Ablation

Ablation is a way of killing tumor cells without surgery or radiation therapy. The recovery from ablation is faster when compared to surgery and treatment is much shorter than radiation therapy.

Different types of energy can be used for ablation including radiofrequency, cryoablation, laser ablation and microwave. These types of energy get transmitted through a needle with an electrode aimed directly into the tumor(s) killing the cells in the area. This destroys the tumor or diseased tissue without harming as much healthy tissue as possible. Ablation can treat tumors in the liver, kidney, bone or lungs.

Risks

Ablation procedures are considered minimally invasive procedures. However, there are risks associated. These may include:

- Pain, which may require pain medicines
- Bleeding, which may require a blood transfusion
- Infection, which may require antibiotic medicines
- Tumors that are close to or within the lung can cause an air leak in the lungs (pneumothorax), which may require that you have a chest tube placed in your lungs. This tube is usually removed after 1 to 2 days.
- Injury to healthy tissue around the treatment area
 - Depending on the location of the tumor, the areas most commonly at risk of injury are the bowel, gallbladder, bile ducts, diaphragm and blood vessels.
 - If an injury occurs, you may need to stay longer in the hospital or have another procedure. This is rare.
- Nerve injury related to positioning during the procedure.

All risks are carefully considered before you are offered this procedure. Your doctor will discuss your risk with you in detail before you have the procedure.

Preparing for the Procedure

- The procedure will be performed in Interventional Radiology. Check your schedule for the exact time and location.
- You will be scheduled for lab tests to check your blood. Tests must be done within 7 days before the ablation procedure.



- **Do not** eat solid food **after midnight** before your procedure. This includes gum, candy and chewing tobacco.
- You may take your medicines approved by your doctor with sips of water.
- To prevent dehydration, you may have clear liquids such as water, apple juice, cranberry juice, grape juice (no orange juice), tea, or black coffee (nothing added) -up until 2 hours

before your procedure check in time. Stop all liquids at that time. Oral contrast, Boost Breeze, broth, and certain juices are **not** considered clear liquids. If you have any questions regarding what is considered a clear liquid, call Interventional Radiology at 713-745-4794.

- **Do not** bring valuables with you to the appointment. The hospital is not responsible for any lost valuables.
- Click on the link below for the latest information on MD Anderson's COVID precautions and patient visitation policy.
 - https://www.mdanderson.org/patients-family/becoming-our-patient/planning-for-care/coronavirus-protections.html
- Most patients will need to stay overnight in the hospital for observation.
- If your procedure is done as an outpatient, you must have a responsible adult present at discharge. This person will receive discharge instructions and will need to sign you out before you can go home. A taxi/ride share driver does not meet these criteria.

Precautions



- Tell the Interventional Radiology doctor if you:
 - Have any metal implants or pumps
 - Have a pacemaker or defibrillator in your heart
 - Are allergic to iodine
 - Have any other allergies
 - Weigh over 400 lbs.
 - Are taking any blood thinning medicines such as Coumadin[®], Plavix[®], Heparin, Lovenox[®] or aspirin

External Medical Devices

If you have an external medical device, you may be asked to remove the device at your procedure visit. Bring additional supplies and necessary medicines as needed to your appointment.

Examples of external medical devices are:

- On body injectors (OnPro®, Omnipod®, V-Go®)
- Continuous glucose monitors (FreeStyle Libre[®], Dexcom G4-6[®], Medtronic MiniMed[®], etc.)
- On body transmitters and monitors
- Medication pumps (CADD, insulin pumps)
- Wound care pumps (PICO 7)

Procedure

- Check your MyChart account for the exact time and location for your procedure.
- If you are unable to keep your appointment, call 713-745-4794 during regular business hours (Monday through Friday, 8 a.m. to 5 p.m.).
- An IV will be placed in a vein in your hand or arm. An IV is a small tube through which you receive medicine and fluids.
- You may be given sedation and anesthesia medicine for this procedure.
- Most patients receive general anesthesia during the ablation treatment. This type of

- anesthesia affects your entire body and will put you to sleep. Some patients receive deep conscious sedation during the treatment. This type of sedation makes you very relaxed, but you may respond to some pain felt.
- Your heart rate, breathing, and other vital signs are carefully monitored while you are under general anesthesia.
- During the procedure, you may have a CT scan, ultrasound or MRI scan.
- Using the images from the scans, the doctor will place a needle with the electrode into the tumor area and perform the ablation.
- After the ablation, a small bandage will be placed over the area.
- You will slowly wake up as the sedation or anesthesia wears off after surgery.
- The total procedure time takes between 1 to 3 hours, depending on the size and location of the tumor.
- After the procedure, you are taken to the recovery area for monitoring.
- Your doctor will let you know if you may need to stay overnight in the hospital for observation.
- It is recommended that you stay in the Houston area for at least 24 hours after you are discharged from the hospital. If you had a lung ablation and plan to fly home, the recommendation is to wait at least 3 to 5 days after your procedure or after the chest tube has been removed. Buy flight ticket that can be easily changed if there you need to stay in the Houston area for an extended time. The safest option would be to consider driving home, if feasible.
- Ask your doctor for more information about what to expect.

Discharge Instructions

- Many patients feel mild to no pain after the procedure. Others have mild pain requiring medicine.
- You may have soreness and tenderness at the puncture site. Some patients also have numbness or tingling.
- You may also feel fatigued for several weeks after the procedure depending on your treatment site.
- Most patients recover within 2 weeks after the procedure.
- The puncture site does not require any sutures or staples. You may remove the bandage the next day.
- You will receive an electronic questionnaire sent through MyChart or a phone call about 2 weeks after the procedure to see how you are feeling.
- About 4 to 6 weeks after the procedure, you may have a CT or MRI scan so your doctor can evaluate your condition.
- You may need to have additional scans in 3 and 6 months after the procedure.
- If needed, the area may be treated again.

When to Call the Doctor



Contact your doctor right away if you notice any of the following:

• Numbness, tingling, or a cold feeling in your leg or arm

- A fever of 101.4 °F (38 °C) or higher
- Redness, swelling, bleeding, or drainage from the site where the catheter was inserted

If you have questions or need more information, call:

Interventional Radiology

Monday through Friday, 8 a.m. to 5 p.m. 713-745-4794

After regular business hours or on the weekends, call the page operator at 713-792-2121 and ask for the Interventional Radiologist on call.