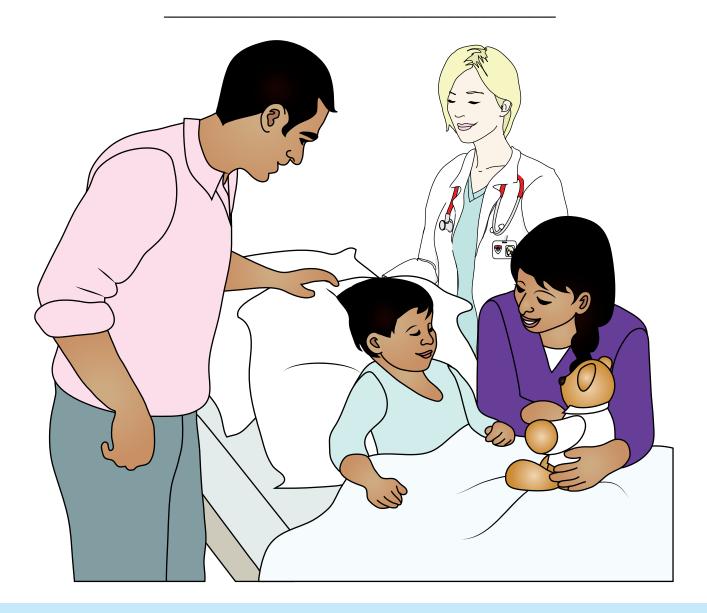
What you need to know about **Hypospadias surgery**

This guidebook is for:



This booklet is meant to help you and your family understand hypospadias. It will guide you as you prepare your child for surgery.

> Hôpital de Montréal pour enfants Centre universitaire de santé McGill



Montreal Children's **McGill University Health Centre**

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This material is also available through the MUHC Patient Education Office website (www.muhcpatienteducation.ca)

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A message from your Urology team

Dear parents,

Your child has been diagnosed with hypospadias. Using our experience and what parents have told us, we have designed this booklet so that it is useful, practical and easy-to-read. We hope that it will help you understand hypospadias and prepare for surgery.

This booklet is meant to serve as a reference when you meet with the hospital team. You can also review it later at home. It will cover important information about your child's surgery, how to prepare and how to play an active part in his recovery.

Please review this closely with your nurse and your family. Bring it with you on the day of the surgery. Use it as a guide during your child's hospital stay. Carefully follow all the instructions. They will help prevent any health problems after surgery. Your child will also more likely go home sooner and recover faster.

We know that this can be a stressful time for families. You might feel overwhelmed with questions, information, and feel a mix of emotions. The good news is that you are not alone. We are here! We hope that this booklet will guide you as you prepare for your child's surgery. Please know that we will help you each step of the way.

Your Montreal Children's Hospital Urology team



If you are not comfortable in English or French, please let your surgeon's office or the Pre-Operative Assessment Clinic staff know, as soon as possible. We will provide you an interpreter (through the hospital's Sociocultural Consultation and Interpretation Services). An interpreter will be with you for all your hospital appointments as well as for the surgery. This service is free of charge.

Hypospadias in Children

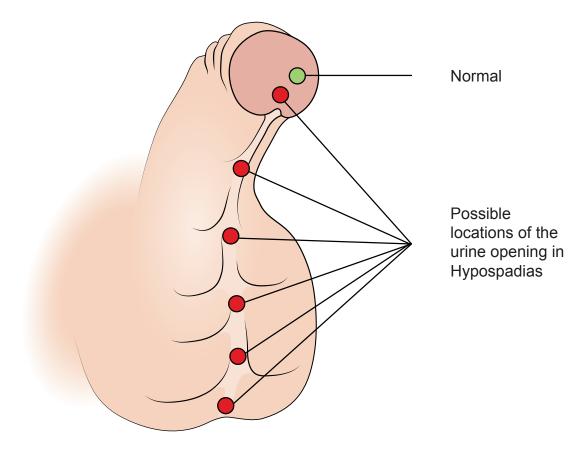
What is hypospadias?

In children with hypospadias, the opening for urine to pass (meatus) is not at the tip of the penis. This is because the tube (urethra) which carries urine through the penis, was not fully formed at birth.

Hypospadias is very common in boys. Approximately 1 in every 300 babies are born with hypospadias.

In mild cases, the opening is near the tip of the penis. In more severe cases, the opening is in the middle, or near the bottom of the penis.

In some boys, the penis may also bend downward. This is called chordee. The foreskin on the underside of the penis may also be missing.



We do not recommend circumcision in newborn babies with hypospadias. This is because the child's foreskin may be used later to repair the hypospadias.

What are the causes?

We do not know the exact causes for hypospadias. They are sometimes inherited (that is, passed down in families).

Why is repair important?

