MEDICAL FACULTY ASSOCIATES
THE GEORGE WASHINGTON UNIVERSITY

LAPAROSCOPIC NEPHRO-URETRECTOMY

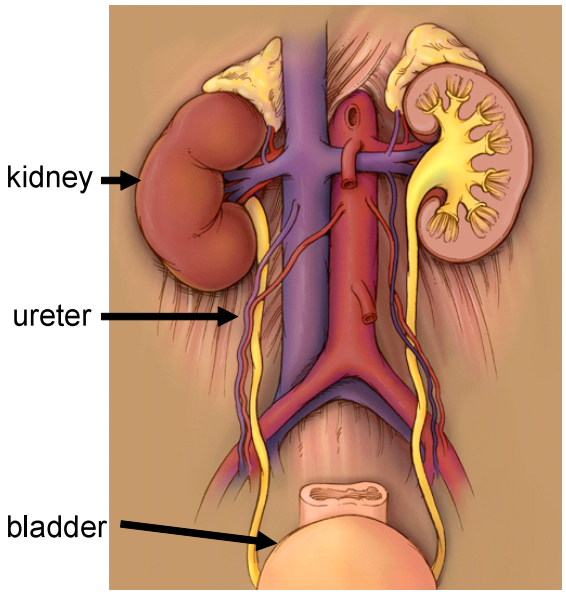
Urology Clinic
GW Medical Faculty Associates
The George Washington University
2150 Pennsylvania Avenue, NW
Washington, DC 20037

PURPOSE

Laparoscopic Nephro-ureterectomy is a minimally invasive technique to remove the entire kidney, ureter and a portion of the bladder that is usually used as a treatment for transitional cell carcinoma (TCC) of the kidney or ureter.

GENERAL INFORMATION

Nephro-ureterectomy or removal of the entire kidney, ureter and a portion of the bladder is the primary treatment used for treatment of transitional cell carcinoma (TCC) of the ureter or kidney. Unlike renal cell carcinoma, TCC forms on the lining of the ureter or drainage system of the urinary tract. Other therapies that spare the kidney may be considered if removal of the entire kidney would lead to problems with renal failure and dialysis.



The laparoscopic approach was developed as a less invasive alternative with a quicker recovery and a more favorable cosmetic result when compared to the traditional open surgical approach. Recent studies have shown equivalent results for well selected patients. . Not all cases are candidates for a laparoscopic approach – determinations are largely dependant on tumor size and extent of spread and patient factors such as obesity and prior surgery.

WHAT TO EXPECT PRIOR TO THE SURGERY

Step 1: As soon as your surgery is scheduled, call the **PAT (PRE-ADMISSION TESTING) Unit** to speak with a triage nurse at **(202) 715-4557** to assess your pre-anesthesia needs and to provide pre-operative instructions. This unit's hours of operation are 8:00 a.m. – 4:30 p.m. Monday – Friday.

Step 2: **PRE-REGISTER** with the Admissions Office. This can be done by telephone. Call **(202) 715-4907**. You will be asked to provide your name, address, insurance, and next of kin information. Registration is necessary regardless if you are admitted to the hospital.

Step 3: Schedule an appointment with your primary care / internist for pre-operative evaluation. Information and test results from your evaluation should be faxed to the **PAT Unit** at **(202) 715-4507 or 715-4525.**

IMPORTANT REMINDERS

- Clear liquids only for 24 hours prior to surgery and do not eat or drink after midnight the night before your surgery.
- **You must bring your films with you (CT or MRI) the day of surgery if you have not left them with your doctor**.

