

Imaging department

Having a microwave ablation of liver tumours

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 liver tumours. It is not meant to replace the consultation 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 liver 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. Most of the normal liver 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:

- medicines such as aspirin, clopidogrel, ibuprofen, naproxen, indomethacin, ticagrelor
- medicines such as 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.

Patients having their procedure at **Hammersmith Hospital** will have a pre-operative assessment appointment before being admitted to hospital. Your medical history and any necessary clinical examinations, investigations and blood tests will be carried out.

What are the risks and benefits of having a microwave ablation?

The benefit of microwave ablation is that it is a safe procedure that can treat liver tumours without the need for major surgery. Microwave ablation can be an effective treatment for primary liver cancer or other cancers that have spread to the liver, or in some patients whose disease is unsuitable for surgical resection (when part of the liver is removed). It can also be used alongside other treatments such as chemotherapy.

Microwave ablation may be used repeatedly to treat recurrent liver 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.

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

- less than 1 per cent (1 in 100) risk of damage to the organs that lie next to the liver (gallbladder, stomach and colon) becoming damaged by the heat generated during the procedure
- less than 1 per cent (1 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
- less than 1 per cent (1 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 2-3 days after the ablation and can last for about 2-3 days. During this time, rest and drink lots of fluids

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 liver tumours, these include:

- alcohol injection
- radiofrequency ablation
- chemoembolisation
- surgery to remove liver tumours

Your doctor will be happy to discuss these options further with you.

What happens on the day of my procedure?

Patients having their procedure at **St Mary's Hospital** will be admitted to the liver ward the day before the procedure. Your medical history, clinical examination and any necessary investigations and blood tests will be carried out.

Patients having their procedure at **Hammersmith Hospital** will be admitted at 07.00 on the day of the procedure. You will have already had your pre-assessment visit 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 be taken into the procedure room and the anaesthetist will then give you a general anaesthetic.

The area where the needle will be inserted will be cleaned with antiseptic fluid and covered with a sterile drape (towel). A needle is placed into the liver 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 1 centimetre margin of liver surrounding the tumour. By ablating this small area of surrounding liver, 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 liver tissue is not affected.

Microwave ablation can take approximately 1 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 give you regular pain relief. You will rest in your bed for at least 4 hours and will stay overnight in hospital. Most patients go home the following day. You should expect to be off work for 1 week.

You will have a follow up scan 2-3 months after the procedure.

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

1 in 4 patients may develop flu-like symptoms (post-ablation syndrome) 2-3 days after the procedure. However, if your temperature suddenly rises or you feel unwell please contact the hepatobiliary specialist nurse, or alternatively, go to your nearest A&E.

When can I get back to my normal routine?

This depends on the individual, but most patients recover within 1 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 hepatobiliary specialist nurse if you have any queries or concerns on
020 3313 2019

Alternatively, please do not hesitate to contact our imaging departments:

- **Hammersmith Hospital:** Du Cane Road, London W12 0HS
Telephone: **020 3313 3389**
- **St Mary's Hospital:** Praed Street, London W2 1NY
Telephone: **020 3312 6418**

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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