Radiofrequency Ablation and Cryoablation (MSK patients)

Radiofrequency ablation (RFA) is a way to treat tumors inside and around bone. RFA is less invasive than surgery. Recovery is much faster. It is done by a radiologist who uses a CT scan for guidance. For your comfort, general anesthesia is used. When treating benign tumors, RFA is done on an outpatient basis, meaning you will be able to go home that same day. There are times when patients will need to stay for one night, most often when the treatment is for a malignant tumor. During the RFA, thin needles are placed through the skin into the tumor. Low level electric current is sent through the needles into the tumor. The heat from the current destroys the tumor tissue. Problems that follow are rare, but can include bleeding, infection, or damage to normal body parts nearby but will depend on where your tumor is. The treatment site is most often sore for a few days.

Cryoablation is another technique used to treat tumors inside and around bone. Thin needles are placed through the skin into the tumor. Extreme cold is sent through them to freeze the tumor tissue. Again, major problems after the treatment are rare, and are the same as those from RFA.

The radiologist will decide which treatment, RFA or cryoablation, will work best for you.

How to Prepare for Your Procedure

- You will need to complete a history and physical exam with your primary physician within 30 days of the procedure. This includes a chest x-ray and EKG (test that shows the heart's electrical activity).
- Depending on your health history, you may need to be evaluated in the anesthesia clinic prior to the procedure.
- The Nurse Coordinator will review your allergies and medications with you. Further instructions will be provided if you take blood thinners, such as Plavix or Coumadin; or, if you take medications for diabetes.
- You will be asked to stop taking aspirin seven days before the procedure.
- You will be asked to stop taking NSAIDS (non-steroidal antiinflammatory drugs) like Ibuprofen, Aleve, or Advil, two days prior to your procedure.
- You will be asked to stop all supplements seven days prior to your procedure.
- If you are started on antibiotics for an infection prior to the procedure call the Nurse Coordinator.
- If you have sleep apnea, you will need to bring your CPAP or BiPAP machine with you on the day of the procedure.
- Bring inhalers and any medications you will need with you.
- You may require an overnight stay in the hospital for observation.
- If you are sent home the same day as your procedure, you must have a friend or family member drive you to the hospital and take you home.
- Do not drive or make important personal or business decisions until the next day.
Tell us if you have a pacemaker, implanted defibrillator, metal prostheses (joint replacements), bile duct stents, or have had bile duct or bowel surgery before.

Do not eat or drink after midnight the night before your procedure.

The Procedure

On the day of the procedure, enter the hospital through the clinic entrance and take the Atrium elevators to the 3rd floor. Check in at the (G3/3) Radiology desk. You will be taken to a preparation area where you will change into a gown. An intravenous (IV) line will be placed in your vein by a nurse. The doctor will meet you in the prep room to explain the risks and benefits of the procedure; and, answer all your questions or concerns. After your questions have been answered, you will sign a consent form.

At this point, you will be brought to the procedure room on a cart. Cryoablation and Radiofrequency ablation are performed in a CT scan room. You will be transferred to a procedure table. An anesthesiologist will give you general anesthesia. Monitors will check your blood pressure, heart rate, and oxygen level. You will have an IV (intravenous) line placed in your arm for medicines and fluids. Your ablation will last 2 to 6 hours. A catheter might be placed in your bladder.

After the Procedure

When you wake up, you will be in the recovery room where the nurses will check your blood pressure, heart rate, temperature often. It is normal to have mild pain at the ablation site for more than a few hours. Pain medicine will be offered to you if needed. You may have mild nausea. When you are fully awake, you will be able to drink and eat. A nurse will call you several days after the procedure. The doctor will see you back in clinic in 2-3 weeks.

Care at Home

- Resume your normal diet, no alcohol for the first 24 hours after the procedure.
- Continue your medications for your pain.
- Restart NSAIDS (non-steroidal antiinflammatory drugs) like Ibuprofen, Aleve, or Advil, the day after your procedure.
- May use ice, not directly on the skin, for 20 minute intervals to help decrease swelling and discomfort.
- It is okay to shower, but no baths tubs, hot tubs, or swimming for at least 3 days.
- Two days after the procedure, you will need to remove the clear dressing and gauze.
- You will have steri strips (small white band aids) covering your incision. They should stay on for seven days. It is okay if they fall off on their own.

When to contact the Radiologist

You or one of your family members should call the doctor if any of these symptoms occur.

1. Severe pain around the site.
2. Nausea or vomiting that won’t go away.
3. If the area around the site becomes red, swollen, or more painful. You have a white or yellow pus or drainage from the site. You have a fever greater than 100.4°F or 38º C.
Phone Numbers

- Musculoskeletal Nurse Coordinator: (608) 263-6871
- After 5:00 p.m. or weekends, call (608) 263-6400. Please ask for the Bone Radiologist. Leave your name and phone number with the area code. The doctor will call you back.

If you live out of the area, call 1-800-323-8942.

- If you need to reschedule, call (608) 263-6871 between 8:00 a.m. to 5:00 p.m.
- If you are in need of immediate help, call 911 or go to the nearest Emergency Room.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 8/2016 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#6691.