

Patient Information Leaflet

Microwave ablation of liver lesions

Derriford Hospital
Derriford Road
Plymouth
PL6 8DH
Tel: 01752 202082
www.plymouthhospitals.nhs.uk



Aim of leaflet

This leaflet tells you about having the liver microwave ablation procedure. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you or the department which is going to perform it.



Referral and consent

The referring clinician should have discussed the reasons for this examination with you in the clinic and you should make sure that you understand these before attending. You will be referred to an Interventional Radiologist (IR) for this procedure. Interventional Radiologists are doctors who have trained and specialised in radiology and treatments using imaging guidance.

Before the procedure you will need to sign a consent form. This is a legal requirement and ensures that you are fully informed about your procedure.

If after discussion with your IR you do not want this procedure then you can decide against it. If the IR feels that your condition has changed or that your symptoms do not require such a procedure, then he/she will explain this to you and communicate with the referring clinician. You will return to your referring clinician for review.

At all times the IR and the referring clinician will be acting in your best interests.



What is a liver microwave ablation?

Microwave ablation is a minimally invasive treatment for primary tumours of the liver such as hepatocellular carcinoma or tumours that have spread to the liver, most frequently metastases from colorectal malignancy.

Microwave ablation (MWA) destroys liver tumours using heat generated by microwave energy. At Derriford Hospital, microwave ablation is performed by an Interventional Radiologists who will insert a thin microwave antenna needle into the tumour under ultrasound or CT guidance, usually under general anaesthetic.

The microwave antenna generates heat which destroys (ablates) a carefully calculated zone of tissue that includes the tumour cells and a small margin of normal liver around the tumour. Once the antenna is in place, the ablation usually takes less than 10 minutes. The whole procedure will on average last approximately 1-2 hours. A biopsy (obtaining a small sample of abnormal cells) may be performed immediately prior to the ablation in some cases. Occasionally more than one ablation will need to be carried out depending on the size of the tumour.

Pre-procedure assessment

Having been seen by your referring clinician you will receive an appointment to see an IR to discuss the procedure in more detail and to decide whether you wish to go ahead with the treatment. An ultrasound



examination may be performed during this meeting and the radiologist will confirm whether you are suitable for the procedure.

If you wish to go ahead, you will also receive an appointment for pre-operative assessment where the anaesthetic team will ensure that you are well enough to undergo this procedure under general anaesthetic. You may expect to have blood tests and non-invasive tests such as heart rate, blood pressure, and in some cases an ECG (electrocardiogram). You will be given instructions on eating and drinking prior to the procedure.

What are the potential complications of the procedure?

This procedure does carry some risks attached to it. The commonest complication is the post ablation syndrome which is a flu like illness that can last 3-7 days following the procedure.

The more serious risks include:

- Bleeding
- Bile leak from the needle insertion site
- Lung injury, pneumothorax and pleural effusion
- Heat injury to surrounding structures such as bowel and gall bladder
- Infection and abscess formation

The IR will explain and discuss these risks with you as they can vary depending on the lesion location. Overall the risk of a serious complication is quite low



and whilst it would be difficult to give a precise figure the risk of a serious complication is probably in the range of 1-5%. The risk of death from this procedure is very low and probably less than 0.5%.

What should I expect to feel after the procedure?

Some discomfort following this procedure is to be anticipated. This is usually at the site of microwave needle insertion but you may also feel chest pain on deep inspiration or shoulder tip pain on the side of the ablation. This is most often well controlled with oral analgesia and most patients leave the hospital the day after the procedure. Slight fever and feeling tired is also to be expected for a few days following the procedure. This is the normal response to the ablation as your body will be trying to clear the dead tumour cells.

What happens after the procedure?

You will recover on a general hospital ward (usually Planned Investigations Unit) and it is expected that you will leave the hospital one day following the procedure after review by the Interventional Radiologist and the referring team. Whilst in the hospital you may be given intravenous fluids and appropriate analgesia. You may feel a little weak and if working should expect to take at least a week of work. The follow up will be arranged by the hepatology team and all patients will have a follow up CT scan approximately 4 weeks following the procedure.



When to seek medical advice?

Please seek medical advice by contacting the hepatology nurse specialists or Interventional Radiology (Monday to Friday 9am-5pm) if you experience any of the following after discharge:

- Severe pain (not adequately controlled with oral analgesia)
- Fever
- Shortness of breath
- Feeling unwell

Hepatology Nurse Specialist: 01752 431321

Hepatology Nurses Secretary: 01752 431320

Interventional Radiology Secretary: 01752 439827

If you develop serious medical problems outside the normal working hours please contact emergency services or attend the local Emergency Department.



Additional Information

Bus services:

There are regular bus services to Derriford Hospital.
Please contact

www.citybus.co.uk

www.firstgroup.com

www.travelinesw.com

Car parking:

Hospital car parking is available to all patients and visitors. Spaces are limited so please allow plenty of time to locate a car parking space. A charge is payable.

Park & Ride:

Buses (number PR3) run from the George Junction Park & Ride Mon-Fri (except Bank Holidays) every 20 minutes between the hours of 06:45 and 19:05. The last bus leaves the hospital at 19:14.

Patient Transport:

For patients unable to use private or public transport please contact TAPS 0845 0539100





**This leaflet is available in large print and other
formats and languages.
Contact: Interventional Radiology Department
Tel: 01752 439827**

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