

*If you have any questions or concerns, please ask your physician or nurse.*

## Ablation of Solid Tumors

Radiofrequency ablation (RFA) or microwave ablation uses heat to kill cancer cells. Guided by ultrasound and/or computed tomography (CT), a needle is inserted through the skin and into the tumor. Once the needle is in place, radiofrequency (RF) or microwave energy is used to destroy the tumor. This treatment:

- Does not affect healthy tissue.
- Allows for more than 1 tumor to be treated at the same time, depending on the location of the tumors.
- May be repeated as needed at a later time.
- Can be used with other cancer treatment options.

Ablation is done in the Interventional Radiology (IR) Department and takes about 2 hours. Most patients return to their normal activities within a few days.

This treatment may be used for lung, liver, kidney and some other cancers:

- When surgery is not an option.
- To kill tumor cells as part of a combination treatment with chemotherapy.
- To help ease cancer pain and discomfort.

Ablation can also be used when surgery is not an option due to medical conditions of the patient or when tumors have:

- Not responded to chemotherapy.
- Come back after cancer treatment.
- Spread to other parts of the body (metastasis).

### **Benefits and risks**

As with any procedure, there are risks. They can include bleeding and infection. Your physician will discuss all risks and benefits of this procedure with you.

### **Preparing at home**

#### **7 days before your procedure**

- Do not take any of the following medications:
  - Aspirin or products containing aspirin.
  - Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Motrin®, Advil®) and naproxen (Aleve®).

- Blood thinners such as clopidogrel (Plavix®) and warfarin (Coumadin®).
- Multivitamins, vitamin E, vitamin D, fish oil and vitamin C.
- Take other medications as directed by your physician.
- Arrange for a responsible adult to assist you in getting home safely after your procedure.

### ***Day of your procedure***

- Do not have anything to eat or drink after midnight before your procedure. This includes gum, cough drops and candy.
- Take medications as directed with sips of water.

### ***What to bring to the hospital***

Please bring:

- Photo ID
- Medical insurance information and card
- Medicare card (for Medicare patients)
- List of allergies and current medicines (including the last time taken)

Please leave all valuables (jewelry, credit cards, money) at home. This includes bodypiercing jewelry and tongue studs. You may not wear any jewelry.

## **Before the procedure**

### ***Arrival***

Plan to arrive 1 1/2 hours before your ablation procedure. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions.

Come to the 4th floor of the Feinberg pavilion, 251 East Huron Street. After you check in with the receptionist, you and 1 member of your family will go to the prep and recovery area.

Here, staff will review your health history, medications and allergies. A short physical exam will be done. The IR physician will also talk with you about ways to keep you comfortable during the ablation procedure, including:

- Moderate sedation. IV (into the vein) medicine is given that will make you relaxed. Often, patients are sleepy, but are able to talk.
- General anesthesia. This often begins with IV medicine and includes breathing anesthetic gases mixed with oxygen through a face mask. You are not aware of the procedure or your surroundings. A breathing tube may be placed into your windpipe to help you breathe.

If you are receiving general anesthesia, you will also meet the anesthesiologist at this time. Before the ablation, be sure to tell the anesthesiologist about any crowns, bridges or loose teeth so that extra care can be taken.

After reviewing the procedure and asking any questions you may have, you will be asked to sign a written consent.

Once you change into a hospital gown, your blood pressure, heart rate and temperature will be taken. An IV (into the vein) line is placed in your arm or hand.

## **During the procedure**

Once in the procedure room, the nurse will help you lie on the exam table. A nurse, radiology technologist (tech) and a physician will all be in the room with you during the ablation procedure. You will be connected to heart and blood pressure monitors. The area around the site will be cleaned with a special soap that may feel cold. It will then be covered with sterile sheets. IV medicine to relax you or general anesthesia will be given.

Ultrasound and CT will be used to locate the tumor to be treated. Using these images, the physician will insert a needle through your skin to the tumor. Then the RF or microwave energy will be applied for about 10 to 15 minutes.

After the treatment, more images will be taken to check the tumor area.

## **After the procedure**

Patients who had moderate sedation will return to the IR prep and recovery area. If you had general anesthesia you will go to the Post-Anesthesia Recovery Unit (PACU) on the 5th floor.

The nurse will monitor your heart rate, blood pressure and the ablation site. Let the nurse know if you are having any pain or discomfort.

After 1 1/2 to 2 hours:

- Patients who received moderate sedation may go home.
- Patients who received general anesthesia will return to the IR Department before going home.

Before you are discharged, the nurse will review guidelines about your follow-up care. This may include prescriptions for antibiotics and pain medicine if needed.

All patients must have a responsible adult assist them in getting home safely.

## **At home**

### ***Diet***

You may resume your regular diet after discharge.

### ***Activity***

On the day you leave the hospital, limit your activities. Do not do physical exercise or heavy lifting (greater than 10 pounds) for the next 3 days. Do not drive for 24 hours after the procedure. You may resume all other daily activities 24 hours after the test.

Some patients may have flu-like symptoms (fever, chills) that appear 3 to 5 days after the ablation procedure. Most often these signs last about 5 to 10 days. These symptoms can be treated with acetaminophen (Tylenol®). **Do not** take any other products that contain acetaminophen while taking this medicine. Too much acetaminophen may damage your liver. **Do not** take more than 4,000 mg of acetaminophen per day. Many remedies contain acetaminophen. Be sure to read labels carefully.

Please call your Interventional Oncology nurse if:

- These symptoms occur and are not relieved by this medicine.
- You have any concerns or questions.

Call the IR Department right away at 312.926.5200 if you notice any of the following:

- Swelling or bleeding at the puncture site
- Fever higher than 101 degrees F
- Increasing redness, tenderness or discharge at the puncture site

## Follow-up care

About 4 to 6 weeks after the ablation procedure, you will:

- Have a test, such as CT or magnetic resonance imaging (MRI), to see if the treatment has been effective.
- Have blood tests.
- Be seen in the Interventional Oncology Clinic to review your test results.