

Information for patients



Kidney Tumour Cryoablation

Leading Interventional Oncology Network

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What is cryoablation?

Your doctor has recommended cryoablation to you as treatment for your kidney tumour. Cryoablation is a technique that destroys tissue, in this case through freezing. In order to produce the freeze, needles are placed into the kidney, using image guidance (e.g. ultrasound & CT scanning). A mixture of gases is then used to freeze and thaw the tips of the needles. Temperatures lower than -100 degrees Celsius are produced but this only travels a small distance (a few centimetres) within your body. Most of the normal kidney tissue is not affected.

Cryoablation has been available since the late 1990s and has been used successfully in Europe and America. It is now being used increasingly in England, and is now available privately.

What are the benefits of cryoablation?

Cryoablation can be an effective treatment for primary kidney cancers. If necessary the procedure can be repeated. You can resume your normal activities within a few days.

How is it done?

Cryoablation is performed in The Radiology Department and is performed under general anaesthetic.

One of the Consultant Radiologists will locate the abnormality in your kidney using ultrasound and the CT scanner. They will then guide the ablation needles into the correct area of your kidney before freezing the tumour to destroy it. Multiple needles will need to be inserted during the same procedure to treat your entire tumour. The body then absorbs this treated area, leaving a scar at the site of the tumour.

Are there any risks?

One of the doctors looking after you will have proposed you undergo this procedure. Thousands of cryoablations have been performed worldwide, however there are unfortunately always risks involved but these will have been minimised by making sure the procedure is appropriate in your circumstances.

The risks are:

- Post-ablation syndrome, which occurs in about 1 in 4 patients. This is a flu-like illness that happens 3-5 days after treatment, and lasts for a few days at most.
- Bleeding from the needle insertion site
- Kidney infection after the treatment
- Injury to the kidney

The radiologist who discusses the procedure with you will also give you an estimate of the risks. In general we quote the risk of a serious complication from cryoablation as 2-3 patients in 100 (2-3%) and the risk of death as less than 1 in 200 (less than 0.5%).

Are there alternative treatments?

Surgery is an alternative either with removal of the whole kidney (nephrectomy) or the tumour and part of the kidney (partial nephrectomy). Studies show that cryoablation and laparoscopic partial nephrectomy (LPN) are both very effective at treating kidney cancer, but that cryoablation takes less time, involves less loss of blood and a lower risk of complications.

It may be that your doctors have decided that you are not well enough to undergo surgery and cryoablation that is less invasive is a better alternative.

There are also other forms of ablation therapy such as radiofrequency and microwave. We can tell you about these.

Pre-operative assessment

We will ask you to come for a pre-operative assessment appointment. At this appointment we will ask you about your medical history and carry out any necessary clinical examinations and investigations to make sure you are well enough for the procedure to go ahead. You may need an ECG and a blood test. We will check the functioning of your kidneys. Your Consultant Radiologist will explain the procedure during your outpatient appointment and the nursing team will give you instructions about eating and drinking before your procedure. This is a good opportunity for you to ask us any questions about the procedure.

We will also give you written information that tells you about eating and drinking before your procedure, what to bring with you, the admission process and what will happen on the day.

The nurse will ask you about any medicines or tablets you are taking – either prescribed by a doctor or bought over the counter in a pharmacy. It helps us if you bring written details of your medicines with you to this appointment. We will tell you whether you need to stop taking any of your medicines before your procedure. When you come into the hospital for the procedure itself, please bring all your actual medicines with you.

Consent

We will give you a copy of the consent form. Please read this carefully. If you have any further questions, please ask a member of the surgical team on the day of your procedure before signing the consent form.

Admission and the day of your procedure

The **consultant radiologist** will see you to talk to you about your procedure and to answer any remaining questions you may have. Once you have understood all the information, including the benefits and the risk of complications, the radiologist will ask you to sign a consent form to give your agreement for the procedure to go ahead.

The **anaesthetist** will also see you before the procedure and talk to you about the sedation or anaesthetic. If you have any questions or concerns, this is the time to ask.

Who will perform the procedure?

Ablation is performed by a **LION Consultant Radiologist** who has a particular expertise in guiding needles using imaging. There are several consultant radiologists, members of the LION, who deliver this treatment. The team works with other doctors involved in your care.

How long will the procedure take?

This is variable depending on the complexity and size of the tumour. Generally the ablation itself will take 60 to 90 minutes but on occasion it may take longer.

What happens after the treatment?

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 pressure is stable, you will be taken to the ward for an overnight stay.

On the ward, you will gradually be allowed to drink water. If you are able to tolerate good amounts and don't feel sick, then you will be able to have a hot drink and something light to eat.

You may have an intravenous drip in your arm, which will be removed before you go home. Your nurse will offer you pain relief to help with any discomfort. By the next day most people require painkillers no stronger than paracetamol. When you get out of bed for the first time a nurse will need to be with you in case you feel faint or dizzy.

The day after treatment, you will have another CT scan of the treated region and will be reviewed by the team before discharge.

What happens when I go home?

Normally, you will be able to go home the day after your procedure. Before you go home we will discuss follow-up with you. You should expect to be off work for 1 week after the treatment.

You will have an appointment to come back into clinic approximately 4 weeks after the procedure to check that you are well and to have a further scan.

You will receive follow-up CT or MRI appointments at 6 and 12 months after treatment, and then yearly thereafter.

Signs to look out for:

- shortness of breath or pain on breathing in
- pain that is not controlled by regular painkillers (e.g. Paracetamol)
- increasing fever or pain more than 1 week after the procedure
- blood in the urine that does not settle but itself

You will be given the contact number of your treating consultant, whom you should contact directly if you experience any of the above symptoms.

Contact details

In working hours (09:00-17:00) LION may be contacted via the medical secretaries:

Email: Lion@hcahealthcare.co.uk

or

Telephone: 0207 908 3756

or

Fax: 0207 908 3773

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Space for notes and questions

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