

Percutaneous Cryoablation for Your Kidney Tumor

We are recommending that you have a procedure called cryoablation to treat your kidney tumor(s). Your urologist and an interventional radiologist have decided it is a safe and good option for you.

What is cryoablation?

Cryoablation is a minimally invasive treatment in which extreme cold (cryo) is used to freeze and destroy (ablate) tissue. When cryoablation is used to treat a kidney tumor, the extreme cold essentially destroys the tumor.

What happens during cryoablation?

Cryoablation is done through the skin (percutaneously). During the procedure, your provider will insert probes through your skin and directly into the kidney tumor. The number of probes that will be used depends on the size of the tumor. Imaging methods allow your provider to see inside your body and direct the probes to the tumor.

When all the probes are in place, pressurized gas is then pumped out through the tip of the needle at the end of each probe. The gas expands then cools. When it cools, the gas turns into an “ice ball.” The ice ball engulfs the tumor and freezes it. This destroys the tumor.

Preparing for surgery

Your provider team will talk with you in detail about your surgery and what you need to do to prepare. Here are some of the things you need to know:

Tumor biopsy

If you have not yet had a biopsy on your tumor, a biopsy may be done either before your cryoablation or after. Your overall medical and physical condition will determine if the biopsy and cryoablation are done at two different times.

Anesthesia appointment

An appointment with our anesthesia team is something you must do before your cryoablation procedure date. We will help you set up this appointment in advance.

Arrange a ride

You must have someone who can drive you home from the hospital after your surgery. You will not be allowed to leave on your own.

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Your medicines

- Seven days before your procedure, stop taking all NSAIDs, including ibuprofen (Motrin), aspirin, and naproxen (Alleve).
- Seven days before your procedure, stop taking all herbals and supplements, including garlic and fish oil.
- If you take ASA or plavix, ask your primary physician if it is OK for you to stop taking this medicine 7 days before your procedure.
- If you are on Coumadin:
 - you need to stop taking Coumadin 5 days before your procedure
 - you need to talk to the doctor who prescribed the Coumadin for you and ask if you need to have lovenox shots while you are not taking your coumadin. If you do need lovenox shots, you should not use a shot the night before or the morning of your procedure. Our office will call your physician to help facilitate this.

The night and morning before your surgery

- Do not eat or drink for 8 hours before the surgery.
- If there are regular medicines you need to take, it is OK for you to take them with a very small sip of water. Do not take any medicines you have been asked to stop.

Your surgery

- When you arrive for your surgery, our anesthesia team and the interventional radiologist will first examine you in the radiology outpatient unit.
- You will then be taken to the procedure room.
- You will be given general anesthesia. This will make you go to sleep. You will be under anesthesia for the entire surgery. This means you will sleep through the procedure and you won't feel anything that is happening.
- After your anesthesia is given and you fall asleep, we will place a catheter into your bladder to monitor your urine for bleeding.
- The entire surgery will take 1 to 2 hours.

Your hospital stay

You will stay in the hospital overnight. This will allow us to watch you closely. The morning after your surgery, the urology team and the interventional radiologist will evaluate you. They will want to make sure that you are eating, drinking, and urinating comfortably before you leave the hospital.

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After surgery

Side effects

- You may have a sore throat. This is caused by the tube that is put down your throat during general anesthesia. This will go away on its own.
- You may have a bruise (hematoma) around the treated kidney. This is common and will go away on its own.
- You may have some blood in your urine for up to 2 days after surgery. Don't worry; this is normal.
- Most patients have very little discomfort or pain after the procedure.

Activity

For 1 week after surgery:

- avoid all strenuous activity
- do not lift more than 5 pounds.

After 1 week, you may gradually go back to your regular activities.

Following up

When you leave the hospital after surgery, the urologist will give you specific instructions for your follow-up appointment. You will have an appointment to take images of your kidney. This will usually happen about 6 to 8 weeks after surgery.

Call your interventional radiologist at (615) 343-9206 if:

- you have a fever over 100.5°F (38.05°C)
- you have bleeding, swelling, or drainage at the incision site
- you have pain at the incision site that does not get better when you take pain medicine
- you see blood in your urine and it's 2 or more days after your surgery.

Who can I contact with questions?

For any problems, concerns, or questions, call Interventional Oncology at (615) 343-9206.

After hours (between 3:30 p.m. and 7:00 a.m. on weekdays, and on weekends and holidays), call (615) 322-5000. Ask for the Interventional Radiology Fellow on call.

If you have an emergency, go to the nearest Emergency Room or call 9-1-1.