Hypospadias is **not** a life-threatening condition. However, it does affect what the penis looks like and how it works. A hypospadias can make it difficult for some boys to stand and urinate properly. The location of the opening and the bend in the penis may also affect sexual functioning later in life. For these reasons, it may be important to repair.

What is the treatment?

There are many types of hypospadias. Some are quite mild and others are more severe. Your child may not need treatment if the hypospadias is very mild.

The treatment for hypospadias is surgery. Surgery is done under general anesthesia. It is usually offered to children between the ages of 6 and 24 months. This is the ideal time for surgery because the penis is big enough. Also, very young children do not remember the experience.

Today, children who have hypospadias repair surgery have very positive results. Over 90% of boys with hypospadias will have the problem corrected in a single surgery. More severe forms of hypospadias may need more than one surgery. In such cases, the surgeries are usually done 6 to 12 months apart.

Preparing for surgery

After a diagnosis of hypospadias is made, your pediatric urologist (doctor who specializes in this area) may suggest other tests. Some boys may need male hormone (testosterone) to enlarge the penis before surgery. This hormone is given as an injection by a nurse at your local pharmacy, CLSC or the urology clinic. Your pediatric urologist will give you a prescription for this.

When the date of the surgery is confirmed, we will give you information about when and where to go, fasting, and other details on how to prepare at the Pre-Operative Assessment Clinic. Please follow all the instructions carefully. They will help prevent any health problems after surgery. You child will also more likely go home sooner and recover faster.

Will my child need to stay in the hospital?

Most forms of hypospadias can be repaired on a day surgery basis. This means that your child can go home on the same day of surgery. A small number of boys may need a bigger surgery. If this is the case for your child, we will ask you to prepare to stay in the hospital overnight. If necessary, hypospadias repair can be combined with another surgery to move the testicle(s) into the scrotum. These two surgeries can be done at the same time.



What happens during surgery?

During hypospadias repair surgery, your pediatric urologist will:

- bring the urine opening to the tip of the penis
- straighten the penis
- make the penis look as it should, as much as possible
- restore the correct direction of urine stream and healthy erection
- remove extra foreskin

During the surgery, the pediatric urologist will first straighten the penis. Then, he or she will make a new urethra (urine tube) using skin from the penis, foreskin or tissue from elsewhere in the body. Your pediatric urologist will discuss these details with you. Finally, the head of the penis (glans) will be remolded and extra foreskin removed.

The exact length of the surgery and the recovery time will depend on how serious the problem is for your child. If your child has a mild case of hypospadias, with not too much bending of the penis (chordee), he will most likely only need a simple surgery. If your child has a more moderate or serious case of hypospadias with chordee, he will need a longer surgery. He will also need a special urine tube (catheter) after surgery.

Pain control

We want to make sure that your child stays as comfortable as possible after surgery. To do this, we will:

- Give your child pain medication at the end of his surgery to make sure that he has pain relief when he first wakes up. This could be in the form of local anesthesia (medication to numb the area) or a suppository (medication given and absorbed into the body through the rectum). Pain relief from these medications will last for 4 to 6 hours.
- Prescribe you acetaminophen (Tylenol[®] or Tempra[®]). Once your child is home, give him mg every 4 hours. You may continue to give acetaminophen for up to 10 days. You may give your child up to 5 doses of this acetaminophen per day.
- Provide you more information on pain control before the surgery

We may prescribe other pain medications for your child. If this is the case for you, it is very important to follow any instructions on how much and how often you give these medications to your child very carefully.



Your child's pain should usually improve after 2 days (48 hours). However, it may last up to 5-10 days for some children. If your son is going home without a urine tube (catheter), he may complain of pain or cry when he urinates for 1 or 2 days. Children who go home with a urine tube (catheter) may have pain due to bladder spasm from the catheter. To help your child stay comfortable, use your pain medications as they were explained to you.

If your child's pain:

- is not relieved by his medications
- continues for longer than 10 days

During office hours, call the pediatric urologist's office at: (514) 934-1934 x 24316

Outside office hours: (514) 934-1934 and ask for the pediatric urologist on-call.



After surgery

Your child's penis will look very swollen and bruised after surgery. Rest assured that it will look healthier after 2 to 3 weeks. It may, however, take several months for all the swelling to disappear. You may notice some oozing and spotting on your child's diaper or underpants after this surgery. This is also normal.

Surgical bandage (dressing)

We will place a clear plastic surgical bandage (dressing) around your child's penis. This will help bring down the swelling and protect the wound.

Your child may also have a special top dressing to cover the clear dressing. If this is the case for your child, we will give you special instructions on when to remove this.

Your child's stitches will dissolve after several weeks.

