

Imaging department

Having microwave ablation of a renal (kidney) tumour

Information for patients, relatives and carers

Introduction

This leaflet has been provided to help answer some of the questions you or those who care for you may have about microwave ablation of a renal/kidney tumour. It is not meant to replace the conversation between you and your healthcare team but aims to help you understand more about what you discussed together.

What is microwave ablation?

Microwave ablation is a treatment that uses heat from microwave energy to destroy cancer cells. A needle is placed into the renal tumour through the skin using image guidance (either ultrasound, CT or MRI scan). The needle produces heat which travels a few centimetres and destroys the tumour. Most of the normal renal tissue is not affected.

Why do I need microwave ablation?

Your doctor has recommended that you have microwave ablation because you have a tumour that is suitable for this treatment.

Is there anything I need to do before my procedure?

Do not eat or drink anything after midnight the night before your procedure. If you need to take medicine, take it with only a sip of water.

Some medicines may increase your risk of bleeding during or after your procedure. Tell your doctor if you are taking:

- blood-thinning medication such as aspirin, clopidogrel, warfarin, dalteparin, enoxaparin, tinzaparin, dabigatran, rivaroxaban or apixaban

Your doctor may tell you to stop taking these a certain number of days before your procedure.

This procedure is only performed at Charing Cross Hospital and patients will have a pre-operative assessment appointment before being admitted to hospital. Your medical history will be reviewed and any necessary clinical examinations and blood tests will be carried out.

What are the benefits of having a microwave ablation?

Microwave ablation is a safe procedure that can treat renal (kidney) tumours without the need for major surgery. Microwave ablation can be an effective treatment for primary renal cancer or in some patients whose disease is unsuitable for surgical resection (when part of the kidney is removed). It can also be used alongside other treatments such as chemotherapy.

Microwave ablation may be used repeatedly to treat recurrent renal tumours (tumours that keep growing back). It is a less invasive treatment which takes less time than other options. Patients are able to return to their usual activities within a few days.

What are the potential risks of having a microwave ablation?

Your interventional radiologist will discuss the potential risks involved when they go through the consent with you. They will discuss the following:

- there is a less than one per cent (one in 100) risk of damage to the organs that lie next to the kidney (liver, gallbladder, stomach and colon) by the heat generated during the procedure
- there is a less than one per cent (one in 100) risk of bleeding. You will have blood tests taken before the procedure so we know if there are any problems with your blood clotting that we need to correct by giving blood products or medication. During the procedure the interventional radiologist is checking for bleeding using ultrasound, CT or MRI scan. After the procedure, we will monitor your heart rate and blood pressure. Once you are discharged from hospital, the chance of bleeding is very low
- there is a less than one per cent (one in 100) risk of infection
- post-ablation syndrome: You may feel like you have the flu, feel ill or have a fever. This usually starts two to three days after the ablation and can last for about two to three days. During this time, rest and drink lots of fluids. Your anaesthetist will prescribe pain relief during and immediately after the procedure.

Are there any alternatives to this procedure?

Your doctor will only have requested microwave ablation if they feel that this is the best way to treat your condition. There are other types of local therapy available for renal tumours.

These include:

- radiofrequency ablation
- cryoablation
- surgery to remove renal tumours

Please discuss the alternative options with your doctor prior to admission.

What happens on the day of my procedure?

Patients will be admitted at **07.00** on the day of the procedure. You will have already had your pre-assessment and necessary tests.

Before the procedure, the consultant interventional radiologist performing the procedure will talk to you about it and answer any questions that you have. They will ask you to sign a consent form. This is a form that says that you agree to have the procedure.

The anaesthetist will also see you before the procedure to talk to you about the anaesthetic.

The ward staff will ask you to change into a hospital gown before going to the imaging department. A cannula (fine plastic tube) will be inserted into a vein in your hand or arm. When you arrive in the imaging department, staff will check your name and date of birth and connect you to a monitor that will record your blood pressure, pulse and ECG (heart tracing). You will then be taken into the procedure room and the anaesthetist will give you a general anaesthetic.

The area where the needle is to be inserted will be cleaned with antiseptic fluid and covered with a sterile drape (towel). A needle is placed into the renal tumour through the skin using image guidance (ultrasound, CT or MRI scan). The needle produces heat which travels a few centimetres and destroys the tumour and an approximately one centimetre margin of kidney surrounding the tumour. By ablating this small area of surrounding tumour, we can ensure that the tumour has been destroyed and there is a lower risk of the tumour recurring (growing back). Most of the normal renal tissue is not affected.

Microwave ablation can take approximately one hour to complete but may take longer if more than one tumour needs treating.

What happens afterwards?

You will then recover from the general anaesthetic and return to the ward.

On the ward you will be able to drink water. Once you are able to tolerate good amounts of fluids and do not feel sick, we will give you something light to eat.

We will also give you regular pain relief. You will rest in your bed for at least four hours and will stay overnight in hospital. Most patients go home the following day. You should expect to be off work for one week.

You will have a follow up scan two to three months after the procedure. This will be requested by the urology team and you will receive a letter of appointment in the post from imaging.

Is there anything I need to watch out for at home?

One in four patients may develop flu-like symptoms (post-ablation syndrome) two to three days after the procedure. However, if your temperature suddenly rises or you feel unwell please contact the urology specialist nurse or, alternatively, go to your nearest A&E. Pain should be controlled with simple analgesics such as paracetamol and ibuprofen and should gradually improve over a few days. You may need to see your GP or attend A&E if you need stronger pain relief.

When can I get back to my normal routine?

This depends on the individual but most patients recover within one week. However, we recommend that you avoid heavy lifting and strenuous exercise for the first 48 hours after your appointment.

How do I get to the hospital?

Please visit the Trust's website for more information about travelling to our hospitals:
www.imperial.nhs.uk/our-locations

Contact details

Please contact the urology clinical nurse specialist if you have any queries or concerns:

Uro oncology clinical nurse (kidney) specialist, outpatients department, third floor, North Wing, Charing Cross Hospital, Fulham Palace Road, London W6 8RF

Email: [urology-cns @nhs.net](mailto:urology-cns@nhs.net)

Alternatively please contact the Macmillan Navigator Service on **020 3313 0303**

What if I cannot keep my appointment?

Please contact us as soon as possible. We can then offer this date to another patient and agree a new appointment date and time with you. You will find the appropriate telephone number on your appointment letter.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Imaging department
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