

Information for Parents About Pyeloplasty

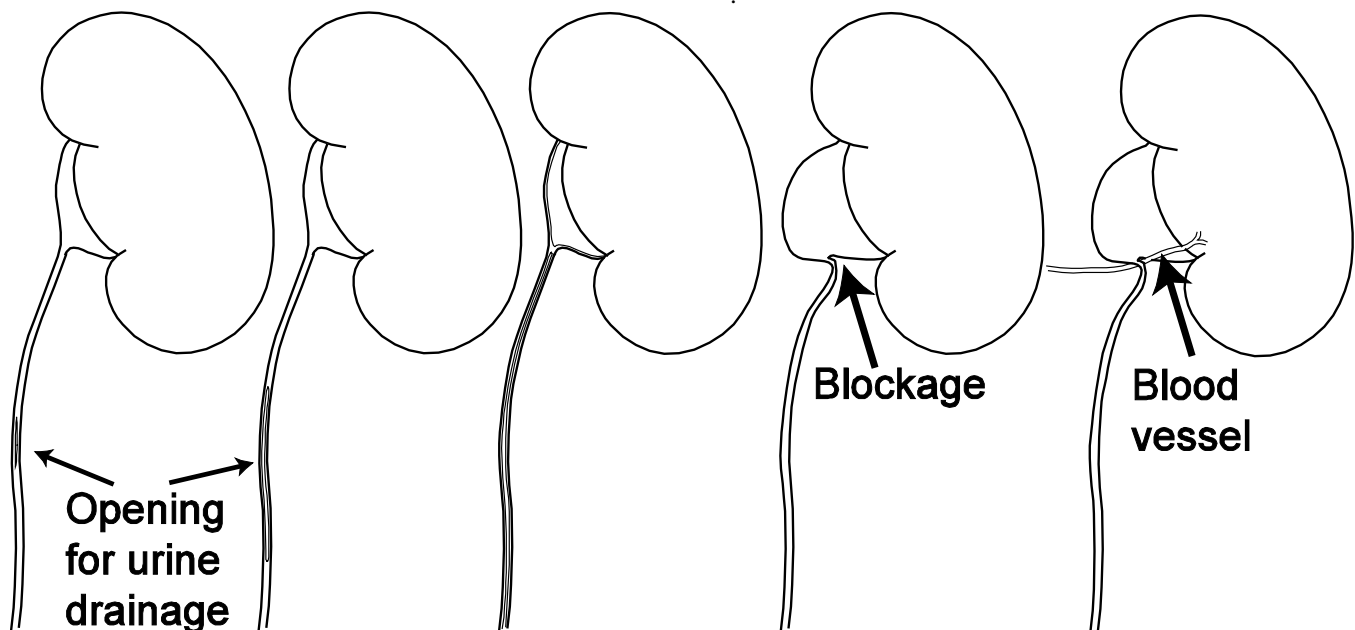
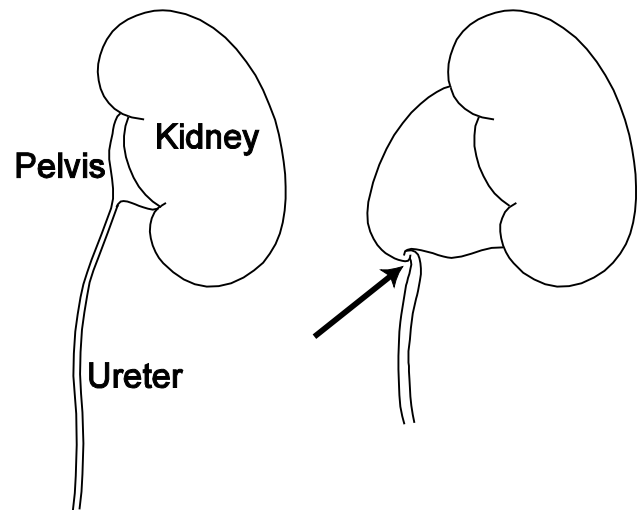
Because of a blockage in the drainage tube/funnel system of the kidney, a pyeloplasty [*pie – low – plasty*] has been recommended for your child. This pamphlet will give you information about the surgery and how to care for your child following the procedure.

Where is the blockage?

Urine that is produced as the kidney cleans the blood drains from the filter into a large funnel called the kidney pelvis. A tube called the ureter [*you-re- tour*] drains from the pelvis down to the bladder. The blockage in your child's kidney is at the connection of the ureter with the kidney pelvis: the ureteropelvic junction, or UPJ for short.