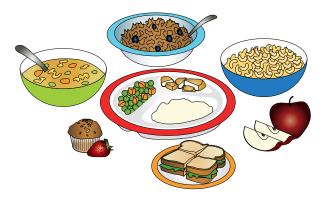
Food and drink

For the first 2 hours after surgery, give your child water or apple juice. Then, move to milk and soft foods a little at a time. Your child will be able to eat normally again within 12 hours after surgery.

Once you are home:

- Encourage your child to drink plenty of fluids. This will help his body to make lots of urine and prevent the urine tube from blocking. A child without a tube will urinate more comfortably.
- Offer your child foods that are high in fiber, such as fruits, vegetables and whole grain products. This will prevent constipation. Straining to have a bowel movement can stress the surgical wound. It can also worsen any bladder spasms.





Urine tube

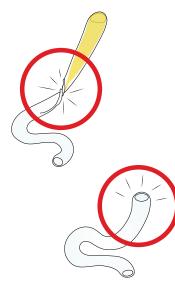
Some children may go home with a urine tube (catheter) in their penis. This tube helps to drain urine out of the penis and help the new urethra to heal.

To take care of the tube:

Take special care not to pull the tube out during diaper changes and bathing. It is helpful to have 2 people present during diaper changes (1 person to change and 1 person to distract your child).

Give your child antibiotics to prevent urine infection, if these were prescribed.

Give your child anti-spasm medication. The urine tube may irritate your child's bladder. This can lead to bladder spasms. **Spasms are not harmful.** During a spasm, your child may suddenly become irritable, pull up his legs or grab his penis. You may be prescribed anti-spasm medication (oxybutynin), if spasms are expected. Oxybutynin can cause facial flushing, dry mouth and constipation.



Check for kinks in the tube. Urine sometimes leaks around the drainage tube or spurts through the end of the tube. If the inside diaper is more wet than the outside diaper, check that the catheter is not kinked at the groin.

Check for a block in the tube. Heavy leaking around the tube and **no drainage** from it may be a sign that the tube is blocked. If you were given irrigation instructions, you may flush 10cc of normal saline into the tube. If the tube still seems blocked, call the doctor.

Give your child a dose of acetaminophen (Tylenol[®] or Tempra[®]) 30 minutes before he is scheduled to have the tube removed. (The urine tube is held in place by a stitch. It will be removed in the Urology Clinic 5 to 10 days after the surgery.)

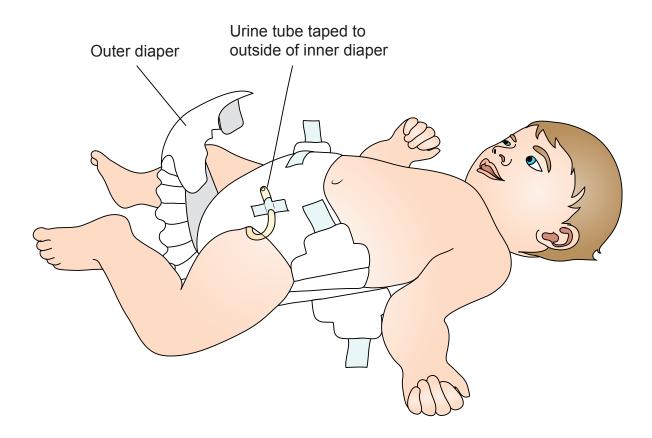


After the urine tube is removed, your child may have pain. His urine may also spray the first time he urinates. This will improve after a few days.

Diaper changes

Apply generous amounts of Polysporin[®] ointment to the tip of the penis at every diaper change for 2 weeks. (If your child is not in diapers, apply Polysporin[®] ointment 3 to 4 times a day.)

If your son has a urine tube, he will need to wear double diapers. Double-diapers provide extra padding and help keep the surgical bandage dry. The inside diaper will collect stool and the outside diaper will absorb urine from the catheter tube.



- Change one or both diapers as needed. Wash the anal area with soapy water after each bowel movement. Carefully wipe any stool that gets on the tube or dressing. Always wipe in a direction **away** from the penis. If the tube or dressing becomes very soiled, wash with mild soap and rinse your child in a tub of clear water.
- The nurses in the Post-anesthesia Care Unit (Recovery Room) will show you the double diaper method. On the day of the operation, please bring 4 diapers one size bigger than what your child normally wears. This will allow room for the dressing and the catheter.
- Dress your son in loose clothing to prevent pressure on the penis. A one piece jump suit will prevent your child from touching the catheter.

If your child is older, the catheter will drain into a bag attached to his leg.

Bathing

On the day of surgery, give your child a sponge bath. Apply generous amounts of Polysporin[®] ointment to the tip of the penis after the bath and at every diaper change. Polysporin[®] ointment helps prevent infection. It will also help to loosen the clear bandage.

