

Patient Information for Robotic-Assisted Laparoscopic Partial Nephrectomy

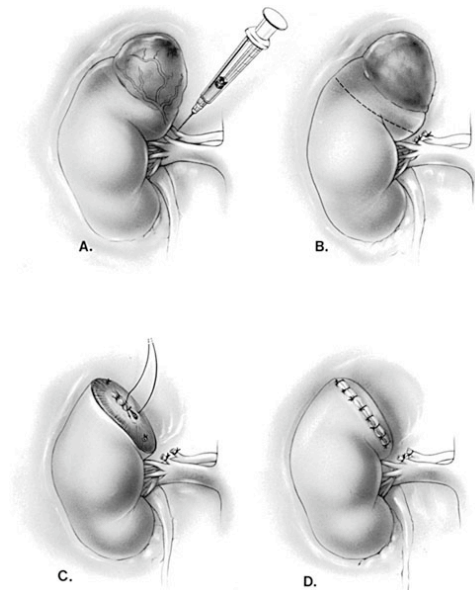
Robotic-assisted laparoscopic partial nephrectomy was first reported in 2004. Since that time, this procedure has become one of the preferred methods for the treatment of localized, small (< 4 cm) renal masses in patients who are candidates for kidney (nephron) sparing surgery. *Urology Specialists, P.C.* is one of only a few practices in the region that utilizes the **da Vinci™ Surgical System** from Intuitive Surgical, Inc.® to perform this procedure. Here is how the operation is completed:

Laparoscopy is performed by filling the belly with carbon dioxide gas so that a working space can be created. Small incisions are created through which the instruments are passed. For removal of the mass and kidney reconstruction, 5 small incisions between 1/4 and 1/2 inch are used. The robot holds 3 instruments and the camera. Once the surgeon and his assistant properly set the robot, he then sits down at a robotic console from where the robotic arms are controlled using hand and foot controls. A table side assistant surgeon helps by passing instruments and aiding in the dissection.



da Vinci™ Surgical System

This diagram illustrates the abnormal anatomy of the kidney in a patient with a renal mass. The tumor is excised along with a rim of healthy, normal renal tissue. The remaining collecting system and normal kidney tissue is then carefully closed to reestablish the normal flow of urine in the kidney and preserve renal function.



Novick et al. Urol Clin North Am 1987;14:419

Advantages of Robotic Partial Nephrectomy

Robotic Partial Nephrectomy offers the same excellent cancer success rates demonstrated with open surgery without the larger, more painful incision. The hospital stay is usually 1 to 2 days for the robotic procedure compared to 3 to 5 days for the open procedure. Most people can return to work in 2 to 3 weeks after the robotic procedure while 4 to 6 weeks is usually required after an open approach.

What to Expect

The typical course experienced by patients undergoing robotic partial nephrectomy is as follows: The patient arrives in the hospital the day of the procedure. The procedure is then performed and typically takes between 2 and 4 hours depending on the difficulty of dissection. The patient then spends the first night in the hospital with a small abdominal drain, is given a clear liquid diet, and is encouraged to walk the night of the procedure. The following day, the patient's diet is advanced and discharge is planned for the next morning after the drain is removed.

The patient is sent home with a prescription for a light narcotic oral medication. Many patients do not require this and use only Tylenol or Ibuprofen. Patients should walk as much as possible immediately. Stair climbing is acceptable. Patients should refrain from lifting more than 15 pounds for 3 weeks. Some patients do experience some constipation which can be remedied by Milk of Magnesia or taking Colace pills.

Patients are allowed to drive after one week if they are no longer taking any narcotic medications. Patients may then return to work within 2 to 3 weeks and then can go back to unrestricted activity in 4 weeks.