What causes the blockage?

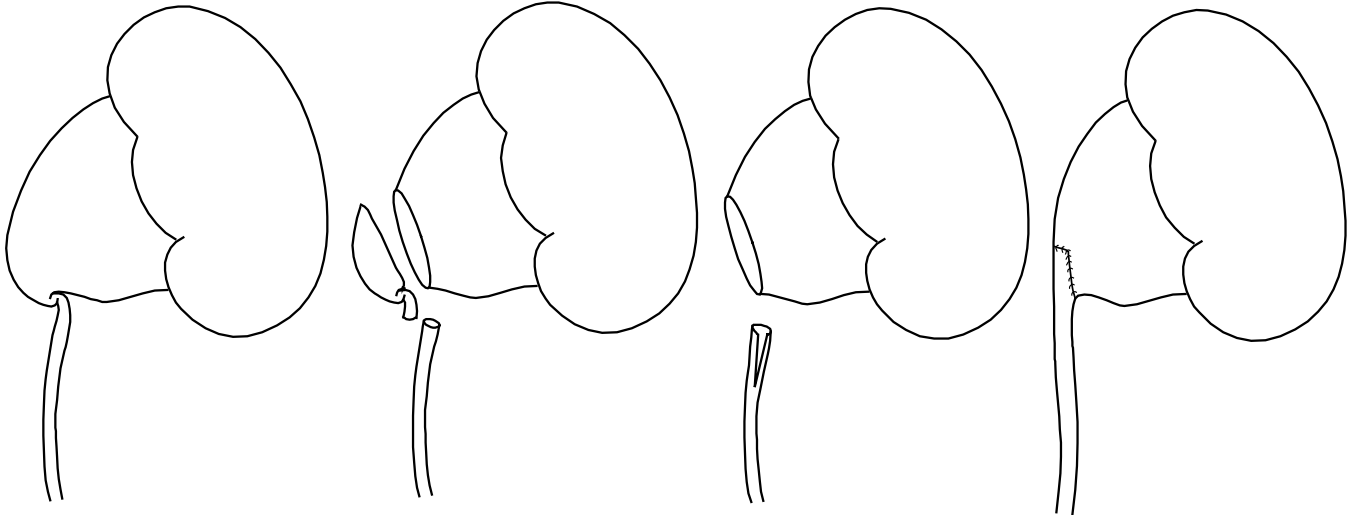
Early in pregnancy, as the kidney is beginning to form, the ureter starts out as a solid cord; it has no opening to carry urine. Gradually, an opening develops in the middle of the ureter. This opening tunnels in both directions (toward the kidney and toward the bladder) until a tube is created. The last part of the ureter to open up is usually the point at which it connects to the kidney pelvis. Sometimes the kidney filtering tissue begins to function, making urine, before the opening is completed.



This can cause stretching and enlargement of the kidney pelvis and partial blockage of the urine drainage. Sometimes the ureteropelvic junction remains narrowed. Sometimes the connection is kinked. Sometimes the ureteropelvic junction is looped over a blood vessel, causing a blockage.

How is the surgery done?

In order to remove the blockage, the connection point between the kidney pelvis and the ureter must be removed. An incision (cut) is made in the back or flank. The muscles underneath the skin are separated (not cut) to expose the kidney. The narrow spot is removed and a slit is made in the ureter. The ureter is then reconnected to the kidney pelvis using dissolving stitches. The muscles are sewn back together and then the skin is closed with dissolving stitches. Small tapes called Steri-Strips are placed across the incision to hold the skin edges in alignment while healing begins.



Are there any complications that could happen during or after the surgery?

As with any surgery, there are possible complications with a pyeloplasty. The most common complication is a blockage occurring at the point of the re-connection of the ureter to the kidney pelvis. This happens in 5 – 10 / 100 patients having the surgery. In many cases, the blockage will get better with time. Sometimes a catheter is placed across the area of blockage while healing continues to allow the urine to drain. The second most common complication is leakage at the re-connection point. This occurs in 2-5/100 surgeries. Leakage is usually treated by placing a drain tube. Urine infection can occur following the surgery. This is usually treated with antibiotics, but occasionally, drainage surgery may be necessary to treat a severe infection. As with any surgery, bleeding can occur during or after a pyeloplasty. Serious bleeding is a rare complication of the procedure.

Will there be any catheters or drain tubes after the surgery?

