



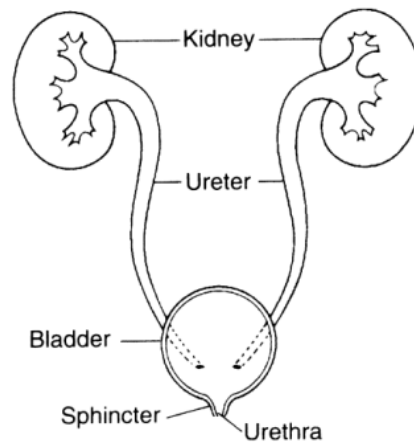
Pediatric Surgical Associates, Ltd.

## Pyeloplasty

### What is a pyeloplasty?

A pyeloplasty is a surgical procedure to repair an obstruction at the point where the ureter meets the kidney (see diagram of the urinary system). This allows urine to drain freely from the kidney to the bladder. If not repaired, urine can back up in the kidney and cause damage to the kidney tissue.

*Diagram of the urinary system:*



### What happens during surgery?

Your child will receive general anesthesia to help them sleep and not feel pain during surgery. The surgery will take two-three hours. Sometimes, a special x-ray called a retrograde pyelogram will be done in the operating room after your child is asleep. During this test, a cystoscope (thin tube with camera and light) will be placed through your child's urethra and into his or her bladder, dye is then injected into the ureter (the tube that connects the kidney to the bladder), this will help the surgeon get a better look at the area of narrowing or blockage. The surgery is either done through a small incision on the side or back (open approach) or laparoscopically with the DaVinci robot. Your child's surgeon will recommend what method is best for your child.

A urinary catheter (flexible tube) will be placed in the bladder to drain urine from the bladder and a stent (thin tube) will be placed in the ureter to keep it open as it heals from surgery. The urinary catheter is typically removed before your child goes home from the hospital. The stent will stay in the ureter for 10-14 days (external stent) or 4-6 weeks (internal stent) depending on your child's age and the work that needs to be done. After surgery your surgeon will detail the plan for stent removal.



### **Will my child be in pain?**

Your child may experience both incisional pain and bladder pain (bladder spasms). The anesthesiologist and your child's surgeon will prescribe and explain the medications that will be used to keep your child comfortable.

Spasms are a contraction of the bladder wall muscle caused by irritation from surgery, and the internal stent. Signs of a bladder spasm are sudden irritability, drawing up their legs, urge to urinate, small urinary accidents, blood in the urine or feeling pressure in their bottom. The spasms can come and go and usually last less than a minute.

Your child may experience bladder spasms until the stent is removed. During this time, you should keep their urine dilute with good fluid intake. Minimize intake of caffeine, carbonation, citrus, chocolate, and excessive vitamin C, these are bladder irritants and can make the spasms worse. Constipation can also worsen the spasms. Keep stools soft and easy to pass daily. Medications will be prescribed to help alleviate the bladder spasms.

### **What can I expect after the surgery?**

Before your child is discharged you will be given written information about their care at home and any questions you have will be answered.

- **Diet:** Resume regular diet as tolerated.
- **Activity:** Your child may return to school or daycare when pain is well controlled. Avoid vigorous activities, contact sports and swimming for 14 days or until stent is removed.
- **Voiding habits:** Expect blood in the urine on and off until the stent is removed. Some children experience frequency and urgency of urination, and small urinary accidents for up to 2 weeks after surgery or until the stent is removed.
- **Wound Care:** Your child will have surgical glue or a clear plastic dressing over their incision. It may take the surgical glue up to 2 weeks to completely dissolve. If a dressing was used, it can be taken off 1 week after surgery.
- **Bathing:** Sponge bathe your child for the first 24 hours after surgery and then they may shower or take short baths (5-10 minutes) in plain water for the next week. This will promote healing and can be soothing.
- **Medicines:** Pain can be controlled by alternating Acetaminophen (Tylenol® or another brand) and Ibuprofen®. Do not give aspirin because it may cause bleeding.
  - If your child is prescribed an antibiotic, follow your surgeon's specific instructions.
  - Your surgeon may supply a prescription for medicine which should help relieve bladder spasms, follow your surgeon's specific instructions.



### **Stent Care:**

- **External:** This is a small tube that runs from the area of surgical repair, through the kidney, and comes out near the corner of the incision. It will drain urine into a collection bag or into a diaper if your child is not toilet trained. Keep the tube secured to your child's body with tape or a securing device. This tube will stay in place for 10-14 days after surgery. Your doctor will decide if the stent should be plugged prior to removal. It is removed in the office by one of our urology nurses. The dressing will be removed at this time.
- **Internal double J stent:** This is a small tube that has one end in the bladder and the other end in the kidney. The stent is not visible. Urine will drain from the kidney, down the stent, and into the bladder. This is usually removed 4-6 weeks after the repair with a brief general anesthetic at the hospital.

### **What to call the surgeon for:**

- Fever with worsening redness or pus like drainage at surgical incision
- If the incision starts to separate
- Has blood clots or increasing amounts of blood in urine
- Concerns with the external stent
- Foul smelling or cloudy urine
- Nausea or vomiting not associated with medications
- Pain or bladder spasms not controlled with prescribed medications

Call your primary care provider for any other concerns.

**Follow-up care:** Follow-up with your child's surgeon as directed following the surgery. Call your surgeon's office to schedule an appointment at (612) 813-8000 option 3.

**Questions?** This information is not specific to your child but provides general information. If you have any concerns, please call our clinic at (612) 813-8000 option 6 for the urology nurses.