Radiology Department

Transarterial Embolisation (TAE)
A guide for patients

Introduction

This leaflet is designed for patients who have been advised to have a transarterial embolisation (TAE) procedure as part of the treatment of a liver tumour.

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What is a TAE?

- A TAE is a procedure where the arteries to your liver cancer are blocked off causing the cancer to be starved of nutrients and oxygen.
- Normally arteries do not show up on an ordinary x-ray so a special dye, called contrast medium, is injected into the liver arteries through a fine plastic tube called a catheter to make them visible.
- X-rays are taken during the injection and detailed images of the arteries are obtained (a so-called angiogram). These images will guide the doctors to the arteries that supply your cancer so they can block them off.

Why do I need a TAE?

- You have a condition called hepatocellular cancer. The cancer is confined to your liver but cannot be treated by an operation.
- Embolisation means blocking of arteries, in your case the ones that supply your liver cancer.
Who has made the decision?

- The consultant in charge of your case and the radiologist performing the angiogram will have discussed the situation, and come to the conclusion that this is the best way of treating your condition.
- However, you will also have the opportunity for your opinion to be taken into account, and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

What happens before the procedure?

- You will be admitted to hospital on the day of, or the night before, the TAE.
- A doctor will take a history from you.
- You will have a small needle put into a vein in your arm for painkillers to be given if necessary.
- Standard blood tests will be carried out.
- You may eat a light meal.
- You will be given oral antibiotics on the morning of the procedure.
- 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), you must also tell your doctor about this.

Who will be performing the TAE?

- A specially trained doctor called an interventional radiologist will be performing your TAE.
- Radiologists have special expertise in using x-ray equipment and in interpreting the images produced.
- They will look at these images while carrying out the procedure.
- The radiologist will be assisted by a radiographer and a nurse.

What happens during the TAE?

- You will lie on the x-ray table, generally flat on your back.
- You will have a monitoring device attached to your finger, and will have a blood pressure cuff placed around your arm.
- The radiologist and nurse will wear sterile theatre gowns and operating gloves.
- The skin near the point of insertion, usually the groin, will be cleaned with antiseptic, and then the rest of your body will be covered with a sterile drape.
- The skin and deeper tissues over the artery will be anaesthetised with local anaesthetic.
- A needle will then be inserted into the artery.
- This is followed by insertion of a guide wire into the artery.
- The needle is then removed and replaced in the artery by a fine plastic tube called a catheter.
The radiologist uses the x-ray equipment to make sure that the catheter and the wire are moved into the right position.

The radiologist will inject contrast medium down the catheter to reveal the arteries – sometimes they will use a pressure injector to obtain the best images.

When they are satisfied that the catheter is in the vessels supplying the cancer, embolisation material (usually consisting of multiple small particles) will be injected via the catheter into the cancerous area.

The radiologist will take more x-ray images to see how successful the embolisation has been in blocking the blood supply.

The embolisation may be repeated several times.

When the radiologist is happy that a good result has been obtained the catheter is removed.

The radiologist will then press firmly on the skin entry point for several minutes to prevent any bleeding.

Will the TAE hurt?

Some discomfort may be felt in the skin and deeper tissues during injection of the local anaesthetic.

As the contrast medium passes through your arteries you will feel a warm sensation.

There will be a nurse, or another member of the clinical staff, in the room looking after you.

If the procedure does become uncomfortable, please let a member of staff know.

Following the procedure you may develop abdominal pain, shoulder pain, low-grade temperature and sickness. If you experience any of these symptoms let the nursing staff know.

How long does the TAE take?

Every patient’s situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be.

Generally, the procedure will last approximately two hours.

As a guide you will be in the x-ray department for approximately three hours before we will send you to a ward for observation.

What will happen after the TAE?

You will be taken back to your ward.

Nursing staff will carry out routine observations including taking your pulse and blood pressure and will also check the treatment site.

If you experience pain or sickness let the nursing staff know.

You will need to stay in bed for at least six hours.

You will need to stay in hospital overnight but you will be discharged the next day.
Conclusion

- Some of your questions about TAE 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 your treatment. You can obtain more information from the hepatology specialist nurses (01223 596322).

This document has been adapted from one prepared by the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists and the British Society of Interventional Radiology (BSIR).

Privacy and Dignity

We are committed to treating all patients with privacy and dignity in a safe, clean and comfortable environment. This means, with a few exceptions, we will care for you in same sex bays in wards with separate sanitary facilities for men and women.

In some areas, due to the nature of the equipment or specialist care involved, we may not be able to care for you in same sex bays. In these cases staff will always do their best to respect your privacy and dignity, for example with the use of curtains or, where possible, moving you next to a patient of the same sex. If you have any concerns, please speak to a member of the radiology team, ward sister or charge nurse.

We are a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language or audio, please contact Interpreting services on telephone: 01223 256998, or email: interpreting@addenbrookes.nhs.uk For Large Print information please contact the patient information team: patient.information@addenbrookes.nhs.uk

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