

Transarterial Chemoembolisation (TACE)

Your doctors have recommended that you have a procedure called TACE. They have weighed the benefits of having the procedure against the possibility of complications - your clinical team will have discussed this 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 chemoembolisation?

Chemoembolisation is a treatment for liver cancer, using a combination of an anti-cancer drug (chemotherapy) and an agent to block the blood vessels supplying the tumour (embolisation). It is often called transarterial chemoembolisation (TACE).

Why do I need chemoembolisation?

The aim of this procedure is to treat the cancer in your liver. The tumours may be from a primary cancer arising in the liver, or cancer spreading to the liver from somewhere else in the body. This procedure can help prevent the growth of the tumour or tumours in your liver while potentially shrinking them, preserving liver function, and allowing you a relatively normal quality of life.

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?

TACE is a safe procedure, but as with any surgical procedure there are some risks and complications that can occur. The overall risk of a problem requiring further treatment is low.

- It is common to have some bruising at the puncture site. This may be sore for a few days but will resolve.
- Very rarely, significant bleeding or blockage of the artery can occur, which may require a small operation (less than one in 1,000 people).
- Pain, nausea and flu-like symptoms can occur after the procedure. These can vary from being very mild to severe. Treatment with strong painkillers and anti-sickness tablets will be available if you require them. The symptoms may take one to two weeks to settle.
- Fatigue is a very common symptom after the procedure. Almost all people experience a feeling of general tiredness lasting for about two weeks - this is normal.
- Infection can occur in the area of the liver treated and will need treatment with antibiotic injections.
- Acute liver failure is a rare, but serious complication occurs in approximately 1% of patients (one in 100 people).
- Impairment of kidney function can occur following the treatment. This can be due to the contrast or the anti-cancer drug.

We will expose you to ionising radiation when we carry out this examination. We are all exposed to ionising radiation from naturally occurring sources such as cosmic rays, certain types of soil and rocks and even food we eat. Ionising radiation can cause cell damage that in turn, after many years, may turn cancerous. The radiation associated with your exam will therefore carry a very moderate risk which is less than 1%. This risk will be far outweighed by the benefits of having this exposure. We will also tailor the amount of radiation we use to you.

How do I prepare for the procedure?

- You will need to have had some blood tests beforehand (2-7 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 the day before procedure
- Your doctors will check that you are fit for this procedure and may ask you to have some tests such as an echocardiogram and electrocardiogram (ECG)
- 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
- You should not bring any valuables with you in case of loss or theft
- If you are taking any medication that thins your blood such as aspirin, tinzaparin, 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 inform your doctor or the radiology department.



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
- We will place a fine plastic tube (cannula) into a vein in your arm, so that you can be given fluids and receive medication while in the hospital. Once in place, this tube does not cause any pain.
- You will be allocated a bed, and one of the doctors looking after you will come and see you, to make sure you are fit to have the procedure
- While in the ward, you will have a drip connecting to the plastic tube in your vein and other medication
- On the morning of the procedure, before you go to the x-ray department, we will ask you to change into a hospital gown
- You can either walk to the x-ray department or be taken there on a trolley or bed.

What happens during the procedure?

- The procedure is performed using local anaesthetic, but in rare cases can be performed under general anaesthesia
- 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.
- You will 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 radiologist will keep everything as sterile as possible 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 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 liver 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 then treatment is given.
- It may take two or more separate courses of the treatment to treat the tumour.

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 one hour or more.

What happens afterwards?

- You will be taken back to the ward 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
- Painkillers will be given if required
- Most patients leave the day after the procedure
- Your doctors will be in contact with you before your discharge
- A repeat CT scan is done in approximately four 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

020 7808 2571

Further information

The Royal College of Radiologists

Website: 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

Website: www.macmillan.org.uk

For information and emotional and financial support on cancer.

National Institute for Health and Clinical Excellence

Website: www.nice.org.uk/guidance

For evidence-based recommendations by independent committees.

