

Procedures/Diagnostic Tests

Radiofrequency Tumor Ablation

What is radiofrequency tumor ablation?

Radiofrequency tumor ablation uses heat created by radiofrequency current to destroy tissue.

The doctor uses CT and/or ultrasound pictures to guide a needle through the skin and into the tumor. Radiofrequency current is then delivered through the needle to the tumor, destroying the tumor.

After the procedure, only a small bandage (like a Band-Aid) is usually needed to cover the needle insertion site. People usually recover quickly from this procedure, and complications are rare.

Preparation

If you are in the hospital, your health care team will help you prepare for this procedure. Preparation may include taking antibiotics or receiving intravenous fluids.

Eat nothing by mouth after midnight the night before the procedure.

Procedure

- ▶ You will be taken from your hospital room to the Radiology Department.
- ▶ A member of your health care team may ask you about your medical history. He or she may also check your blood pressure, pulse and body temperature.
- ▶ You will then be taken to an ultrasound or CT (computed tomography) exam room. There, you will receive intravenous sedation or general anesthesia.
- ▶ Your skin will be disinfected with liquid that contains iodine.
- ▶ Grounding electrode pads will be placed on each thigh. These pads spread electricity onto a larger surface area to lessen the chance of burns to your skin.
- ▶ A surgeon or interventional radiologist* will do the ablation.

Locating the tumor

- ▶ First, the doctor will use ultrasound and CT scans to locate the tumor. Then, the doctor will make a small incision on the skin over the tumor.
- ▶ The doctor will place a needle through the incision and use ultrasound and/or CT scans to guide the needle into the tumor.

*An interventional radiologist uses images to look inside the body and treat disease.

Ablating the tumor

- ▶ Radiofrequency energy will be passed from the needle tip into the tumor to destroy it.
- ▶ Throughout your treatment, the doctor will monitor your treatment with ultrasound and/or CT scans.

After the procedure

- ▶ The doctor will put a bandage over the incision.
- ▶ You will be taken to a recovery area where your vital signs will be closely monitored as you gradually awaken.
- ▶ You may have pain relievers if you need them.
- ▶ When you fully awaken, you will be taken to your hospital room.

Discomfort

- ▶ You may feel nauseated from the anesthesia.
- ▶ You may feel discomfort at the tumor site. This is common and can be eased by pain relievers.
- ▶ You may feel pain in another part of your body, such as the shoulder, after this procedure.

Medications

- ▶ When you are discharged, you may be given a prescription for pain medicine, or you may be instructed to take a non-aspirin pain reliever for mild discomfort.
- ▶ You may be given a prescription for an antibiotic to take when you are home.

Activity

- ▶ When you are back in your hospital room, you may want to relax during the rest of the day.
- ▶ Once you are home, you may do your regular activities, *but avoid strenuous activity for 1 week.*

Bandage

You may remove the bandage from the incision site 24 hours after the procedure.

Diet

You may return to your regular diet. Drink plenty of fluids to help your body get rid of the destroyed tissue.

Side effects

One-third of the people who have this procedure feel mild, flu-like symptoms with low-grade fever and muscle aches. This may last 3 to 5 days after the procedure.

If you feel hot, take your temperature. Report fevers above 100 degrees Fahrenheit (37.8 degrees Celsius) to your doctor.

Risks of radiofrequency tumor ablation

Radiofrequency tumor ablation is an operation that has medical risks similar to those for surgery. Some of these risks include:

- ▶ Pain
- ▶ Internal bleeding
- ▶ Infection
- ▶ Temporary numbness, tingling, and nerve irritation
- ▶ Bile leakage
- ▶ Damage to the stomach, bowel, gallbladder, diaphragm, or lung
- ▶ Pneumothorax (collapsed lung)—air escapes from the lungs but stays in the chest cavity
- ▶ Skin burns from the grounding electrode pads .

(If skin burns require treatment, this will be given at the time of your ablation.)

- ▶ Ureteric stricture—a narrowing of the ureter

Any of these complications may require hospitalization, re-admission, and possibly surgery. We will discuss your questions and concerns before treatment.

When to contact your health care provider or seek medical help

Contact your health care provider or seek medical attention if you experience any of the following:

- ▶ Bleeding or swelling at the incision site
- ▶ Pain not relieved by a non-aspirin pain reliever
- ▶ A temperature of 100 degrees Fahrenheit (37.8 degrees Celsius) or greater
- ▶ Dizziness or light-headedness
- ▶ Shortness of breath
- ▶ Any other change that concerns you

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Questions about the Clinical Center?

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4/08

