
Mitrofanoff/ Bladder Augmentation

Developed by the health care professionals of the Department of Urology with assistance from the Department of New Knowledge and Innovation.

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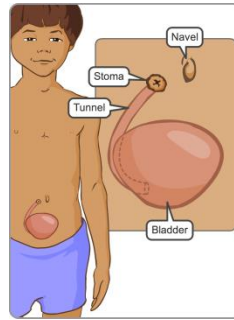
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What is a Mitrofanoff?

A Mitrofanoff is a small tunnel that is from the bladder to the outside of the body. It is used to empty the bladder. A small, flexible tube called a “catheter” is put into the Mitrofanoff stoma for the urine to flow through.

A Mitrofanoff opening is created by the surgeon, using the appendix. The appendix is a small tube that is attached to the bowel (large intestine) and is unused. The surgeon will detach the appendix and connect it to the bladder and the skin near the belly button. There are many reasons that a child may need a Mitrofanoff, such as:



- Difficulty or pain using a catheter through the urethra
- Spinal cord injury
- Birth defects such as, Spina Bifida or Bladder Exstrophy

What is a Bladder Augmentation?

- A Bladder Augmentation is simply making the bladder bigger. The surgeon will open up the bladder and attach a piece of small bowel (intestine) to it. This makes the bladder bigger and able to safely hold more urine. An augmented bladder will always need to be irrigated and emptied with a catheter. Your Urologist or Urology Nurse will discuss bladder irrigations with you.

Is there any preparation for this surgery?

- Yes. You will meet with the Urology Nurse before the surgery to talk about what to expect at the hospital. This is a good time to have your questions answered.
- Because the surgeon will operate on your child’s bowel, it is important the bowel is cleaned out first. This means that your child will be admitted to the hospital ward 1-2 days before the surgery date and given a liquid to drink; this will help to wash the bowel out.

Eating and Drinking

Once the bowel washout has started, your child will be given some fluid through an IV (intravenous) catheter. Your child will also be to eat and drink clear fluids such as: jello, apple juice, water and popsicles. Your bedside nurse will give you more information about eating and drinking when you arrive at the hospital.

Your child will need to be catheterized multiple times during the day.

Catheterization is usually done every 3-4 hours during the day, depending on how much your child drinks. Some children are also catheterized overnight.

Your Urology Nurse will discuss a catheterization schedule to follow, before you go home.

There are no special steps to take when your child bathes or swims.

There is no need to cover the Mitrofanoff stoma with gauze or a dressing. There should be no urine leaking from it. No bath or pool water will end up in your child’s bladder.

Your child should wear a Medic Alert bracelet.

A medic alert bracelet lets other health care workers know of your child’s Mitrofanoff and bladder surgery if there is an emergency. Your Urology Nurse will give you the information you need to get this bracelet.

You should call your Urology Nurse Clinician if your child is:

- Leaking urine from the stoma.
- Having problems emptying the bladder even after irrigating.
- Having difficulty putting the catheter into the stoma.

Showing signs of infection. These include cloudy or smelly pee and fever. It is important that your child drinks a lot of fluids to help protect against infection.

If You have any Issues or Questions

- ♥ The phone number for the Urology Nurse is 604-875-2889

Step 2:

- Clean the Mitrofanoff stoma and surrounding area with a clean cloth and water, or an unscented towelette. It is important to make sure the area is clean before you put the catheter into the bladder.
- Apply a lot of water-soluble jelly on the first two inches of the catheter.



Step 3:

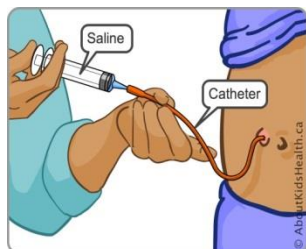
- Slide the catheter downward into the stoma. It may get harder to push as the catheter reaches the bladder. Keep pushing gently until urine flows.



Let the urine drain into the toilet or a bottle until the flow stops. Then, push the catheter another ½ to 1 inch further. Urine may or may not flow again.