You may bathe your child in a bathtub 1-2 days (24-48 hours) after surgery. Soak your child (with the catheter) in a tub of clear water for 10 to 15 minutes. Do not use soap. Tub baths will help:

- Loosen the surgical bandage.
- Clean the penis.
- Promote healing.



After bathing your child, gently pat the penis dry with a clean towel. Do not rub. Carefully start to peel off the clear dressing. It may take a few days before you are able to remove the bandage completely.

Apply Polysporin[®] ointment over the entire penis after each tub bath, especially on the underside.



Give tub baths and apply Polysporin[®] ointment, 1-2 times a day, for 5 days, or until the catheter has been removed.

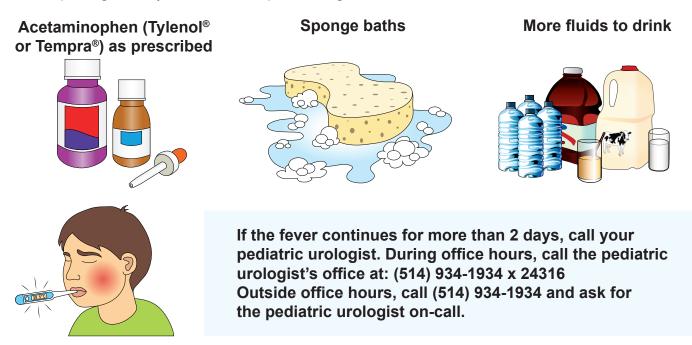
Once the catheter is removed, continue tub baths and Polysporin[®] ointment, 1-2 times a day, for 5 more days. Then bathe as usual.

The penis will look swollen and bruised at the beginning. The swelling and discoloration will improve slowly with each passing day. It may take several months for all the swelling to completely disappear.

A few days after surgery, you may see a yellowish substance over the head of the penis. This is not a sign of infection. This is a normal part of healing. It will clear on its own after several days.

Fever

You can expect a low grade fever up to 38.5°C or 101° F after surgery. To help bring down your child's temperature, give him:



Signs of Infection

Call your pediatric urologist at (514) 934-1934 extension 24316, if you notice any of the following signs of infection:

- Fever lasting more than 48 hours
- Penis is getting more swollen over time and is hot to the touch
- Foul-smelling fluid draining or urine

Bleeding

Some oozing (pinkish or brownish fluid) under the dressing or spotting in the diaper is normal. On the day of surgery, check for bleeding **(bright red drops of blood)** every 2 hours and once during the night. If bleeding occurs, apply gentle pressure to the penis for 5 minutes.

> If there is any heavy bleeding or if you have concerns about bleeding, call the pediatric urologist. During office hours, call the pediatric urologist's office at: (514) 934-1934 x 24316. Outside office hours, call (514) 934-1934 and ask for the pediatric urologist on-call.

Movement and play

When your child wakes up from surgery, he may feel dizzy and his legs may feel weak. Offer him calm and quiet play activities until the next day.

To prevent injury to the penis, you will need to watch your child very closely for 2 weeks after surgery. Do not let him straddle toys (bicycles, rocking horses, walkers), play in chlorinated swimming pools, or in sandboxes.

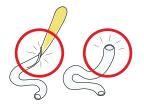
Use a small blanket or towel to pad your son's lap when using a seat belt, stroller or a car seat. This will prevent any injury.

When to call the doctor

Call the Montreal Children's Hospital if you notice any of the following:



bleeding-bright red blood that does not stop after applying gentle pressure to the penis for 5 minutes.



 urine tube is blocked (and irrigating does not clear the block) or urine tube falls out.



 fever (38.5°C or 101°
F), lasting more than 48 hours, with foul-smelling fluid draining or urine.



 pain that is not relieved by the prescribed medications and/or that continues for longer than 10 days or your child is straining or unable to urinate.

During office hours, call the pediatric urologist's office at: (514) 934-1934 x 24316

Outside office hours, call (514) 934-1934 and ask for the pediatric urologist on-call.



Possible problems after surgery

Problems after surgery are rare, but they can happen. These include:

- Infection this is rare, but can occur during the first 6 weeks following surgery.
- A fistula (tunnel that forms under the skin) or leak may develop along the shaft of the penis. If the fistula does not close by itself during the first 6 months following surgery, then it will need to be repaired.
- Scarring or narrowing of the new urethra can also occur. This may cause the urine stream to be thin or the child to push to urinate. We recommend that you check for changes in your child's urine stream regularly during the first 6 months after surgery.

FACT: Did you know that at the Montreal Children's Hospital, the rate for problems after hypospadias repair surgery is very low (less than 5%)?



Hospital map



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> All patient materials are freely available on the internet to MUHC patients, and to patients and families everywhere.

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In Person / By Mail: 1650 Cedar Avenue, room E6-129 Montreal QC, H3G 1A4

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