

# Embolisation of a vascular mass

Radiology

## Introduction

### What is the aim of this leaflet?

The aim of this leaflet is to explain the procedure for patients undergoing an embolisation of a vascular mass. This leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for outlining risks and benefits.

### What is an embolisation?

An embolisation is the term used to describe the intentional blocking of blood vessels. When an abnormal mass is present in the body that contains a lot of blood vessels, embolisation can be used to reduce the blood supply.

### Who has made the decision?

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances.

Your doctors are aware that there is an abnormal mass present and will have discussed all the possible treatment options. Embolisation is one such option that can be used either before surgery to reduce the blood supply to the abnormal mass to ensure a safer operation, or as a primary treatment to stop bleeding and reduce the size of the mass.

This can be used in both benign and cancerous masses. Examples include fibroid embolisation (see separate information leaflet), high flow vascular malformations and cancer embolisation (often from the kidney or thyroid). Embolisation will not have any effect on any other further treatments that may be necessary such as chemotherapy or radiotherapy.

### Who will carry out the procedure?

An interventional radiologist will perform the embolisation. They have special expertise in interpreting the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

## Consent

We must seek your consent for any procedure or treatment beforehand. Written consent will be obtained from yourself, by a doctor, to give permission to have the procedure carried out. Your doctor will explain the risks, benefits and alternatives where relevant before you sign the consent. A referral will be made and your appointment will be arranged. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

## What are the potential benefits of having an embolisation?

- Reduces blood flow which can help if surgery has been recommended
- May prevent the mass getting bigger or reduce the size of the mass
- May relieve or reduce symptoms making you feel better.

## What are the potential risks of having an embolisation?

Serious complications from vascular mass embolisation are uncommon but, you should be aware of the following:

- Bruising around the puncture site
- Pain post procedure
- If the bruising becomes inflamed and uncomfortable it may be a sign of infection which can be treated with antibiotics. If you are unsure please visit your GP
- If the mass is in the spine or pelvis, embolisation may increase the symptoms you currently have. These typically are short term
- Loss of sensation or power to the affected area may be permanent
- There is also a rare risk of non-target embolisation (embolisation of vessels not supplying the mass or tumour). The initial angiogram will determine the safety for embolisation; however, if it does occur it is generally not a significant problem. This does depend on where the tumour or mass is situated; the interventional radiologist doing the procedure will explain the slight differences to you
- **Radiation:** Ionising radiation may cause cancer many years or decades after the exposure. We are all at risk of developing cancer during our lifetime. 50% of the population is likely to develop one of the many forms of cancer at some stage during our lifetime. It has been estimated that undergoing this procedure may increase the chances of this happening to you to about 0.1 %. The requesting doctor and the doctor that will be performing your examination feel that the benefit of having the test or treatment outweighs the risk from the exposure to radiation. If you have further questions about the risk of exposure to radiation, please talk to your doctor during consent
- Serious complications from vascular mass embolisation are uncommon, but a number have been described.

**Please contact the X-ray Department as soon as you receive this appointment if you think you may be pregnant.**

**Contrast agent:** The “dye” that is used to show up the blood vessels can have side effects for a minority of patients:

- 3 in 100 patients experience nausea and hot flushes
- 4 in 10,000 may have more serious effects including breathing difficulties.

If a side effect does occur the doctors, nurses and radiographers are trained to deal with it.

## Are there any alternative treatments and what if I decide not to have it done?

The consultant in charge of your care will discuss the alternatives with you. They will also discuss the consequences of no treatment.

## Are you required to make any special preparations?

Vascular mass embolisations are usually carried out as an inpatient procedure under local anaesthetic (a medication used to numb an area of the body to reduce pain).

- If sedation (a medication used to produce a state of calm or sleep) is necessary you will be advised to not eat before your procedure but may still drink as normal. The nurse looking after you on the ward will know if your procedure requires sedation or not as it will be discussed during consent
- Bloods will be taken from you to check for any abnormalities and to check your clotting
- If sedation is to be given, a cannula will be inserted on the ward
- If sedation is not to be given, you may eat and drink as normal
- You will be given antibiotics prior to the procedure to reduce the risk of any Infection post-procedure
- 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 procedure.

