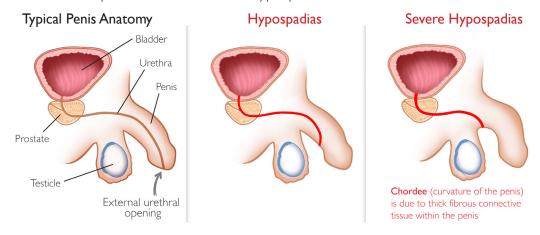


Surgical Treatment for Hypospadias: A Guide for Parents and Caregivers

About Hypospadias

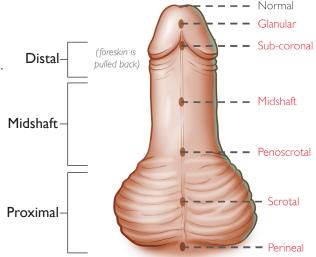
Hypospadias is a congenital condition, one that is present at birth, where the opening for the urethra or tube that carries urine and sperm is not located at the tip of the penis. The external urethral opening can be located anywhere along the underside of the penis from the tip to the rectum. In many cases, a condition called chordee, or downward curve of the penis, is associated with hypospadias.



TYPES OF HYPOSPADIAS INCLUDE:

- **Distal:** external opening is located near the head of the penis (glanular or sub-coronal). This is the most common form of hypospadias.
- Midshaft: opening is located along the middle shaft of the penis.
- Proximal: opening is located near or at the base of the scrotum (penoscrotal, scrotal, or perineal). This type is considered more severe than others.

The exact cause of hypospadias is unknown. Published literature suggests there could be many causes for hypospadias, including the environment, medications taken during pregnancy, hormones, and/or family history.



Treatment for Hypospadias

Each year, Texas Children's Urology Division provides care for more than 500 patients who have hypospadias and performs over 180 hypospadias surgeries.

Many types of hypospadias can be repaired with a single outpatient surgery. Complex and severe cases may require more than one surgery. Surgical repair for hypospadias is usually done after 6 months of age.

THE GOALS OF HYPOSPADIAS REPAIR ARE:

- To bring the external urethral opening to the tip of the penis.
- To straighten the penis if curvature is present.
- To improve the appearance of the penis.

Surgery Outcomes

Our board-certified urologists are committed to provide the highest value of care to our patients. We continuously strive for a successful outcomes of a normal appearing and functioning penis; however, as with any surgical procedure, there are potential risks.

These risks may include:

- Excessive bleeding of the penis.
- Poor wound healing.
- Urinary tract infection.
- Urine may leak out of a second hole. This is called a fistula.
- The opening may narrow. This is called stricture.
- Recurrent downward curve of the penis.

What Are the Risks of Anesthesia?

"Will going under anesthesia hurt my child?" Every anesthesiologist and surgeon has been asked this question. Even though anesthesia is much safer today than ever before, every anesthesia exposure and surgery has an element of risk. In fact, it may be difficult to separate the risks of anesthesia from the risks of the surgery or medical procedure itself. Anesthesia is used to take away pain and discomfort from your child and make it easier for a procedure to be accomplished in the best way possible. These benefits must be weighed against the risks of anesthesia itself.

The specific risks of anesthesia are like that of any medication. Each type of anesthetic has a specific set of risks and side effects associated with it Your physician anesthesiologist will talk to your

associated with it. Your physician anesthesiologist will talk to you about the various types of anesthesia that may be used for your child and the advantages and disadvantages of each.



SAFETY ANNOUNCEMENT FROM THE U.S. FOOD AND DRUG ADMINISTRATION

The U.S. Food and Drug Administration (FDA) issued a safety announcement on Dec. 14, 2016, regarding the potential effect of anesthetics on children younger than 3 years of age.

- A single, short exposure to anesthesia appears to be safe
- There is some evidence that longer (>3 hours) or repeated exposures could have negative effects on behavior or learning
- Much more research is needed

Because anesthesia or sedation is necessary during most procedures to keep your child safe and comfortable, discuss the following items with your doctor before your procedure.

- Should the procedure be done now or when the child is older?
- How long is the procedure expected to take?
- Will repeated or additional procedures be needed?

What to Expect After Hypospadias Surgery

WHILE YOUR CHILD IS IN THE POST ANESTHESIA CARE UNIT/PACU

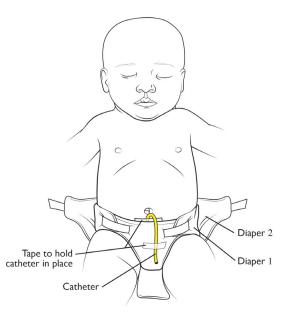
After surgery, the penis may be swollen and red. You may also notice some bruising. The area should return to normal within a few months.

