

Guide for Radiofrequency Ablation and Cryotherapy for Kidney Cancer

Your plan for surgery will depend on your diagnosis and plan of care. This information is meant to give broad information about this type of surgery. Your specific plan will be individualized for you.

The size and location of your tumor will determine the type of surgery that is planned for you.

About the Surgery:

Radiofrequency Ablation and cryoablation are minimally invasive procedures that destroys or kills tumor cells without surgery or radiation.

Renal Ablation or Radiofrequency Ablation (RFA) uses imaging procedures such as computed tomography (CT), Magnetic resonance imaging (MRI) or ultrasound, to guide the needle electrode into the tumor, and the electrical current or energy is passed through to heat and destroy diseased cancerous tissue.

Cryotherapy or cryoablation is a freezing mechanism using liquid nitrogen or carbon dioxide to destroy the diseased tissue.

Considerations for these treatment options are:

- One kidney or poor kidney function
- Medical conditions that might prevent surgery
- Size and location of the tumor
- Age and overall condition of the patient
- Number of tumors in the kidney

Recovery for these procedures is generally much faster than surgery or a course of radiation therapy, with less pain, shorter hospital stay, and earlier return to work and daily activities.

Diagnostic Test Prior to Surgery:

You may have several of the following tests before surgery.

A physical exam, EKG, chest x-ray, and blood tests will be done. A CT scan (computerized tomography) or MRI (magnetic resonance imaging) or ultrasound may be done.

Anesthesia Evaluation

The anesthesia provider will review your medical history and discuss anesthesia with you. It is important to discuss your current medications and over-the-counter medications and supplements.

Interventional Radiology Physician Evaluation

- Review of medications that you are taking, especially blood thinners or aspirin products, and your medical health issues.
- Allergies
- Any metal implants, pumps or pacemaker/defibrillators

Discharge Instructions

Discharge instructions will be provided which will include pain control, diet, wound care, resumption of medications, activity restrictions, and symptoms you should report to your surgeon.

It is important to know how to contact your surgeon. An appointment will be scheduled with your surgeon for follow-up after discharge.