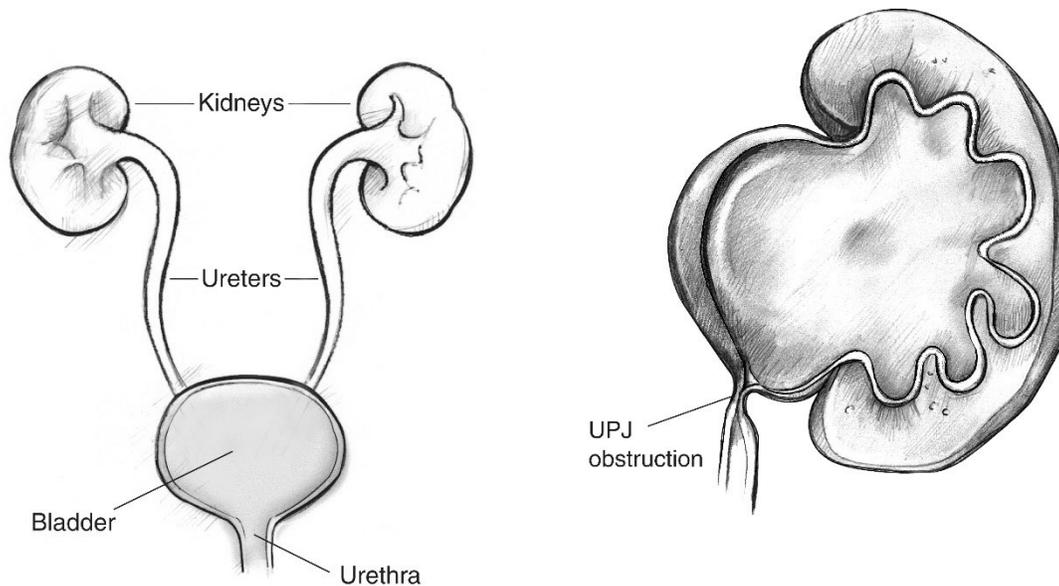


Robotic-Assisted Laparoscopic Pyeloplasty

What is a robotic-assisted laparoscopic pyeloplasty?

Robotic-assisted pyeloplasty is a procedure to remove a blockage in the urinary tract where the kidney meets the **ureter** (the tube that carries urine, or pee, from your kidney to your bladder). The procedure is done by a surgeon through 4-6 small (half-inch) cuts in the skin or a single 2-inch cut (called an **incision**).



In a healthy urinary tract, urine drains easily from the kidney into the ureter, which then carries the urine down to the bladder. The place where the kidney connects with the ureter is called the **ureteropelvic junction (UPJ)**. For many reasons, the UPJ can narrow or become blocked, and this prevents the urine from flowing down easily into the bladder.

There are several causes for UPJ blockages including kidney stones, scar tissue, or infections. Symptoms of UPJ blockage may include pain in your back, sides, and upper abdomen (stomach) area, and blood in your urine. If this condition is

not treated, it can lead to worse kidney function over time or even the loss of a kidney.

What steps should I take to prepare for the procedure?

1. **Do not eat any solid food** (including gum, hard candy, or mints) after 12 a.m. (midnight) the night before your surgery.
2. **Do not drink any milk products** after 12 a.m. (midnight). **You may only drink water** and take any routine medications up to 4 hours before your surgery.
3. Wear loose, simple clothing which can easily be changed. Leave all jewelry and valuables at home.
4. **Bring a responsible adult (18 years or older) to the hospital with you.** They should stay in the hospital and be available to hospital staff during your procedure. They should also help you after your procedure by driving you home and making sure you're doing okay.

What should I expect before the surgery?

- You will have lab work, an EKG (heart rhythm test), and a chest x-ray (if needed) to ensure your body is safe to have anesthesia and surgery.
- On the day of your surgery, you will check in at the information desk on the first floor of the main hospital. Please arrive a few minutes before your surgery is scheduled so you have time to check in and change your clothing. Hospital staff will help you and bring you to the preoperative area (where you will wait and get ready before your surgery).
- Right before your procedure, you will get an **antibiotic** (a medication to help prevent infections) through an **IV** (a needle in your vein). You will likely not need antibiotics after surgery.
- The anesthesia team will put monitoring devices (devices to check your heart rate and blood pressure) to you. We will take you to the operating room where you will have your procedure.

- You will be put under **general anesthesia** (medication that puts you into a deep sleep and blocks pain) for the whole procedure.

What happens during the procedure?

1. Once you are under anesthesia, the surgery team will carefully lay you on your side for the procedure.
2. The surgeon will make several small incisions or one 2-inch incision in your abdomen (stomach) and insert robotic metal tools that will help them do the surgery.
3. The surgeon will use these tools to separate your kidney and ureter. Then they will rebuild your urinary tract by fixing the blockage, allowing the kidney to easily pass urine down the ureter to the bladder. This requires several stitches in the kidney and ureter that will heal on their own in a few weeks.
4. The surgeon will place a plastic tube called a **stent** in the ureter to help the healing process. The Urology Clinic staff will remove this stent 3-6 weeks later.
5. Sometimes the surgeon will put in a drain tube to help drain fluid away from the site of your surgery. This helps to prevent infection and other complications. Many times, the surgeon doesn't think a drain is needed and they will not place one.
6. A **Foley catheter** will be placed in your bladder. A Foley catheter is a tube that goes through the urethra and into your bladder to drain urine.

