## **Patient Education**

Radiology/Imaging Services



# Radiofrequency Ablation

Treatment for solid tumors

This handout explains what radiofrequency ablation is and what to expect when you have it done.

### Why do I need this treatment?

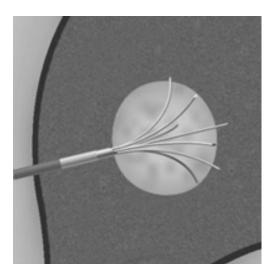
Your doctors have found a tumor (or tumors) in an organ in your body (usually the liver, kidney, or lung). There are many treatments for tumors, but certain ones work best for certain people.

Our team of experts believes that *ablation* (destruction) of the tumor with a heat probe is the best option for you at this time. In some cases, this treatment will destroy the tumor. After this, other options (such as chemotherapy, chemoembolization, or surgery) may also be advised for you.

## How does radiofrequency ablation work?

Heat can be used to destroy cancer cells. In radiofrequency ablation (RFA), a special probe is inserted through your skin into the tumor. The probe is guided into the tumor using CT scans or ultrasound (imaging techniques).

The probe has wires that pass into and near the tumor. An electric current is passed through the probe, which heats and destroys the cancer cells. Only the tumor itself and a small border of normal tissue around it will be destroyed. The scar that is formed will shrink over time.



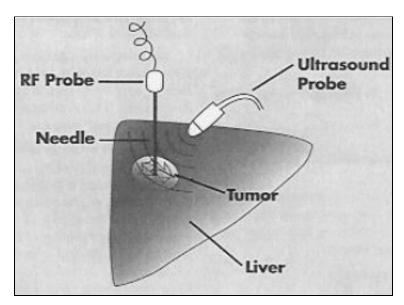
The heat probe with wires going into a tumor

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#### How is the procedure done?

The procedure is done by an *interventional radiologist*, a doctor who specializes in this type of procedure. Because you must be perfectly still during the treatment, we will give you *general anesthesia* to make you sleep.

- The procedure is done in an interventional radiology suite or a *computed tomography* (CT) scanner. It takes about 1 to 3 hours, depending on the size and number of tumors being treated.
- Once you are asleep, a radiology technologist will clean your skin around the area of your procedure with a special soap. Tell this person if you have any allergies. The technologist may need to shave some hair in the area where the doctor will be working.



#### A probe going into a liver tumor

- Your doctor will insert the probe into your tumor. The probe may need to be inserted more than once into the same tumor. If you have many tumors, several of them may be treated in 1 session.
- The probe is removed after the tumor is destroyed. The only sign of the treatment will be small quarter-inch nicks in your skin where the probes were placed.

## Are there any side effects?

- All invasive medical procedures involve some risk. Most patients do very well after this procedure, without any major problems.
- You may have some pain and bruising around the puncture site. This may last for several days.

- The most common serious problem is bleeding into the abdomen from the probe placement.
- Very rarely, an important organ (such as the bowel) can be injured. This can be very serious. Your doctor will take great care to avoid this kind of injury.

Your doctor will talk with you about these risks before the procedure. Please be sure that all of your questions and concerns are addressed.

#### **Before Your Procedure**

- You will need a pre-procedure assessment by the Anesthesia department. We will schedule this visit for you.
- A nurse coordinator will call you the afternoon before your procedure. If your procedure is on a Monday, the nurse will call you the Friday before. The nurse will give you final instructions and answer any questions you have.
- If you do not understand English well enough to understand these instructions or the details of the procedure, tell us as soon as possible. We will arrange for a hospital interpreter to assist you. A family member or friend may not interpret for you.
- You most likely will need blood tests done within 14 days of your procedure. Sometimes, we do this when you arrive for your procedure. We will let you know if we need a blood sample before that day.
- If you take any blood-thinning medicines (such as Coumadin, Lovenox, Fragmin, or Plavix), you may need to stop taking the medicine for 3 to 9 days before the procedure. You will receive instructions about this.
- If you have diabetes and take insulin or metformin (Glucophage), you will receive instructions about holding or adjusting your dose for the day of your procedure.

