



**University
Hospitals Sussex**
NHS Foundation Trust

Sussex Cancer Network 

Having Radiofrequency Ablation Treatment at the Sussex Tumour Ablation Centre

Patient information

What is radiofrequency ablation?

Traditionally cancer has been treated by a combination of surgery, radiotherapy and chemotherapy.

Radiofrequency Ablation (RFA) is used to treat a range of tumours, including lung, liver and kidney tumours.

RFA involves the use of extreme temperatures applied to tumours to cause destruction of cancer cells. Small needles are used and inserted into the tumour. The needles are heated or cooled causing thermal damage and eventual destruction of the cancer cells.

Many trials show that it is an effective oncological treatment and can prolong life expectancy.

Who has decided that I should have this treatment?

The decision to have ablation will be by your referring doctor (usually an oncologist), the radiologist and yourself.

You will have had up-to-date imaging, usually in the form of a computed tomography (CT) scan, which the radiologists will use to make informed decisions regarding the planning of any ablation treatment.

Who will perform the procedure?

A specialist doctor called a radiologist will perform the ablation treatment. Radiologists have special expertise in using diagnostic imaging equipment such as CT and in the interpretation of the images produced. Additionally, radiologists are skilled in placing needles into precise locations in the body.

You will also meet with one of the centre's consultant anaesthetists and the clinic's nursing team.

Where will the procedure take place?

The ablation treatment will take place in the CT Scanning Department at the Royal Sussex County Hospital (RSCH), Brighton on Level 5 of the Thomas Kemp Tower.

What happens at my pre-assessment Clinic?

You will be sent a pre-assessment clinic appointment before the ablation treatment, to meet ablation clinic staff on Level 5 at RSCH.

The purpose of the pre-assessment visit is to meet with the key staff before the procedure and discuss/undertake the following:

- Discuss the procedure in detail with the consultant radiologist and decide whether treatment is appropriate for you. It is your decision to have ablation treatment and you will need all the information about potential benefits and risks before the treatment. For this reason, we recommend that you bring with you a partner, relative or friend to the pre-assessment clinic.
- Assess your fitness for the procedure. You will meet with the one of the consultant anaesthetists, as well as one of our ablation clinic nursing team.
- Perform any further tests e.g. checking your blood clotting and/or performing an echocardiogram (ECG).
- Perform any further scans if necessary.
- Reassure you, answer any questions, make sure you feel comfortable.

It is extremely important that you let us know if you are taking warfarin, clopidogrel or any other drug that can affect how your blood clots. These medicines may need to be stopped temporarily if you decide to proceed with the tumour ablation.

What happens the day before the procedure?

We will call you the day before the operation to confirm with you final details.

- You will be required not to eat anything solid for six hours before the procedure.
- You may take clear fluids up to two hours before the procedure.

What happens on the day of the procedure?

You should report to Imaging Reception (Level 5 Thomas Kemp Tower at the Royal Sussex County Hospital, Brighton) on the day of the procedure at 8.00am.

You will be asked to sign a consent form saying that you agree to allow us to carry out the procedure.

You will be asked to put on a standard hospital gown.

You will be admitted and given a bed in the hospital, where you will be looked after by a team of nurses.

We are happy for a partner or close relative to attend with you. We would normally recommend that they drop you off in the morning. They are welcome to visit later on L9a following the procedure. The normal visiting times are between 3.00pm to 8.00pm. The ward can be phoned on **01273 696955 Ext. 4499**.

What happens during the procedure?

The procedure will be carried out under a general anaesthetic.

You will have a CT/Ultrasound scan again as part of the procedure. This allows the consultant radiologist to further plan the treatment and confirm the best means of access to the tumour. Usually, this is done with you lying on your front, or on your side.

Using the scans, the point of entry for the needles is marked on the skin. The area of the skin to be used is cleaned with antiseptic solution.

A biopsy of the area may be taken prior to the needles being inserted.

The needles are guided into the tumour, using the CT/Ultrasound images to ensure they are correctly targeted. The ablation is then undertaken, with possibly several areas being targeted and the needles being manipulated several times.

