

Radiology Department

Image Guided Ablation

Introduction

You have been advised by your hospital consultant that you need to have an image guided ablation treatment for your tumor. This procedure can be performed in the Radiology Department or in Theatre depending on its location and size. This information tells you about having the procedure, what is involved, and what the possible risks are.

If you have any queries or concerns, please contact us using the telephone number on your **appointment letter**, or ask the ward staff. If you feel unhappy with any part of your care please ask to speak to a senior member of staff.

Please read this leaflet carefully to ensure you are completely prepared for the examination.

Please contact the x-ray department if your weight is equal to or more than 205Kg (32 stone) as you may require an alternative examination.

Referral and consent

You will be asked to sign a pink consent form confirming that you understand the procedure and are aware of the risks and benefits involved. This is usually done in an outpatient clinic before your admission to hospital for the procedure, or on the hospital ward before you go for the procedure.

You may be asked to attend for pre-assessment to take bloods and discuss medications or anything else which may affect the procedure.



Patient Information

Image guided ablation is usually done as a planned procedure and you should have plenty of time to discuss the situation with your doctor looking after you before you sign the consent form. When you arrive for the procedure you will also discuss the procedure with the doctor who specialises in X-rays and scans (a radiologist), who will be performing the procedure who will again sign the consent form with you.

If after talking with your hospital doctor or radiologist, you do not want the procedure carried out, then you can decide against it.

The hospital doctor or radiologist may feel that your condition has changed or that the procedure is not needed. If this happens they will explain the reasons to you, and ask the person who referred you to review your situation as soon as possible.

At all times the radiologist and referring doctor will be acting in your best interests.

Points to remember

- You may need to stay overnight in hospital before and/or after the ablation. For this reason you should prepare an overnight bag and bring this with you. We will talk about this with you in your pre-operative assessment.
- Please bring any sprays or inhalers that you are taking to your appointment. **Please bring a list of any regular medications you are taking.**
- Leave any valuable possessions on the ward or at home.
- If you are diabetic, please note that you are required to starve before the examination. You may be given an early morning appointment or a different medication will be given on the ward. Please tell ward staff before your appointment if this is the case.
- **If you are taking any blood thinning drugs e.g. Warfarin, or, if you are aware that you may have bleeding problems, please notify us as soon as you have received your appointment so that the X-ray doctor (radiologist) can be notified. They will need to discuss this with your hospital consultant before your appointment can be confirmed. You may need to stop taking your medication before the procedure.**

What is image guided ablation?

Ablation is a technique that destroys tissue through heating or freezing. In order to produce the heat or cold, needles are placed into the tissue using Ultrasound, CT or X-rays (image guidance).

Ablation is performed either in the Radiology Department or in an operating theatre and is most often done under a general anaesthetic but can be done under sedation (in certain circumstances).

Using either an ultrasound machine, a CT scanner or using x-rays, the consultant radiologist will locate the tumour and insert a needle into it. The tip of the needle is then heated or cooled to destroy the tumour. The needle will then be removed. The needle may need to be inserted more than once during the same procedure to treat the whole tumour

Only a small amount of heat or cold is produced and it only travels a small distance (a few centimetres) within your body. Most of the normal tissue surrounding the tumour is not affected. A radiofrequency electric current or microwave energy is used to generate heat. Cold gases are used to generate freezing temperatures.

Usually, the ablation will take about 60 minutes but this can depend on the size and type of tumour.

What is a CT scan?

A CT scan is an X-ray examination that gives much more information than a normal X-ray. It produces detailed images of inside your organs and blood vessels.

What is Ultrasound?

An ultrasound scan is an examination that uses sound waves to take pictures of parts of the body. It does not involve X-rays.

Preparation

- You will have had some special blood tests, to check how your blood clots four to five days before your appointment or occasionally on the same day as your appointment, to check that you do not have an increased risk of bleeding.
- Vitamin K may be required before the procedure to help with your blood clotting. The procedure may have to be postponed until your blood clotting has improved.

Patient Information

- You may have a light very early breakfast on the day of your appointment. Please **do not eat or drink** anything, except a little water if necessary, for **four hours before** your appointment.
- You may need a small tube (cannula) inserted into a vein in your arm to allow access for fluids and for administering medication such as antibiotic prophylaxis.
- You will need to wear a hospital gown. The Porters will collect you from the ward and bring you to the X-ray Department, on your bed, for the procedure.

During your examination

The procedure will be explained to you by the radiologist, surgeon and anaesthetist. You will be able to ask any questions that you may have.

Risks of the procedure

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The possibility of these occurring will vary for each patient and the possibility of these happening to you will be discussed with you, before you sign the consent form.

- **Bleeding:** Inserting the needle into the tissue carries a small risk of bleeding. On rare occasions, this may become severe.
- **Infection:** Occasionally there may be infection in the area surrounding the insertion site. This can usually be treated with antibiotics.
- **Damage to underlying tissues:** Rarely, as the needle passes through the body to the target area, surrounding tissues may be damaged. This can include damaging the bowel leading to perforation or damaging the lung causing an air leak and collapsed lung which might require a drain into the lung to help it re-expand.
- There may be soreness around the needle insertion site and some bruising.
- **X-rays** are a type of radiation. We are all exposed to natural background radiation every day of our lives; this comes from the sun, food we eat, and the ground. Exposure to X-rays carries a small risk, but your doctor feels that this risk is outweighed by the benefits of having the test. We will take all safeguards to minimise the amount of X-rays you receive.

Patient Information

Despite these possible complications, the procedure is normally very safe. At all times during and after the procedure the staff will be monitoring your responses to this treatment in order to minimise the effects of any complications.

Safety

Patients aged 12-55 years – could you be pregnant? The risks of radiation are slightly higher for the unborn child so you will be asked to confirm that you are **not pregnant** before the examination can proceed.

After your examination

- When you wake from your anaesthetic, you will be in the recovery area. The nurse will regularly check your pulse rate and blood pressure. Once you are comfortable and your blood rate is stable, you will be taken to the ward, usually for an overnight stay.
- On the ward you will be allowed to drink some water slowly. If there are no problems, you may be able to have a hot drink and something light to eat.
- You will need to stay in hospital for at least 6 hours and sometimes overnight depending on how the procedure went. This is to allow the sedation or anaesthetic to wear off and to monitor you for any problems.
- Once you are comfortable and it is safe to do so, you will be able to go home (discharged). Your hospital doctor will arrange follow up scans to monitor the effect of the ablation on the tumour.
- If you have any problems after the procedure, please speak to the staff on the ward. Contact your GP or emergency doctor if problems occur when you have returned home.

Other sources of information:

For information about the effects of X-rays and information about radiology departments visit the NHS website: <https://www.nhs.uk/conditions/x-ray/>

The Macmillan website has information about radiofrequency ablation; www.macmillan.org.uk

Patient Information

Please note that the views expressed in these websites do not necessarily reflect the views of UHCW NHS Trust.

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact the telephone number on your appointment letter and we will do our best to meet your needs.

The Trust operates a smoke free policy

To give feedback on this leaflet please email feedback@uhcw.nhs.uk

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