

## Bland Embolisation (liver)

Your doctors have recommended that you have a procedure called embolisation. The aim of this procedure is to treat the cancer in your liver. They will have weighed the benefits of having this procedure against the possibility of complications - your doctors will have discussed these with you. If you are still unsure about the benefits of having the procedure, please ask.

This factsheet explains what the procedure involves, the possible risks and the complications you may experience. It is important that you fully understand what is involved before you sign the consent form.

### What is bland embolisation?

Bland embolisation is a treatment option for liver cancers where the tumour cannot be removed by surgery. This is done by blocking the blood supply to the tumour.

### Why do I need bland embolisation?

This procedure can help prevent the growth of the tumour or tumours in your liver. It can potentially shrink them, preserve liver function, and allow you a relatively normal quality of life.

This treatment can be repeated or used in combination with other types of therapy to control the tumour growth. Because this is a localised treatment to the tumour, it can be done without affecting other parts of your body.

### Who has made the decision?

The consultant in charge of your case, and the doctor carrying out the procedure will have discussed your situation and feel that this is the best treatment option for you. However, your opinion will also be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

### Who will be doing the procedure?

A doctor called an interventional radiologist will carry out the procedure. They are able to see what they are doing by using x-rays and other scanning equipment. They will be assisted by radiology nurses and radiographers who will look after you throughout the procedure.

### Where will the procedure take place?

This procedure is carried out in a room in the x-ray (radiology) department.



## Are there any risks or complications?

- Fever (short-term)
- Nausea
- Vomiting
- Fatigue
- Abdominal pain
- Infection
- Any procedure that requires placement of a catheter (small tube) inside the blood vessel can cause damage to the vessel, bruising or bleeding at the puncture site
- There is a small chance of the embolisation material or particles becoming lodged in the wrong place and depriving normal tissue of its blood supply
- Because of the contrast material used to view your vessels with x-ray, there is a chance of allergic reaction to the contrast. There is also a risk of kidney damage for those with diabetes or pre-existing kidney disease.

These effects vary for every person. Medicines are given to help prevent or relieve most of these side effects. In addition, steps can be taken to prevent allergic reactions to contrast and lessen the chance of kidney damage for those at risk.

## How do I prepare for the procedure?

- You will need to have had some blood tests beforehand (two to seven days before your procedure) to check that you do not have an increased risk of bleeding
- If not already an inpatient, you will need to be admitted to the hospital as an inpatient, either on the day of the procedure or the day before
- You **must not** eat anything for six hours before the procedure, although you will be allowed to drink clear fluids until **two hours** before the procedure
- If you are taking any medication that thins your blood such as aspirin, tinizeparin, clopidogrel or warfarin you **must** contact the radiology department
- If you have any allergies, you **must** let your doctor know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans), then you must also let your doctor know
- You should not bring any valuables with you in case of loss or theft.

## Can I bring a relative or friend?

You may bring someone with you but for safety reasons they cannot accompany you into the x-ray room.

## When you arrive at the hospital

- Please report to the day care area, which is written on your appointment letter.



- You will have a fine plastic tube (cannula) placed into a vein in your arm, so that you can be given fluids and receive medication while in the x-ray department. Once in place, this tube does not cause any pain.
- If you need to be admitted a day before, your doctors will see you and you will be moved to a ward. Here, you will be given some medication to prepare you for the procedure.
- You will be allocated a bed, although you may not go there until after the procedure.
- Before you go to the x-ray department, you will be asked to change into a hospital gown.
- You can either walk to the x-ray department or be taken there on a trolley.

### **What happens during the procedure?**

- The procedure is generally done under local anaesthesia, but can be done under general anaesthesia, depending on the extent of embolisation and at the discretion of the radiologist.
- You will lie on the x-ray table on your back. If this is difficult for you, we can help you to get comfortable with pillows.
- We will give you painkillers and other medication through the cannula in your arm.
- You will also have monitoring devices attached to your arm and finger. You may be given oxygen through small tubes into your nose by a nurse who will be with you throughout the procedure.
- The doctor will use ultrasound or x-ray machines to determine the most suitable point for inserting the tube.
- The radiologist will keep everything sterile, and will wear a sterile gown and gloves. Your skin near the point of insertion will be cleaned with cold antiseptic. The rest of your body will be covered with a sterile theatre sheet.
- The doctor will give you an injection of local anaesthetic which will cause some stinging initially, then numbness.
- The skin at the top of the leg (groin) is numbed and a small tube (catheter) is placed in the artery.
- The catheter is passed into the artery to the area that needs to be embolised under x-ray guidance.
- X-rays are taken to identify the blood vessels supplying the tumour by injecting dye (contrast agent) into the catheter.
- The catheter is passed as close as possible to the blood vessels supplying the tumour and treatment is given.
- After the procedure, the catheter is removed from the liver and pressure is applied to the site to prevent any bleeding.

### **Will it hurt?**

You may feel some discomfort in your skin and deeper tissues during the injection of the local anaesthetic. After this, the procedure should not be painful. A nurse or another member of clinical



staff will be close by throughout the procedure. You will be awake during the procedure and able to tell the radiologist if you feel any pain or discomfort.

### **How long will it take?**

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

### **What happens afterwards?**

- You will be taken back to the ward or day care area on a trolley or a bed
- You must lie flat in bed for approximately two hours but will be able to eat and drink as tolerated.
- Nurses on the ward will carry out routine observations such as checking your pulse and blood pressure, and will also check the treatment site to make sure that there are no problems
- You will stay in bed for a few hours, until you have recovered
- Generally you can eat and drink normally after the procedure
- Painkillers will be given if required
- Most patients leave the day after the procedure
- Your doctors will be in contact with you after discharge
- A repeat CT scan is done in approximately four to six weeks to confirm regeneration and enlargement of the liver.

### **Contact details**

If you have any questions or concerns about your procedure, or you are unable to attend for this appointment, please call:

The Radiology Department: 0207 808 2571

### **Further information**

The Royal College of Radiologists

Website: [www.rcr.ac.uk](http://www.rcr.ac.uk) for general information about radiology departments.

Macmillan Cancer Support

Support line: 0808 808 00 00 8am – 8pm, 7 days a week [www.macmillan.org.uk](http://www.macmillan.org.uk)

National Institute for Health and Clinical Excellence

[www.nice.org.uk/guidance](http://www.nice.org.uk/guidance) for evidence-based recommendations by independent committees.

