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# **Ureteral Reimplantation Surgery**

### What is ureteral reimplantation surgery?

The original ureter is surgically re-positioned (reimplanted) in the bladder wall. The end of the ureter is surrounded by bladder muscle in this new position, which prevents urine from "backingup" (refluxing) toward the bladder.

#### Where is the incision?

The surgery is done through a small incision in the lower abdomen (below the bikini line). All sutures are dissolvable and do not need to be removed. Occasionally, there may be one stitch in the skin to be removed if it is securing a catheter. Either skin glue or a clear plastic dressing that can be removed 2 days following surgery will cover the incision. If a clear plastic dressing is used there will be little pieces of tape called "steri-strips" placed along the incision. These pieces of tape will curl up and eventually fall off. Your doctor will instruct you as to when you may begin bathing your child.

### Are any tubes left in place after the surgery?

A bladder catheter is usually placed to be sure the urine is draining well while healing takes place. This is removed between 1 - 3 days after the surgery. A catheter in the ureter may be left in place that comes out through a small incision in the abdomen. Once it is removed, a small gauze bandage can be

placed over the site and this site will heal very quickly. Fluid may leak from the old site for a day or so, which is normal.

### How long will the surgery take?

The surgery takes approximately 2 - 3 hours. If it takes a little bit longer or shorter, do not to worry. We will have the surgical operating room nurse give updates on the status during the surgery.

# **Post Operative Information**

### What can I expect post-operatively?

Many children will have nerve blocks (caudal or epidural) to minimize the pain after the procedure. It has been our experience that this has been a major improvement in post-operative pain management. Alternatively, your child may be a good candidate for a PCA (Patient Controlled Analgesia) pump. This involves infusion of the pain medication through the IV to maintain a more consistent blood level of pain medication. One of the pain treatment plans as described above will be used in the care of your child. A prescription for pain medication that can be taken by mouth will be given to you at the time of discharge (usually Tylenol with Codeine). You can have the prescription filled at any pharmacy that is convenient for your family.

#### Will my child have any problems urinating after surgery?

It is common after surgery of this type that your child will experience bladder spasms (intermittent cramping), urinary frequency, episodes of urinary incontinence, and losing small amounts of blood-tinged urine. If the symptoms become a problem, a medication called Ditropan (oxybutynin) may be

prescribed for these spasms. It will not eliminate all of the spasms, but should decrease the discomfort. Sitting the child in a shallow tub of warm water may provide relief. Also placing a damp, warm washcloth on the perineum may also make your child more comfortable. Older girls may become upset if they experience the loss of control of urine, especially if it is blood-tinged. Your child may want to wear light mini-pads in the underwear until this problem resolves. In some children, the urinary frequency and bloody urine may continue for 2 - 3 weeks (this is normal). Reassure your child that control will return as the bladder heals.

# Are there any problems that I should be looking for in the postoperative period?

Please contact our office, at 415 353 2200, if you are concerned with your child's progress after surgery. If your child exhibits any of the following, you should call our office:

· Temperature greater than 101° F

 $\cdot$  Excessive Bleeding from the incision (some spotting, or blood stains on the dressing, is normal)

- · Extreme irritability/inconsolability
- · Inability to tolerate liquids
- · Continuous vomiting
- · Inability to urinate

### **Medications**

#### What kind of side effects do the medications have?

Ditropan (oxybutynin) may cause your child's cheeks to flush. His/her skin may feel warm. This does not mean that your child has a fever. Children taking Ditropan will often experience a dry mouth and may have a decrease in appetite. At this point, we are not concerned about the poor appetite (many children lack interest in food following surgery). However, we ask that you continue to offer your child frequent fluids to maintain an adequate urine output. He/she does not have to take a large amount at one time, even just a few sips every 15 minutes or so is great. Be creative with the way you offer liquids. Offer popsicles, Jell-O and soup, if your child enjoys these. Smoothies are a terrific source of vitamins and are usually tolerated well. This may require patience and persistence on your part as you offer fluids (in one form or another) frequently. Sometimes offering your child's favorite foods can help in the return of appetite.

Morphine is among the medications your child may be given while in the hospital. Also, ondansatron (Zofran) may be given for feelings of nausea and vomiting. These medications should help the discomfort, but may make your child drowsy. Although it is rare, it is important for you to know that

children react to pain medication differently. Some children become overexcited, nervous or develop a rash. If this happens, simply let the nurse taking care of your child know and the medication will be changed to a more agreeable one for your child.

Before discharge, the pain medication will be switched to Tylenol with codeine (Tyco). This comes in both tablet and liquid form. The codeine part of this medication can make some children constipated, so it's particularly important to encourage your child to be as active as possible as much as he or she can tolerate, and to provide plenty of liquids, fruit and vegetables. Gradually, you can start to manage your child's discomfort with plain Tylenol as needed, or with Children's Motrin. Within a few days to a week after discharge you should begin to notice your child feeling more like him or herself.

## **Post Surgical Follow Up**

#### What is the follow-up after surgery?

Your child will usually be discharged anywhere from the first to fourth day after surgery. This is dependent on how your child recovers from surgery. If a drain or catheter is left in place, an office appointment should be made for one week after surgery to remove it. If there is no drain, an appointment will be scheduled for four to six weeks after the surgery. Your child will usually have an

ultrasound at the time of the follow-up appointment. It is important that your child continue the low-dose antibiotics until this time. You may be given the Ditropan and Tylenol (Tylenol with codeine) if necessary to relieve spasms during this time before your return visit. The antibiotics given at the time of hospital discharge should be completed by this visit and your child should resume taking his/her pre-operative maintenance antibiotic daily.

Four to six weeks after the surgery, your child will be scheduled for an ultrasound of the kidneys. This test tells us if there is any blockage at the site of the surgery. It does not let us know if the reflux is corrected; only a cystogram can show that. Your doctor will talk with you about obtaining a cystogram after the operation to confirm whether the operation was successful. The open procedure has a very high success rate and sometimes the decision is made to not perform a cystogram after surgery unless your child gets a urinary tract infection.

Your child may discontinue the low-dose, maintenance antibiotics at about three months out from surgery. Your child will likely return to the clinic for a check-up around six months out from surgery. We will then plan to see your child for a follow-up in one year for a blood pressure test and to check the kidneys with another ultrasound.

# Will my child have anymore urinary tract infections (UTI's) after the surgery?

Some children may be particularly prone to urinary tract infections (for unknown reasons). They may continue to get UTI's even after a successful surgery. However, the difference is the infected urine does not back up towards the kidney and decreases the risk that the bladder infection becomes a kidney infection. Children typically do not have a fever with these infections. If you suspect that your child has an infection you should notify your child's pediatrician or us.

See the next page for contact information.



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#### **Appointments & Location**

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