

## Procedures/Diagnostic Tests: Interventional Radiology

### *Percutaneous radiofrequency, ultrasound, or cryoablation*

You are scheduled for a CT (computed tomography) guided radiofrequency, ultrasound or cryoablation procedure. “Percutaneous” means through the skin; “radiofrequency,” “ultrasound,” “microwave” or “cryo” describe types of sound waves or freezing. “Ablation” means to destroy.

This procedure will reduce the size of or destroy a tumor, mass, or lesion.

Using CT and ultrasound guidance, the radiologist will place a needle-like probe through your skin directly into the tumor, mass, or lesion. Depending on the size of the tumor, mass, or lesion, the probe may be moved through another area of your skin to improve the success of your treatment. This procedure is not surgery. But like all procedures, complications may occur and may include bleeding, infection or pain.

#### **Preparation**

What your doctor or health care provider will need to do or place orders for

- A History and Physical (“H&P”) to be written no more than 30 days before the procedure
- Blood work including a “CBC,” “Acute Care Panel” and “Coags” within 7 days of the procedure

What you will need to do

- If you take aspirin, ibuprofen (Motrin), naproxen (Aleve) or blood-thinning medicines, ask your doctor at least a week before the procedure if you should continue taking them.
- Please do not eat anything after midnight on the day of the procedure.
- **Please ask your doctor** if you may drink a sip of clear liquids such as water, clear tea, or black coffee up to 2 hours before your procedure,
- **Please ask your doctor** if you should take your regular medications, at their usual time, with a sip of water before your procedure.

During the procedure, the radiologist may give you contrast dye through an intravenous catheter. This dye helps the radiologist see your blood vessels on x-rays so that he or she can place the catheter.

**If you are allergic to I.V. contrast, you may need to take some medications before the procedure. These medications will enable you to receive the I.V. contrast safely. Your doctor will probably ask you to take these medications several times during the day before the procedure, often starting 13 hours before the procedure.**

**You may be asked to take these medications on one of these schedules:**

- Prednisone by mouth, 13 hours before the procedure
- Prednisone by mouth, 7 hours before the procedure plus prednisone and benadryl (diphenhydramine) by mouth 1 hour before the procedure
- Prednisone and Benadryl (diphenhydramine) by mouth 1 hour before the procedure

**Note for patients with diabetes:** If you take a medication for diabetes made with metformin, you must stop this medication for 48 hours **after** the procedure, and have a BUN/creatinine (blood work) to assess your kidney function BEFORE restarting this medicine. Your doctor will talk to you about the need to take other diabetes medications.

You may meet with the anesthesia team in the pre-anesthesia clinic before your procedure. This meeting may be scheduled the evening before the ablation.

### **Immediately before the procedure**

- When you arrive in Interventional Radiology, the radiologist and nurse will discuss the procedure with you and answer your questions.
- You will be asked to sign a consent form giving us permission to perform the procedure. Then, you will change into a hospital gown, if you are not already in one.

### **During the procedure**

- The radiologist, radiology nurses, technologists, and the anesthesia team stay with you throughout your procedure to check your health condition constantly.
- After you arrive in the procedure room, the anesthesiologist and staff members will attach monitors to watch your heart and lung function (vital signs) throughout the procedure. These monitors will include EKG, pulse oximetry, blood pressure cuff, and possibly other equipment depending on your needs).
- The anesthesiologist will give you sedation or anesthesia.
- The interventional radiology staff members clean your skin with antiseptic soap to decrease risk of infection.
- You may receive antibiotics during the procedure.
- After numbing the area, the radiologist will use CT and ultrasound to place the needle-like probe through the skin directly into the tumor, mass or lesion.

### **After the procedure**

- You will have small dressings or bandages placed over the puncture site(s).
- You will go to the PACU (recovery area) while you wake up from anesthesia. When you are awake, you will return to your room.
- You will remain on bed rest for several hours.
- If you feel pain let your nurse know. You will have medication prescribed to take, as needed.
- You may feel drowsy or sleepy for several hours after the procedure.

### **After you return to your room**

- If you have bleeding from the site, place your hand firmly over the site and call your nurse.
- Slowly resume your regular diet, unless your primary team tells you otherwise.
- Limit your physical activity as directed by the radiologist or your primary care team.
- Lift nothing heavier than 10 pounds for a week, or as directed by your primary care team.
- You may remove your dressings/bandages after 24 hours.
- You may shower in 24 hours, but do not soak the site for 48 hours, unless your primary care team tells you otherwise.
- Ask your primary care team when to you can resume taking aspirin, ibuprophen (Motrin), naproxen (Aleve) or blood-thinning medications.

**Note for Patients who have no history of heart failure or kidney problems:**  
Drink 8 to 10, 8-ounce cups of fluid per day for several days to help your body rid itself of the I.V. contrast you received for your procedure.

### Special instructions

**After discharge, call your primary care team if you have these symptoms:**

- Temperature or chills as instructed by your clinic (often 38.5 C or 101 F).
- Redness, swelling or excessive bleeding or drainage at the puncture site(s).
- Unrelieved or increasing pain.
- Shortness of breath/difficulty breathing.

If you have routine questions or concerns, contact your primary care team.

**If you have symptoms that you feel are significant or severe and you cannot contact your primary care team, call 911 or go to your nearest Emergency Room. If possible, bring this sheet with you and give it to the Emergency Room staff.**

NIH Clinic/Physician \_\_\_\_\_ Phone \_\_\_\_\_

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