation is the term used to describe the blocking of blood vessels. In your case, there are abnormal blood vessels supplying part of your lung, which are bleeding. Blocking these vessels by using a fine plastic tube (catheter) will stop the bleeding.

Why do you need a bronchial embolisation?

You have been coughing up blood from your lung. This is coming from an area of abnormal lung tissue usually caused by chronic inflammation and supplied by abnormal arteries. In the past, this condition was treated by a major surgical operation to remove part or the entire lung. Nowadays, it can be treated with a minimally invasive interventional radiology technique of embolisation.

Are there any risks?

Embolisation is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise. Occasionally, a small bruise may develop in your groin at the needle-entry site. Rarely if leakage of blood continues from the needle-entry site, it may form a small pulsating

lump (called a false aneurysm) which may require a further procedure to treat.

Occasionally, blood vessels to the spinal cord may come from the bronchial artery. If particles were to find their way into the spinal artery, they could cause paralysis. Because catheters need to be passed by the blood supply to the brain there is a small risk of stroke. However, the interventional radiologist will make every effort to avoid this complication and the risk to you of continuing bleeding into your lung is much greater than the risk of paralysis or stroke.

There is also a rare risk of non-target embolisation (embolisation of vessels not supplying the bleeding area). The initial angiogram will determine whether it is safe to proceed with the embolisation, however, if it does occur it is generally not a significant problem.

Who has made the decision?

The consultant in charge of your care and the interventional radiologist performing the procedure have discussed your case and feel that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

Are you required to make any special preparations?

You will already have undergone some tests including a chest X-ray and probably also a computed tomography (CT) scan to identify the area of bleeding. You may also have had a bronchoscopy.

You will be an inpatient for the procedure. You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you *must* tell the radiology staff before you have the test.

Who will you see?

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

Where will the procedure take place?

In the angiography suite or theatre; this is usually located within the radiology department. This is similar to an operating theatre into which specialised X-ray equipment has been installed.

What happens during embolisation?

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm.

The procedure will take place in the X-ray department and you will be asked to lie flat on your back. You may have monitoring devices attached to your chest and finger and may be given oxygen. Your groin area will be swabbed with antiseptic and you will be covered with sterile drapes.

Local anaesthetic will be injected into the skin in your groin and a needle will be inserted into the artery. A fine plastic tube

called a catheter will be placed into the artery.

The radiologist uses X-ray equipment to guide the catheter towards the arteries that are bleeding in your chest. A special X-ray dye (contrast agent) is injected into the catheter to ensure a safe position for embolisation.

The interventional radiologist can then block the abnormal arteries by carefully injecting tiny particles through the catheter guided by images on a screen. Small amounts of contrast are injected down the catheter to check that the abnormal arteries are blocked satisfactorily.

Once the interventional radiologist is satisfied with the images, the catheter will be removed. Firm pressure will be applied to the skin entry point, for about ten minutes, to prevent any bleeding. Sometimes a special device may be used to close the hole in the artery.

Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about two hours.

What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine observations including pulse and blood

pressure and will also check the treatment site.

You will stay in bed for at least six hours.

You will be kept in hospital overnight and may be discharged the next day.

Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

Contact:

British Society of Interventional Radiology
www.bsir.org

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists. Approved by the Board of the Faculty of Clinical Radiology: 25 February 2011

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**British Society of Interventional
Radiology**

**Bronchial artery
embolisation**

Patient information

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