

# Radiofrequency Ablation for Spinal Tumors

## Overview

The spine is the most common site of cancer spreading to the bone.

At least 30%-40% of cancer patients complain of symptoms related to metastatic spinal tumors, often involving several levels of the spine.

The physician is able to shrink or destroy spinal tumors with the use of **radiofrequency ablation**.

## What is Radiofrequency Ablation?

Radiofrequency ablation (RFA) is a minimally invasive, image-guided procedure that uses heat to destroy cancer cells.

High-frequency electrical currents are passed through a flexible instrument which is introduced into the spine creating focal heat that destroys the tumor.

## What Happens During the Procedure?

RFA is typically done on an outpatient basis; you will not have to stay in the hospital. Medication is given to help you relax and make you sleepy. This is called conscious sedation. You will also be given a local anesthetic to numb the area where the instrument is inserted.

RFA is performed by an interventional radiologist. She or he will use imaging techniques such as a CT scan or fluoroscopy to precisely locate the area of treatment. Once located, the focal heat is applied.

The procedure typically takes less than 1 hour.

## How Do I Prepare?

Before surgery always tell your doctor or nurse if you:

- could be pregnant
- are taking any drugs – including over-the-counter medications, herbs, and supplements
- have been drinking a lot of alcohol
- have any allergies including local anesthetic or to contrast including iodine

In the days before the surgery

- Stop smoking
- You may be asked to stop taking drugs that make it hard for your blood to clot such as aspirin, nonsteroidal anti-inflammatory drugs (NSAIDS) like ibuprofen (Advil®), Coumadin (Warfarin), and other blood thinning agents

### **On the day of the surgery**

- You will be instructed not to eat or drink anything six hours prior to your procedure.
- Your doctor will let you know which medications you can take with a sip of water.
- You will be told by your doctor or nurse when to arrive at the hospital.
- Before your procedure, you will have blood work drawn in phlebotomy.

### **After the procedure**

- Discharge instructions will be given to you
- You must have safe transportation to and from your procedure. It is prohibited to take public transportation home from the hospital (Taxi, bus, subway or Uber).

### **Benefits of Radiofrequency Ablation**

- A safe and effective treatment option that can have a big impact on your quality of life by helping to relieve pain.
- Destroys cancer cells while reducing the pain associated with spinal metastasis.
- Increases your mobility and ability to participate in daily activities.
- Works with radiation to rapidly relieve pain and prevent bone fractures.

### **Risks**

- Bleeding
- Infection
- Allergic reaction to medications
- Pain

While complications are uncommon, any surgical procedure has risks. Some risks can be fatal such as heart attack, stroke, or embolism (obstruction in an artery) to heart or lungs.

Any questions or concerns can be answered by your doctor or nurse.