A bladder drain tube (catheter) will be placed at the time of the surgery after your child is under anesthesia. This catheter is usually removed in the morning on the day the child goes home from the hospital. Sometimes a stent (internal drain catheter) is left in place to help with urine drainage following the surgery. An external stent (one that comes out of the body) is usually left in place for 7-14 days after the surgery. An internal stent (one that coils between the kidney pelvis and a bladder – doesn't come outside of the body) may be left for 6-8 weeks following the surgery. Sometimes a drain tube is left in place for up to 10 days following the surgery.

Will there be a bandage?

Yes, there will be a bandage over the incision. We like to avoid placing tape on the skin because removing the tape hurts. For this reason, we usually use a fishnet bandage to hold the gauze bandage in place.

How long will my child need to be in the hospital?

To be ready to leave the hospital, your child will need to be eating regular food and have his/her pain controlled with oral pain medicine. Most children enter the hospital the day of the surgery early in the morning. They are usually ready to go home from the hospital 1 – 2 days later (usually 2 days). Of course, every child is different. We will not send your child home from the hospital until he/she is ready.

When we return home, how active my child be?

Most children are less active than they normally are for several days following pyeloplasty surgery. We recommend that your child not participate in organized sports or gym class for three weeks following the surgery. It is very important, though, for your child to move around and walk after the surgery. This will help the healing process.

What can I give my child for pain?

While your child is in the hospital, we will give him/her pain medication through an intravenous line. Before you leave the hospital we will use pain medication that your child can take by mouth (liquid or pills). We will give you a prescription for Tylenol with codeine for your child to take at home. You may also use children's ibuprofen (Motrin, Advil, or generic) for pain. Sometimes the codeine causes nausea or vomiting. It may be best to try the ibuprofen first.

When can my child bathe?

If your child has no catheter, stent or drain, he/she can take a brief shower or bath (5-10 minutes) 2 days following surgery. If your child has a catheter, stent or drain, he/she should have a sponge bath until the catheter, stent or drain is removed.

How will we know if the surgery was successful?

We will see your child in the clinic 1-3 weeks following surgery to check the incision. Two to three months following the surgery we will order a kidney scan to see how well the kidney is filtering and draining. It is common to have enlargement of the kidney pelvis persists after the surgery. This may be temporary or permanent. However, the important thing is how well the kidney drains. Sometimes, we order ultrasounds periodically in the months following the surgery. Sometimes additional scans are necessary.

What special care will my child need on the day of surgery?

In order for the surgery to be safe your child needs to have an empty stomach on the day of surgery. This means that he/she should have nothing to eat or drink (including water) for several hours before surgery. The anesthesia doctor will tell you more about this. **Your child should not take ibuprofen (Motrin, Advil, etc.) or aspirin within 7 days of the surgery.** It can increase the risk of bleeding complications. If your child has a cold, flu or fevers within one week of the surgery please call my office to reschedule. It would be unsafe to proceed with surgery if your child is ill.

Is there anything I can do to prepare my child for surgery?

When a child is old enough to talk there are several things which can help prepare him/her for surgery. Most children are anxious if they don't know what will happen to them. You can ease this fear by talking about the upcoming surgery. Many local libraries have books about going to the hospital or doctor's office. Some have video tapes on this subject. Loyola's Ronald McDonald Children's Hospital is a special place with well-trained nurses and care givers who are experts in the care of children. Some families like to visit the hospital before the surgery so that their child will feel familiar with the surroundings. Tours can be arranged by calling the Child Life Coordinator (708/216-5607). Children who take the tour are often much more comfortable when they return for their operation. Children are usually fearful of an unfamiliar environment. It may help to bring a favorite toy or blanket on the day of surgery.

What if I have more questions?

Like children, parents also are sometimes anxious about the unknown. Don't hesitate to ask questions. We want you to have all the information you need about the surgery. If you have questions, it may help to write them down. You are welcome to call or write to us to have your questions answered.

To schedule the surgery, e-mail Linda Bauman, Senior Secretary [lbauman@luhs.org] or call (708/216-6266).

For more information on this topic you are welcome to visit Dr. Hatch's web site: Genitourinary Development

[www.meddean.luc.edu/lumen/meded/urology/guhome.htm]

For more information about Dr. Hatch and the Department of Urology please visit our web site [www.luhs.org/urology]

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Darien 630/985-4989

Elmhurst 708/327-7030

Hickory Hills 708/233-5333

Homer Glen 708.645.3400

Oakbrook Terrace 630/953-6600

Wheaton 603.665.5995

Directions and maps available at www.luhs.org

7/28/2010