

Patient Information for Robotic-Assisted Laparoscopic Pyeloplasty

Robotic-assisted laparoscopic pyeloplasty was first reported in 2001. Since that time, robotic pyeloplasty has become one of the preferred methods for reconstructive surgery for the treatment of ureteropelvic junction (UPJ) obstruction, or a symptomatic congenital narrowing where the ureter joins the kidney.

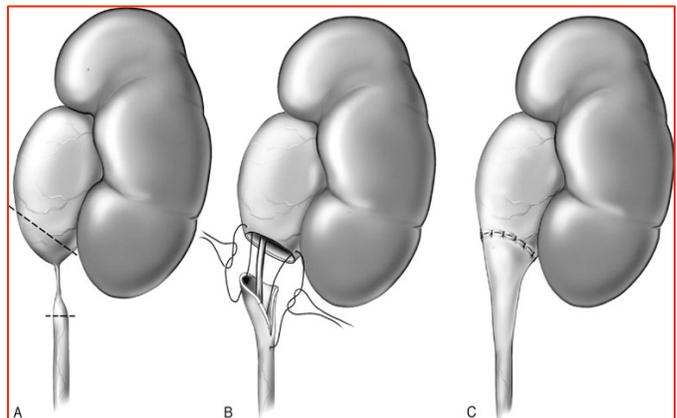
GU Inc is one of only a few practices in the region that utilizes the **da Vinci™ Surgical System** from Intuitive Surgical, Inc.® to perform this procedure. Here is how the operation is completed:

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 kidney reconstruction, 4 small incisions between ¼ and ½ inch are used. The robot holds 2 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 collecting system in a patient with ureteropelvic junction (UPJ) obstruction. The narrowing present where the ureter joins the kidney is excised and the ureter is then carefully reattached to the renal pelvis to reestablish the optimal flow of urine out of the kidney.



Advantages of Robotic Pyeloplasty

Robotic Pyeloplasty offers the same excellent success rates (over 95%) demonstrated with open surgery without the larger, more painful incision. Hospital stay is usually overnight for the robotic procedure compared to 2 to 3 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 usual course experienced by patients undergoing robotic pyeloplasty 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 regular diet, and is encouraged to walk the night of the procedure. 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.

A ureteral stent is placed during the procedure to maximize healing across the repair. This is removed in the office or in the operating room 4 to 6 weeks after surgery. 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.