



# Transarterial chemo-embolisation (TACE)

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**This factsheet has been written to provide further information for patients regarding the transarterial chemo-embolisation (TACE) procedure. It includes details on the procedure, benefits and risks of TACE. If you have any further questions, please contact a member of your healthcare team (contact details at the end of this leaflet). You will have a further opportunity for someone to explain the procedure in more detail to you and answer all of your questions before asking you to sign a consent form.**

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## **What is transarterial chemo-embolisation?**

This is a procedure in which chemotherapy is given directly into the tumour (cancer) in your liver using X-rays. At the same time, the blood supply to the tumour is also blocked off.

A doctor (called an interventional radiologist), who is an expert in this X-ray technique, will perform the procedure, which will take approximately one hour.

The procedure involves feeding a wire into an artery (blood vessel) in your groin or wrist through a very small hole. The area where the hole is made will be numbed beforehand. This is called a 'transarterial' method. From here, tubes and wires are passed into the arteries going into your liver. You should not feel these inside you. This route is used to see where the tumour is in the liver and find out which arteries go to the tumour. If it is safe and possible to do so, the doctor will then inject cancer cell-killing drugs (Doxorubicin and Lipiodol) as an emulsion (mixture) directly into the tumour to stop the blood supply. This is called 'chemo-embolisation'.

## **Who can have transarterial chemo-embolisation?**

Unfortunately, not everyone with liver cancer can have this procedure. Your cancer has to have started in the liver ('primary' liver cancer) and your liver must be working well enough to tolerate both the chemotherapy and the 'blocking-off' of the blood supply to the tumour within the liver.

We also know from studying patients around the world, that this procedure is only successful in patients whose tumour is small enough and has not spread outside of the liver.

## **Will I have a general anaesthetic?**

No, as this is not necessary.

You will have a local anaesthetic injection to make the area where the needle is placed in the groin or wrist feel numb. You will also have strong painkillers that may make you feel sleepy. Sometimes, these can also make you feel nauseous (sick) but this can be treated with anti-nausea medication.

## What are the benefits to transarterial chemo-embolisation?

We know from studies around the world that transarterial chemo-embolisation can be successful in killing the cancer that is in your liver and can delay, and even stop, the cancer returning in your liver. In achieving this, patients with primary liver cancer can live longer.

## Can I be cured?

Unfortunately, we do not believe that we can cure your cancer with this procedure alone. Although we hope that we will be able to control your cancer and that you will live longer.

## What are the risks of transarterial chemo-embolisation?

The risks and side effects of this treatment are due to the two parts of the procedure.

### 1. Chemotherapy

From the chemotherapy part of your treatment, there is a risk that the chemotherapy does not just stay in the liver but moves into your bloodstream, causing hair loss and a sore mouth. It may also stop your bone marrow from working properly, which may mean that you get infections more easily (usually from bacteria inside your body and not from outside sources). These side effects are temporary, and your hair will grow back.

### 2. Embolisation (blocking the blood vessels)

- **Common risks:** The most common side effect of this treatment is pain. This is caused when part of the liver, and the cancer inside of it, dies. You will be given strong painkillers for a few days after your treatment to help with this. It is also very likely that you experience symptoms similar to flu, such as shivers and shakes. This is because your body is coping with the 'dead' liver cells. Regular doses of paracetamol will help. However, if you are worried about your symptoms, please do not hesitate to get in touch with the team at the Royal Berkshire Hospital via the phone numbers at the end of this factsheet.
- **Uncommon / rare:**
  - There is a small risk of bleeding from where the needle goes into your groin / wrist. This is usually controlled by pressing on the spot for a few minutes. You are likely to have a bruise on your leg or arm for a week or two after the procedure. It will be necessary for you to remain in bed for about six hours immediately after the procedure to help the needle site in the groin to heal. Very rarely, the bleeding is more serious and other treatment is required.
  - There is a very small risk of damage to other arteries in your body or leg by the movement of the tube (catheter) inside them. Sometimes, this could mean that the treatment cannot be finished.
  - There is a small risk of infection where the needle goes into your body, but this can be treated with antibiotics.
  - From the embolisation part of the treatment, there is a small chance of damage to your bile ducts (these are the pipes which drain bile around and from your liver). This damage may require a further procedure to insert tubes into your bile ducts.

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- There is also a very small risk of damaging your small bowel. Rarely, this complication requires emergency surgery.
- There is a risk that an abscess (collection of pus) may form in your liver after the treatment. This would require you to be treated with antibiotics and possibly a tube into your liver to drain the abscess.
- There is a small risk that your liver will not cope with the treatment and it will then fail to work. Liver failure may vary from being very mild (requiring a short period of time in hospital) to being very serious (life threatening).
- We know that sadly up to 3% of patients who have transarterial chemo-embolisation only survive days to weeks after the treatment.

### **How long will I stay in hospital?**

You will need to have this treatment at the Royal Berkshire Hospital. The amount of time spent in hospital varies, but usually people stay for between three and six days.

### **If I agree to this treatment what happens next?**

- You will be given a date (usually in about four weeks' time) to come into hospital. We will discuss the procedure with you and ask you to sign a consent form.
- Further safety checks need to be done and we may need to assess you right up to the day of your planned procedure before we can decide whether it is safe. We may not be able to perform chemo-embolisation because it would be too dangerous for you.
- We may ask you to have some blood taken at your local doctor or hospital the week before your procedure. A letter will be sent to your GP to request the relevant blood tests.

### **What happens after I go home following the treatment?**

You may feel tired and quite weak when you go home. If you still have some discomfort from your treatment, then continue to take painkillers.

We will then see you again in clinic 4-6 weeks after this appointment. During this 4-6 week period, you will attend the hospital for a scan to assess how well the treatment has worked.

When we see you in clinic, we will be able to discuss the results with you and talk to you about any further treatment that may be needed. For some patients we recommend a second or third chemo-embolisation procedure to try to treat the liver tumour (or tumours) more completely.

### **Further questions**

We have covered a lot of the usual questions people ask us; however, everyone is different. If there is anything else you would like to know, please do not hesitate to ask us.

You can contact us on the telephone on the following numbers:

CAT-4 (Gastroenterology and Hepatology)

Monday-Friday 8.00am-6.00pm

Telephone number: 0118 322 8391

Email: [rbb-tr.CAT4@nhs.net](mailto:rbb-tr.CAT4@nhs.net)

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Sidmouth Ward: 0118 322 7468

Interventional Radiology

Monday-Friday 9.00am-5.00pm

Telephone number: 0118 322 7423

**Notes and queries**

Please write down any questions you may have and bring this with you to your next appointment:

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**Useful link:**

<https://www.cancerresearchuk.org/about-cancer/liver-cancer/treatment/chemoembolisation>

*Information adapted from University Hospitals Birmingham NHS Foundation Trust with kind permission*

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Gastroenterology and Liver Services  
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