## **Day Before Your Procedure**

You must closely follow these instructions before your procedure:

- The day before the procedure, you may eat as usual.
- Starting **6 hours** before the procedure, you may only have *clear liquids* (liquid you can see through, such as water, Sprite, cranberry juice, weak tea)
- Starting **2 hours** before your procedure:
  - Take **nothing** at all by mouth.
  - If you must take medicines, take them with **only** a sip of water.
  - Do not take vitamins or other supplements. They can upset an empty stomach.

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> If you are an outpatient, you must have a responsible adult drive you home and stay with you the rest of the day. You may NOT drive yourself home or take a bus, taxi, or shuttle.

### On the Day of Your Procedure

- Take all of your other usual medicines on the day of the procedure. Do **not** skip them unless your doctor or nurse tells you to.
- Bring a list of all the medicines you take with you.
- Please plan to spend most of the day in the hospital. If there is a
  delay in getting your procedure started, it is usually because we
  need to treat other people with unexpected and urgent problems.
  Thank you for your patience if this occurs.
- Unless told otherwise, check in at Admitting on the 3rd (main) floor of the hospital. Admitting is to the right and behind the Information Desk in the lobby.
- A staff member will take you to a pre-procedure area. There, a nurse will do a health assessment. Your family or friend can be with you there.
- An IV line will be started. You will be given fluids and medicines through the IV.
- An interventional radiology doctor will talk with you about the procedure and ask you to sign a consent form if that has not already been done. You will be able to ask questions at that time.

#### **Your Procedure**

- The nurse will take you to the radiology suite. This nurse will be with you for the entire procedure.
- You will lie on a flat table that allows the doctor to see into your body with X-rays.
- Wires will be placed on your body. These allow us to monitor your heart rate.
- You will have a cuff around your arm. It will inflate from time to time to check your blood pressure.
- An anesthesiologist will give you medicine to make you sleep. This
  person will monitor you during the procedure and while you
  recover afterward.

#### **After Your Procedure**

- Once you are awake, you will go to a short-stay unit the hospital. A different nurse will monitor you there.
- You will most likely be able to eat and drink. Your family may visit you.
- When you are fully awake and are able to eat, use the restroom, and walk, you will be able to go home.
- Complications are rare. If they occur, we may need to keep you in the hospital overnight so that we can monitor you or treat you.
- Before you leave the hospital, your nurse will tell you what activities you can do, how to take care of your incision, and other important instructions.

#### When You Get Home

- Relax at home for the rest of the day. Make sure you have a family member, friend, or caregiver to help you. You may feel drowsy or have some short-term memory loss.
- For 24 hours, do **not**:
  - Drive a car or use machinery
  - Drink alcohol
  - Make important personal decisions or sign legal documents
  - Be responsible for the care of another person
- There is usually only mild to moderate pain after an ablation. If your doctor says it is OK for you to take acetaminophen (Tylenol), this should ease any discomfort you have. If your doctor expects you to have more severe pain, you will receive a prescription for a stronger pain medicine.
- Resume taking your medicines as soon as you start to eat. Take
   only the medicines that your doctors prescribed or approved.
- You may be given medicines to help prevent infection or stomach ulcers. Take all of your medicines as prescribed until they are gone.

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## **Questions?**

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

| Radiology/Imaging<br>Services:<br>206-598-6200 |  |  |  |  |
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#### When to Call

Call us **right away** if you have:

- Abdominal pain
- Fever higher than 101°F (38.3°C) or chills
- Dizziness
- Vomiting

#### Who to Call

| Interventional Radiology nurse coordinator  | 206-598-6897 |  |  |
|---|--------------|--|--|
| Procedure Scheduling  | 206-598-6209 |  |  |
| After hours (between 5 p.m. and 7 a.m.), and on weeke holidays  Ask for the Interventional Radiology Fellow on call |              |  |  |
| If You Have an Emergency  |              |  |  |
| Go directly to the nearest Emergency Room or call 9-1-1. Do not wait to contact one of our staff.                   |              |  |  |

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