Step 4:

- If you need to flush the bladder, fill the syringe with saline and attach the syringe to the end of the catheter, once it has stopped draining pee. Push the Saline into the bladder until the syringe is empty, and then pull back as much Saline as you can into the syringe. It is normal to see mucous floating in the Saline.
- Not all children need to flush the bladder. Your doctor will tell you if this step is needed.



Step 5:

Take out the catheter and discard. You may re-use the 60cc syringe for one week. Your Urology Nurse will teach you how to keep it clean.

Surgery Day

- On the morning of the surgery, you will have a chance to meet the Anesthetist (sleep doctor) who will be looking after your child during their surgery. You will be able to accompany your child to the operating room and stay with them until they are asleep.
- The surgery will take approximately 4-6 hours. You will have a chance to speak with the surgeon before and after the surgery.

After the Surgery

- After the surgery is finished, your child will be taken to the Recovery Room. You will be allowed to see your child in the Recovery Room and accompany them back to their hospital room. For the first few days, your child will have an IV (intravenous) for giving medications and fluids. Your child may also have some of the following:
- **Nasogastric tube:** a tube is inserted during the surgery through the nose, into the stomach. The purpose of this tube is to help keep the stomach empty and give the bowel (intestines) a chance to rest. This tube will be removed before your child goes home.
- **Abdominal drain:** the drain is inserted into the abdomen for the purpose of draining fluids from the surgical site. This drain will be removed before your child goes home.
- **Suprapubic catheter:** this catheter tube enters through the skin of the abdomen and goes into the bladder. The purpose of this catheter is to drain urine out of the bladder, into a drainage bag. It is important to keep the bladder empty, so that it has a chance to heal. This catheter will stay in place for 4-6 weeks and will be removed in the Urology Clinic.
- **Mitrofanoff catheter:** this catheter tube is inserted through the new Mitrofanoff stoma (opening) in your child's belly button area, into the bladder. The purpose of this catheter is to drain urine out of the bladder. It also keeps the Mitrofanoff stoma open as it heals. This catheter will stay in place for 4-6 weeks and will be removed in the Urology Clinic.

- **Stents:** the stents are very small tubes that go into the ureters. (The ureters carry urine from the kidney into the bladder.) The ureteral stents come out of the abdomen and are attached to small drainage bags. The purpose of these stents is to drain urine from the kidneys and helping to keep the bladder empty. These stents will be removed before your child goes home.
- **Urinary catheter:** this is a tube that is inserted through the urethra (the opening that you pee from), and goes into the bladder. The purpose of this tube is to drain urine from the bladder and keep it empty. This catheter tube will be removed before your child goes home.
- **Incision:** your child will have a surgical incision (opening of the skin) on their abdomen. This will be covered with a dressing (bandage). The dressing will be changed by your bedside nurse as needed.

When can we go home?

Most children are able to go home approximately 7-10 days after the surgery. Your bedside nurse and Urology nurse will make sure that you are comfortable with caring for your child at home, before you leave.

Follow-Up

Your child will be scheduled for an appointment with the Urology Nurse in the Urology Clinic, approximately 4-6 weeks after surgery. During this appointment, your child will have the remaining catheter tubes removed and will also be taught how to use their new Mitrofanoff stoma to empty their bladder. The Urology Nurse will make sure that you and your child are familiar with the medical supplies that will be needed, and know where to get them.

Caring for Your Mitrofanoff after Surgery

Learning how to catheterize the Mitrofanoff

You will meet with the Urology Nurse at about 4-6 weeks after surgery in the Urology Clinic, for teaching and suprapubic tube removal. Your nurse will teach you how to put the catheter tube into the Mitrofanoff to drain your bladder. Plan to be at the Urology Clinic for about 2-3 hours. Once you are feeling comfortable with catheterization, your suprapubic tube will be taken out.

Catheterizing through the Stoma

Your Urology Nurse will discuss the supplies that you will need to have and help to you organize where to get them from. You will need these supplies:

- A catheter
- Water-soluble jelly to make the catheter slippery
- A clean face cloth/moist unscented towelette
- A clean 60cc catheter tip syringe
- Normal saline

Step 1:

- Gather your supplies and make sure to place your catheter on a clean surface. A clean piece of paper towel works well. Wash your hands with soap for a minute – pay attention to space between the fingers.

