Guide for Minimally Invasive Surgery: Laparoscopic or Robotic Nephrectomy

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:

Laparoscopic is a less invasive surgical technique. It involves using a laparoscope, which is an instrument that is inserted through a series of small incisions or ports into the surgical area. This eliminates a large surgical incision. It can be used for both radical and partial nephrectomies.

Laparoscopic Radical Nephrectomy removes the entire kidney, and may include the adrenal gland and lymph nodes that are near the kidney.

Laparoscopic Partial Nephrectomy removes a part of your kidney—only the affected part of the kidney.

Hand-Assisted Laparoscopy Hand-assisted techniques have been developed to eliminate some of the challenges of using laparoscopic instruments. A short incision may be made in addition to the small incisions or ports, so that one hand can be inserted to assist the laparoscopic procedure.

Robotic Nephrectomy is a surgery procedure using robotic arms. The surgical instruments and 3-D cameras are inserted into the body similar to laparoscopic procedures, and the doctor sits at a special desk near the surgical bed that shows an enlarged 3-D view of the surgery. The doctor can move the instrument’s handles from the desk, which moves the robotic arms. The robotic arms follow the doctor’s exact movements.
Benefits of these types of surgery may be:
Decreased blood loss
Faster Recovery time
Shorter hospital stay
Less pain and discomfort
Smaller incisions and less scarring

Diagnostic Tests 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.

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.