How long will it take?

The procedure can take up to three hours to complete. If all has gone well, you will be transferred to our Theatre Recovery ward for a few hours before going up to the ward.

What happens after the procedure?

Most patients experience some discomfort following the procedure and this is usually managed by simple painkillers. You may need to take these for up to a week.

You may have a mild fever for one to two days following the procedure and you may experience a general sensation of 'feeling under the weather'. This is quite common and usually only lasts a few days.

The majority of patients are observed in hospital for one night following the procedure and are then discharged home the following day (usually in the morning).

We advise a period of rest for around a week following the procedure with no strenuous exercise, and no driving for a week.

The needles only make a very small point of entry through the skin and the dressings involved are simple plasters (please remember to let us know if you are allergic to any types of plaster). These can be removed after 48 hours.

A member of staff from the Sussex Tumour Ablation Centre will discuss with you about the follow-up arrangements at the time of your discharge.

What symptoms should I look out for?

If there is any continued bleeding or discharge from the needle sites, you should promptly seek medical advice, either by phoning the Sussex Tumour Ablation Centre on **01273 696955, Ext. 67570** or by contacting your GP.

What are the advantages of radiofrequency ablation?

The procedure can be used as an alternative treatment when a patient is not considered fit enough to undergo surgery.

Ablation can be performed percutaneously, which means that needle probes are placed directly through the skin and there is no need for a large incision. There is usually little blood loss and as there is no incision, recovery times are much faster when compared to traditional open surgery.

The ablation procedure can also be repeated if required.

What are the risks?

There is a risk of thermal damage to structures other than the tumour. In most cases, an area of normal-appearing tissue around the tumour will also be treated, as the bordering cells may contain microscopic tumour cells that may not be visible on a scan. This reduces the risk of tumour recurrence.

However, other structures next to the tumour may be damaged during ablation such as bowel or blood vessels. This may cause a bowel perforation or bleeding (in the treatment of liver and kidney tumours). If this happens, we can see it on the post-procedure scan and it can be dealt with promptly, usually with a needle again but very occasionally surgery is required.

Lung Tumours

In patients undergoing lung tumour treatment there is a 30% chance of developing an air leak (pneumothorax) during or following the procedure. If this occurs during the procedure, it may make it impossible to complete the ablation treatment. In most patients this complication can be treated quickly and effectively by draining any air with good results and no delay to discharge following the procedure.

However, in some patients (approximately 10% of all patients having lung ablation) it may be necessary to stay longer than one night to resolve this.

Large research studies suggest that less than 1% of ablation treatments result in serious complication or even death.

Anaesthetics

As with any use of sedation or general anaesthetic, there are some risks associated, but all doctors and nurses involved in the ablation clinic have appropriate training in the use of anaesthesia, and the actual incidence of such risks are minimal. You will be informed more about the risks involved in the general anaesthetic by one of the consultant anaesthetists, at the Sussex Tumour Ablation Centre.

Allergies

There is a very small risk of an allergic reaction to the dye used when CT scans are obtained.

You should let us know if you think you may have an allergy to any injections.

All ablation staff are trained in dealing with such a situation and medicines used to treat the reaction are kept within the X-ray rooms themselves.

Additionally, please remember to let us know if you are allergic to any types of plaster.

Tumour Recurrence

There is a risk of recurrence of the tumour after an ablation procedure. The exact risk varies from patient to patient. Follow-up scans to examine the ablated area will be arranged as appropriate following the procedure.

Are there any alternatives?

If you are unable to tolerate this procedure your referring doctor will be informed and he/she can decide if an alternate treatment is appropriate for you.

Who can I speak to for further information or advice?

Most of your questions should have been answered by this leaflet; however, this information is only the starting point for discussion about your treatment with the doctors looking after you.

If you have any special requirements/dietary requirements please do not hesitate speaking to a member of staff.

If you have vision, mobility or access issues please contact Ablation Secretary (Imaging Medical Secretary) on [Ext. 67570](tel:67570).

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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