After your child is fully awake:

- He will be encouraged to drink clear liquids.
- Pain medication will be given as needed.
- Your doctors and nurses will provide discharge instructions and prescriptions to take home.
- Your child will be discharged home when he is drinking without vomiting.



UPON ARRIVAL HOME AND THE FIRST 5 TO 7 DAYS



Catheter/Diapers

Your child will have a catheter, a small tube, in the external urethral opening. The catheter, will let urine drain continuously from the bladder. He should wear 2 diapers for comfort, cushioning and protection.

- The inner diaper is for bowel movements and the outer diaper will absorb urine from the catheter.
- The catheter will drain into the outer diaper. Pink-tinged urine is okay. Urine may leak around the catheter where it is inserted into the external urethral opening. This is only a problem if there is excessive leaking, which may indicate a blockage in the catheter. Another sign of blockage is if the catheter is not draining or the outer diaper is consistently dry.

The catheter will be removed 2-7 days after surgery in the urology clinic (unless otherwise specified by your child's surgeon). After the catheter is removed, observe the urinary stream. Some spraying of urine is normal.

Dressing

Your child will have a wound dressing over the penis. Some spotting or blood stains on the dressing is normal. If the diaper becomes soiled with stool, clean the area as best as possible with a moist wipe or damp washcloth by gently wiping away from the penis. Do not remove the wound dressing. It will be removed 2-7 days after surgery in the urology clinic. If the dressing falls off on its own, there is no need to replace it.

Once the catheter and dressing are removed, apply a topical antibiotic ointment (Neosporin®, Polysporin®) during diaper changes and after bathing to prevent the wound from sticking to the diaper or underwear. Do this for 4-5 days.

Questions and Concerns

Please contact Texas Children's Urology at 832-822-3160 if you are concerned with your child's progress after surgery or if your child exhibits any of the following:

- Temperature greater than 101°F
- Excessive bleeding (some spotting or blood stain on the dressing is normal)
- No interest in eating and drinking
- Uncontrolled pain

- Persistent vomiting or diarrhea
- Difficulty breathing or shortness of breath
- No urine output for 8 hours
- Fussiness or extreme irritability

Medications

Pain Medication: Make sure you understand how to give your child all pain medications before you leave the hospital.

Your child may be given a nerve block during surgery to reduce pain. This block will wear off in 4-6 hours. Sometimes, children experience a spike in discomfort lasting 15-20 minutes while the block is wearing off. To prevent this, give pain medication 4 hours after the surgery, even if he appears comfortable.

Give pain medication at

(4 hours after surgery)

Give your child pain medicine on a regular schedule for the first 24 hours

after surgery, even if your child does not appear to be in pain. You will want to have children's acetaminophen (Tylenol®) and ibuprofen (Advil® or Motrin®) available after the surgery. Give acetaminophen for the first dose and ibuprofen for the next dose, alternating between the 2 medications while the child is awake. Do not wake up your child to give pain medication. Follow the dosing instructions on the package based on your child's weight and age.

Bladder Spasm Medication: A bladder spasm is when the bladder tightens suddenly and may cause your child to bend his knees up to his chest and/or leak urine around the catheter. Your child will receive oxybutynin (Ditropan®) to ease bladder spasms. Give this medication 3 times daily while the catheter is in place. Stop this medication once the catheter is removed.

Antibiotic Medication: Give this medication as directed until the day after the catheter is removed.

Bathing and Activity



Only sponge bathe your child until the catheter is removed. After the catheter is removed, your child may bathe twice a day for 5-10 minutes for 4-5 days.

Your child should rest the day of surgery. He may return to limited activity the next day. No swimming for 2 weeks. No straddle toys or sports for 4 weeks.



Food and Drink

When your child comes home after surgery, he may not want to eat or drink.

Nausea and vomiting is common after surgery. Start by giving your child clear liquids, such as apple juice, Sprite[®], Gatorade[®], tea, broth, a popsicle, or gelatin. Give him 1-2 ounces every hour while he is awake. If your child

drinks clear liquids and does not vomit, give soft food and then resume a normal diet.

Frequently Asked Questions about Hypospadias Surgery

- I. Will my child have pain with urination after surgery?

 Pain with urination may be experienced for a few days after the catheter is removed. This typically improves over time without treatment.
- 2. What do I do if my child has a bowel movement and stool gets on his dressing?

 This is very common. Clean the area as best as possible with wipe or damp washcloth. Do not remove the dressing. Your child is taking antibiotic to prevent infection of the area. If the dressing falls off on its own, there is no need to replace it.

Resources for Parents and Caregivers

Visit http://texaschildrens.org/preparingforsurgery to find interactive information on the surgery experience at Texas Children's Hospital.

This information is for educational purposes only and is not intended to replace the advice of your child's doctor or health care provider. Discuss any questions or concerns with your child's doctor.