How long your surgery lasts depends on the complexity of your case. Usually it lasts about 3 hours.

What should I expect after the procedure?

- You will stay overnight in the hospital. The nursing staff will usually remove the Foley catheter the night of, or morning after, your surgery. If

your surgeon placed a drain, they will also remove the drain before you leave the hospital.

- Most patients stay a single night in the hospital and leave the following day around lunch time.

How can I avoid complications (medical problems that might develop after surgery) while I'm in the hospital?

- Use the **incentive spirometer** provided by the nursing staff. An incentive spirometer is a breathing machine that helps you fill your lungs with air and prevents **pneumonias** (infections in your lungs) and fevers. You should take this home with you.
- Get up and move around to prevent blood clots called **DVTs (deep vein thrombosis)** and nausea or vomiting.

When will I be ready to leave the hospital?

You will be ready to go home when you can:

- **Eat regular food:** You will not be very hungry after surgery. However, you must prove you can eat a little food without vomiting. It's most important that you're able to drink liquids (mainly water) while your appetite returns over the next few days.
- **Control pain with pain medications:** You will not be pain-free right after surgery, but it should be somewhat controlled with pain medication. You should take your pain medication to avoid not being able to get out of bed. Remember that even though this is a surgery done with small cuts, it is still a big surgery on the inside of your body.
- **Walk:** If you were able to walk before surgery, we must make sure you can walk again before you are safe to leave. Walking after surgery is very important as it lowers your risk of pneumonia, blood clots, and gastrointestinal (stomach and bowel) issues.

When can I go home?

Your doctor will decide when you're safe to go home from the hospital. If there is a high risk that you will have a complication at home, we will ask you to stay at the hospital longer so we can check on you. However, if you can do everything listed above (eating, controlling pain, and walking), it is safer for you to be at home than in the hospital. Shorter hospital stays can prevent issues such as infections. You will also get better sleep at home, and your body will heal better than if you stay in the hospital too long.

When will my stent and/or drain be removed?

- You will be sent home with the temporary stent in your ureter. Your urologist will remove it 3-6 weeks after your surgery a thin tube inserted through the urethra with a light, a lens for viewing (flexible cystoscope), and local anesthesia.
 - You can expect some blood in your urine for as long as the stent is in place.
- If the surgeon placed a drain, there may be a small amount of clear drainage from the drain site for a few days. The drain should be taken out before you go home.

What medications will I need to take?

- If you were regularly taking any blood thinners and you stopped taking them for surgery, the surgery team will tell you when you can start taking these medications again.
- You will get opioid pills (strong pain control medication) to take by mouth for pain relief at home. These medications may cause **constipation** (having hard and fewer bowel movements). Take a stool (poop) softener like Colace[®], drink juices and eat foods high in fiber (such as fruits and vegetables) to prevent and relieve constipation.

To learn more about pain control after your surgery, read this online guide:

<http://www.med.umich.edu/1libr/PainSteeringCommittee/TakingOpioidsSafely.pdf>



Your doctor may also prescribe:

- Flomax® (tamsulosin) to relax the ureter
- Pyridium® (phenazopyridine) to reduce painful urination
- Ditropan® (oxybutynin) to help with any bladder spasms caused by the ureteral stent

What should I avoid in the first 24 hours after my surgery?

- Do not drive any motor vehicle or operated motorized equipment for at least 24 hours after your procedure or while taking narcotics.
- Do not make any complex decisions, sign legal documents, or participate in activities potentially harmful to others, such as cooking or nursing infants, without supervision for at least 24 hours after your procedure.
- Do not drink alcohol for at least 24 hours after the procedure.

What kind of physical activity can I do after surgery?

You should avoid any heavy lifting (lifting anything more than 10 pounds) or strenuous activity (any exercise other than walking) for 4 weeks, which is around when we will remove your stent. Most patients need this long to recover so that they can go back to work. If you have a job that doesn't require much physical activity and you feel that you can go back to work sooner, you can call us. We can check if you're ready to return to work, as long as you continue to avoid heavy lifting or strenuous activity for 4 weeks from surgery. Drink lots of water to stay hydrated.

When should I call the Urology Clinic for help?

If you are unable to urinate (pee), call the clinic. If you are not able to talk with a nurse or doctor within 1 hour, then **go to the Emergency Room.**

Call the Urology Clinic if you have any of these symptoms:

- A fever of more than 101.5 ° Fahrenheit, along with feeling cold and sweating
- Bright red blood in your urine and large clots that make it difficult to urinate
- Severe pain that continues and is not helped with pain medications, or leg pain

What is the contact information for the clinic?

- During business hours between 8 a.m. - 5p.m. Monday through Friday: call (734) 936-7030.
- After 5 p.m. or on weekends: contact the on call urologist at (734) 936-6267

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Authors: Sapan Ambani MD, Khurshid Ghani MD, Breanna Frederick RN, Anna Silvenis RN
Edited by: Brittany Batell, MPH MSW

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