NHS
University Hospitals of Liverpool Group

Patient information

Cryoablation

Interventional Radiology Imaging

This leaflet tells you about the procedure known as cryoablation, 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 a discussion.

You should have plenty of time to discuss the situation with your consultant and the radiologist who will be doing the procedure, and perhaps even your own family doctor (GP).

You should have had sufficient explanation before you sign the consent form.

What is cryoablation?

Cryoablation is a way of destroying tumour tissue by passing a probe through the skin into the organ containing the tumour. By passing cryoablation probes through the tumour, the tumour and adjacent tissue freezes and the cells die. The benefits of this procedure are that more than one area of tumour can be treated at the same time. Sometimes it may be necessary to have a second or third procedure at a later date if it is not possible to treat the entire tumour in one go.

Why do I need it?

Other tests that you probably have had performed, such as an ultrasound scan or a CT scan, will have shown there is an area of tumour inside your body. The procedure will slow the progression of the tumour and in some cases may be curative. You may have already had some surgery to try to treat the tumour or your surgeon may think that a big operation is too dangerous.

What are the benefits of having Cryoablation?

Avoids open surgery and scar. There are no stitches, only small puncture wounds are made in the skin and covered with a dressing.

You can usually go home on the following day.

There is less discomfort after the procedure compared with an operation.

What are the risks of having Cryoablation?

- If your kidney is being treated, then there is a risk of bleeding from the kidney. If the bleeding were to continue, then it is possible that you might need a blood transfusion. Very rarely, an operation or another radiological procedure is required to stop the bleeding.

- If the tumour is close to the lung, then it is possible that air can get into the space around the lung. This generally does not cause any real problem, but if it causes the lung to collapse, then the air will need to be drained, either with a needle, or else with a small tube, put in through the skin. The tube will need to be removed before you go home.
- Sometimes when the tumour tissue dies it can become infected and may form an abscess. If this happens, you may need to be treated with antibiotics or even need to have a small tube inserted into the abscess.
- There is a very small risk that the ice from the probes can pass back along the probe and cause a burn or frostbite to the skin.

If you are worried about any of these risks, please speak to your consultant or a member of their team.

Are there any alternatives to this treatment?

- The alternatives include surveillance or surgery. However, if the lesion grows beyond a certain size during surveillance, cryoablation may no longer be suitable and you will need to be treated with surgery.
- Surgery is an alternative to cryoablation i.e. nephrectomy (removing the entire kidney) or partial nephrectomy (removing part of the kidney). This is usually associated to higher risk and longer recovery time.

What would happen if I choose not to have this treatment?

- You can be considered for surgery or surveillance depending on the size, position and your other medical problems.

Getting ready for your Cryoablation

You will need to be an in-patient in the hospital.

- You will probably have had some blood tests performed beforehand, to check that you do not have an increased risk of bleeding.
- You will be asked not to eat for four hours beforehand, though you may be allowed to drink some water.
- You will be asked to put on a hospital gown.

If you have any allergies, you must let your doctor know.

The procedure

Generally this takes place in the X-ray department, either in the CT scanning room, or in Interventional theatres, with an ultrasound machine.

The procedure is performed under general anaesthesia.

The radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and you may have some of your body covered with a theatre towel. The radiologist will use the CT scanner to decide on the most suitable point for inserting the probe. Then your skin will be anaesthetised with local anaesthetic so that it is more comfortable when you wake up. The probe is then inserted into the abnormal tissue.

Will it hurt?

The procedure is performed using a general anaesthetic so you will be asleep throughout. When you wake up you may feel uncomfortable, but painkillers and sedation will be given to you to control the pain. There will be a nurse, and anaesthetist, standing next to you and looking after you. Your abdomen may feel a bit sore for a day or two after the treatment.

How long will it take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. It may be over in 60 minutes or may take up to 120 minutes.

After the procedure

Recovery - Nursing staff will check your blood pressure, pulse, and procedure site in the recovery area. The length of time this is done for depends on each patient/procedure.

Discharge You will be admitted to a ward for observation overnight. Usually, you will be discharged the next day after review by the Radiology doctor. You will usually need an escort home from hospital. This can be discussed with nurse when they ring you.

If you are a ward patient, you will be returned to the ward for further observation by the ward staff.

Your wound small 2-3mm incision(s) over area to be treated. Small dressing(s) applied.

Back to work/driving/normal activities We would usually recommend not to drive for 24 hours post procedure. This can be discussed with nurse when they ring you.

Results

Usually the radiologist will send a brief report back to the ward immediately after the procedure. This report is mainly to inform the ward staff about the details of the procedure, and whether or not there are any specific observations that need to be performed.

A full report, following close inspection of the X-rays produced during the procedure, usually takes a few days to reach the doctors on the ward. Your GP will receive a letter to let them know you have been treated.

Further Appointments

Follow-up: If any further appointments are needed, you will be contacted by the team that sent you for the procedure.

Unexpected problems or concerns: Ring the Interventional Radiology department if related to this procedure (RLUH – 0151 706 2748, AUH – 0151 529 2925).

If you think you need **urgent** medical assistance please contact NHS111 or attend your local A&E Department.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information
Radiology Department
Tel: 0151 706 2744
Text phone number: 18001 0151 706 2744

WWW.NICE.org

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