If you are taking the following medication and the doctor has not discussed them during consent please contact the X-ray department when you receive this information:

Acenocoumarol, Apixaban, Aspirin, Bivalirudin, Dabigatran, Dalteparin, Danaparoid, Dipyridamole, Edoxaban, Enoxoparin (clexane) Fondaparinux, Heparin, Phenindione, Tinzaparin, Warfarin.

## Where will the procedure take place?

The procedure will take place in the angiography suite; this is located within the radiology department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

The angiography suite will liaise with your ward nurse and porters to arrange transport for your procedure.

## What actually happens during a vascular mass embolisation?

You will be asked to get undressed and put on a hospital gown. For this procedure you will need to lay flat on your back. Routine observations of your heart rate and blood pressure may be taken during and after the procedure. A team of nurses and radiographers will assist the radiologist during the procedure. An interventional radiologist uses an ultrasound probe and X-rays (either Computerised Tomography or Fluoroscopy) to allow accurate access and treatment to the mass.

Local anaesthetic is injected at the procedure site. This may sting for a few seconds but will then go numb. The interventional radiologist places various catheters and wires along the artery / vein. They may also inject contrast agent in order to highlight the vessels to reach the mass. You may be able to feel this but there should be no pain. When the radiologist is happy with access, embolisation will begin. Different treatments can be used for embolisation. This will be discussed with you before the procedure. All tubes will be removed at the end of the procedure.

## Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. Most patients feel some pain afterwards, which ranges from very mild to very severe pain. It is generally worst in the first 12 hours and can be controlled by further painkillers.

## How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the procedure room for about an hour. Afterwards, you will have to stay on the day ward for bed rest and further observations for around four to six hours.

## What happens afterwards?

- You will return to your ward
- The nurse on the ward will take your pulse and blood pressure to make sure that there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it
- You will need bed rest for up to six hours, you will then be able to sit up and walk around if there are no complications.

## Going home advice

### Groin Access

- You will need to continuously check the procedure site for oozing or swelling
- Special care must be taken when driving especially if your access site is in the groin. Staff will give you further information on the day unit but, we advise you do not drive for the first 48 hours after the procedure. If bruising over the groin is preventing you from braking quickly and effectively, it is advised you do not drive until the bruise has resolved. Further information can be found on the DVLA website: <https://www.gov.uk/guidance/general-information-assessingfitness-to-drive>
- Do not undertake heavy or physical activities for the next 48 hours
- You may need somebody to stay with you at home and have access to a telephone for 24 hours following the procedure. This should be discussed with the radiologist before the procedure as this may not be the case for every patient.

### All Access

The nurse and doctor in charge of your care will give you clear instructions and advice

- You will need somebody to come and collect you when the ward is happy for you to go home
- You will need somebody to stay with you at home for 24 hours following the procedure. You will also need access to a telephone during this time
- The ward in charge of your care will give you the correct advice to follow at home
- A follow up appointment will be made and sent to you in the post in the near future. It is unlikely that the puncture site will bleed, but if this happens, you should follow the instructions below:
  - Stop what you are doing and lie down
  - Press firmly on the site with your fingers
  - Call NHS helpline on **111** or **999**, explain that you have had an angioplasty and the site is bleeding.

## Trainees

A Radiology trainee (qualified experienced doctors training in Radiology) or occasionally a student may be present during the examination. If you would prefer them not to attend, please let a member of Radiology staff know.

## How to contact us

If you have any personal access needs, require wheelchair access or wish to speak to a member of staff for further information please contact the interventional radiology department on 01902 307999 ext. 86344 between 08:30 and 16:30 as the department cannot help with queries outside of these hours.

**Angiography Suite / Interventional Radiology**

Second floor Radiology A2

New Cross Hospital

Wolverhampton

West Midlands

WV10 0QP

**Patient Advice and Liaison Service**

New Cross Hospital

01902 695362

Email: [rwh-tr.pals@nhs.net](mailto:rwh-tr.pals@nhs.net)

**Further information**

Further information about your examination is available from The British Society of Interventional Radiologists at:

<http://www.bsir.org/patients/angioplasty-and-stenting/>

and The British Society of International Urology Surgeons at:

[https://www.rcr.ac.uk/sites/default/files/docs/.../EMBOLISATION\\_BSIR\\_PIL\\_FINAL.doc](https://www.rcr.ac.uk/sites/default/files/docs/.../EMBOLISATION_BSIR_PIL_FINAL.doc).

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。