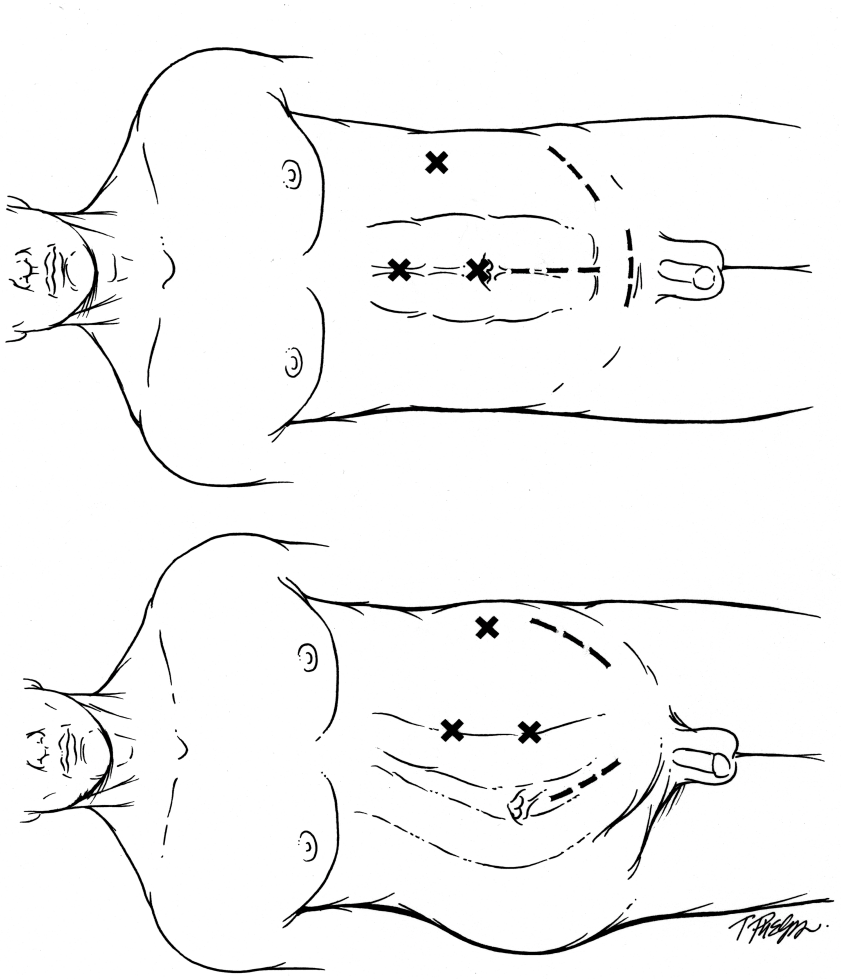
Do not hesitate to ask your physician's office to clarify any concerns you may have.

PREPARING FOR SURGERY

- **Make sure that either your doctor has your films (CT and/or MRI) or that you bring them with you to surgery. These are an integral part of the procedure for your doctor in determining the correct surgical site**.
- Drink clear fluids for a 24-hour period prior to the date of your surgery (please see attachment 1, Clear Liquid Diet). Nothing by mouth after midnight the night prior to surgery.
- Aspirin, Motrin, Ibuprofen, Advil, Alka Seltzer, Vitamin E, Ticlid, Coumadin, Lovenox, Celebrex, Voltaren, Vioxx, Plavix and some other arthritis medications can cause bleeding and should be avoided 1 week prior to the date of surgery (Please contact your surgeon's office if you are unsure about which medications to stop prior to surgery. Do not stop any medication without contacting the prescribing doctor to get their approval).

THE OPERATION

For this procedure, 3 to 5 small incisions (5-12 mm) are placed into the abdomen. A telescope connected to a camera and several working instruments are passed through these "keyholes". This allows the surgeon to have an enlarged view of inside the body on a video monitor to guide him through the procedure. The kidney and upper ureter are removed laparoscopically. A small incision (approximately 2-3 inches) is then placed in the lower abdomen to assist with removal of the lower ureter, and a portion of the bladder. The specimen is then placed in a sterile retrieval bag and removed through the small incision for the pathologist to evaluate for an accurate diagnosis. Typically, the length of the operation is 3-4 hours and the pathology report is ready in 5-7 working days.



X marks sites for laparoscopic incisions and the dotted line (---) marks the places where incisions may be placed to perform the bladder portion of the procedure and remove the specimen. The top is for normal patients the bottom for more obese patients.

POTENTIAL RISKS AND COMPLICATIONS

The safety and efficacy of the procedure has been well established for selected patients. As with any surgical procedure, there are risks and potential complications. The safety and complication rates are similar when compared to the open surgery. Potential risks include:

- **Bleeding:** Blood loss during this procedure is possible and a transfusion is possible in 5% of patients. If you are interested in autologous blood transfusion (donating your

own blood) you must make your surgeon aware. If you wish to make an autologous blood donation, you must first call the GW Hospital Transfusion Services Department at **(202) 715-4398**. They will assist you in choosing a blood collection facility convenient to you. Please allow at least 1-2 weeks for the collections, processing and delivery of the donated blood to GW Hospital.

- **Infection:** All patients are treated with intravenous antibiotics prior to starting surgery to decrease the chance of infection occurring after surgery. If you develop any signs or symptoms of infection after the surgery {fever (>100.5^{o} F) drainage from incision, urinary frequency/discomfort, pain or anything that you may be concerned about please contact us immediately}.
- **Tissue / Organ Injury:** Although uncommon, possible injury to surrounding tissue and organs including bowel, lung, vascular structures, spleen, liver, pancreas and gallbladder could require further surgery. Loss of kidney function is rare, but is a potential risk. Scar tissue may also form in the kidney requiring further surgery. Injury could occur to nerves or muscles related to positioning. Hernia at incision site is a possibility.
- **Conversion to Open Surgery:** The surgical procedure may require conversion to the standard open operation if difficulty is encountered during the laparoscopic procedure. This could result in a larger than standard open incision and possibly a longer recuperation period.
- **Pathology:** After the surgery, the pathologist will review the specimen in detail. 15% of patients will have a final diagnosis of a benign tumor. There is no guarantee that the procedure is curative and other treatments may be necessary.
- **Hernia:** As with any surgery, a hernia may form at the surgical site.

WHAT TO EXPECT AFTER THE SURGERY

Immediately after the surgery you will be taken to the recovery room and transferred to your hospital room once you are fully awake and your vital signs are stable.

- **Post Operative Pain:** Unfortunately, this is not painless surgery. Pain medication can be controlled and delivered **by the patient** via an intravenous catheter or by injection (pain shot) administered by the nursing staff. You may also experience some minor transient shoulder pain (1-2 days) related to the gas used to inflate your abdomen during the laparoscopic surgery. Most patients see a large improvement in their pain level on the second day after surgery.
- **Nausea:** You may experience some nausea related to the anesthesia. Medication is available to treat persistent nausea.
- **Urinary Catheter:** You can expect to have a urinary catheter draining your bladder (which is placed in the operating room while the patient is asleep) for approximately 0ne to two days after the surgery. It is not uncommon to have blood tinged urine for a few days after your surgery.
- **Diet:** You can expect to have an intravenous catheter (IV) in for 1-2 days. (An IV is a small tube placed into your vein so that you can receive necessary fluids and stay well hydrated; in addition it provides a way to receive medication.). Following

surgery, the bowels will transiently "go to sleep". Most patients are able to tolerate ice chips and then clear liquids the day after surgery. The diet is then advanced as tolerated by the patient. Once on a regular diet, pain medication will be taken by mouth instead of by IV or shot.

- **Fatigue:** Fatigue is common and afternoon fatigue is common even several weeks beyond surgery. This is part of the body's normal healing process.
- **Incentive Spirometry:** You will be expected to do some very simple breathing exercises to help prevent respiratory infections through using an incentive spirometry device (these exercises will be explained to you during your hospital stay). Coughing and deep breathing is an important part of your recuperation and help prevent pneumonia and other pulmonary complications.
- **Ambulation:** On the day after surgery it is very important to get out of bed and begin walking with the supervision of your nurse or family member to help prevent blood clots from forming in your legs. You can expect to have SCD's (sequential compression devices) along with tight white stockings on your legs to prevent blood clots from forming in your legs.
- **Hospital Stay:** The length of hospital stay for most patients is for approximately 2-3 days.
- **Constipation:** You may experience sluggish bowels for several days or several weeks. This is a combination of the surgery as well as the narcotic pain medicines. Suppositories and stool softeners are usually given to help with this problem. Taking stool softeners and mineral oil daily at home will also help to prevent constipation.

WHAT TO EXPECT AFTER DISCHARGE FROM THE HOSPITAL

- **Pain Control:** You can expect to have some pain that may require pain medication for 2-7 days after discharge, and then Tylenol should be sufficient to control your pain**. Do not restart aspirin or non-steroidal anti inflammatory medicines until you have seen your surgeon and he gives the okay**.
- **Showering:** You may shower at home. Your wound sites can get wet, but must be patted dry. Tub baths can soak your incisions and therefore are not recommended in the first 2 weeks after surgery. You may have adhesive strips across your incision. These are not to be removed. They will fall off in approximately 5-7 days. Sutures will dissolve in 4-6 weeks.
- **Activity:** Taking walks is advised. Prolonged sitting or lying in bed should be avoided. Climbing stairs is possible. Driving should be avoided for at least 1-2 weeks after surgery. Absolutely no heavy lifting (greater than 20 pounds) or exercising (jogging, swimming, treadmill, biking) for six weeks or until instructed

by your doctor. Most patients return to full activity on an average of 3 weeks after surgery. You can expect to return to work in approximately 4 weeks.

- **Diet:** You should drink plenty of fluids and discuss with your doctor if you need to be on a salt or protein restricted diet.
- **Follow up Appointment: You** will need to call the GW Medical Faculty Associates Urology Clinic at **(202) 741-3106** to schedule a follow up visit for 1- 4 weeks after your surgery date with your surgeon. Your surgeon will tell you the time frame based on your post.-operative needs. During this appointment you will obtain a long term follow up plan from your surgeon. This will probably include being followed by your primary doctor for radiological tests and blood testing.

CONTACTS

GW Medical Faculty Associates Urology Clinic
Monday – Friday, 8:30 a.m. – 5:00 p.m.
(202) 741-3101

In the event of an emergency and you need to contact someone in the evening hours or on the weekend, please call the GW Hospital at **(202) 715-4141** and ask to speak to the Urology Resident on call.