



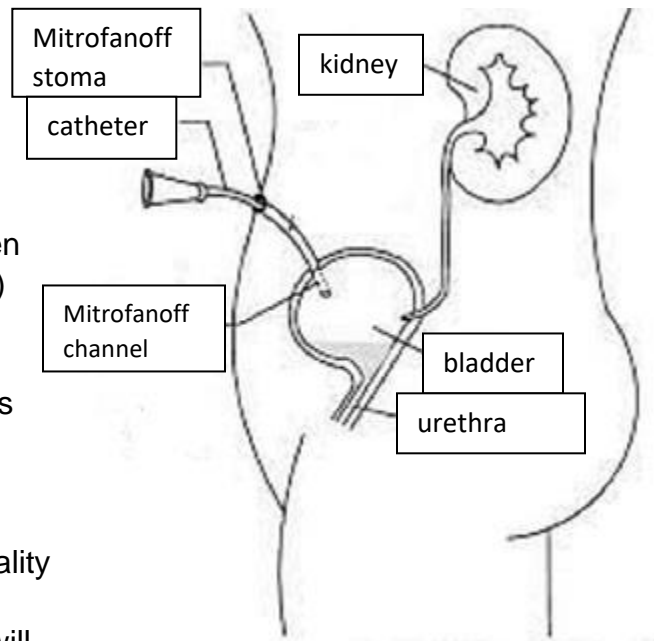
## Mitrofanoff (Appendicovesicostomy)

### What is a Mitrofanoff?

A Mitrofanoff is a tube created inside the body using the appendix or a small piece of bowel tissue to drain urine from the bladder.

### Why is the Mitrofanoff Procedure Done?

A Mitrofanoff is an option for children who need a way to empty their bladder other than peeing/voiding, but who do not want or cannot catheterize through their urethra (tube from the bladder to the outside). The Mitrofanoff allows children to pass a catheter (small flexible tube) through a small opening in the abdominal wall (usually the belly button) called a stoma every 3-4 hours to empty their bladder. This surgery allows most children to catheterize themselves, increasing their independence and improving their quality of life. Children in a wheelchair can empty their bladder while sitting and will not have to move from the wheelchair to catheterize. Adult supervision is needed until it is well known they are doing the procedure correctly.



Before surgery a bowel cleanout will be ordered. This is typically done at home with medications and a special diet to help clean out the bowel of stool. For some patients it may be recommended to have a more extensive bowel cleanout the day before the procedure in the hospital. Our surgery scheduling department will give you further instructions and information.

### What happens during surgery?

Your child will receive general anesthesia to help them sleep and not feel pain during surgery. The surgery takes 2-3 hours and can often be done with other surgical procedures your child may need. Your child's surgeon will create a tube using the appendix or small piece of bowel that will be open on both ends. One end will be



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“funneled” into the bladder and the other end is made into a small opening on the abdomen or in the belly button. This is called a stoma. To empty the bladder, a catheter is passed through the stoma into the bladder and the urine is drained from the bladder. Your child will have two catheters after surgery: one in the newly created Mitrofanoff, plus, one in the urethra and/or a suprapubic catheter (incision in the lower belly). The catheter(s) purpose is to keep the bladder empty so everything can heal. Your child will go home with these catheters in place for 3-4 weeks.

After surgery, your child will be admitted to the hospital for a couple of days or up to a week or longer, depending on the actual procedure or procedures that were done.

### **Will my child be in pain?**

Your child may experience both incisional pain and bladder pain (bladder spasms). The anesthesiologist and your child’s surgeon will prescribe and explain the medications that will be used to keep your child comfortable.

Spasms are a contraction of the bladder wall muscle caused by irritation from surgery, and the urinary catheter(s). Signs of bladder spasms are sudden irritability, children drawing up their legs, urge to urinate, small urinary accidents, blood in urine or feeling pressure in their bottom. The spasms can come and go and usually last less than a minute. Your child may experience bladder spasms until the catheter(s) are removed. During this time, you should keep their urine diluted with good fluid intake. Minimize caffeine, carbonation, citrus, chocolate, and excessive vitamin C in their diet, these are bladder irritants/stimulants and can make the spasms worse. Constipation can also worsen the spasms. Keep stools soft and easy to pass daily. Medication(s) will be prescribed to help relieve bladder spasms.

### **What can I expect after the surgery?**

Before your child is discharged, you will be given written information about their care at home and any questions you have will be answered.

You will be taught how to care for the catheter(s) before you leave the hospital, and you will be instructed on how to irrigate the catheter(s) as needed to keep the bladder draining easily. Typically, the catheters stay in place for 3-4 weeks, depending on the procedure(s) your child had done. You and your child will return to our clinic for catheter removal and teaching with our nursing staff. Future catheter supplies will be ordered at that time.

- **Diet:** Resume regular diet as tolerated.
- **Activity:** Your child may return to school or daycare when pain is well controlled. Avoid vigorous activities, contact sports and swimming until the catheter(s) are removed.



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- **Catheters:** Be sure your child's catheters are secure to their body to avoid being accidentally pulled out. Urine should constantly be draining from the catheter. Expect blood in the urine on and off until the catheter(s) are removed. Irrigate the catheter once a day as directed by your child's surgeon.
- **Wound Care:** Your child will have surgical glue or a clear plastic dressing on their incision. It may take the surgical glue up to 2 weeks to completely dissolve. If a dressing is used, it can be taken off 1 week after surgery or per your surgeon's directions.
- **Bathing:** Sponge bathe your child for the first 24 hours after surgery and then they may shower or take short baths (5-10 minutes) in plain water until the catheter(s) are removed. This will promote healing and can be soothing.  
**Medicines:** Pain can be managed by alternating Acetaminophen (Tylenol® or another brand), and Ibuprofen (such as Advil® or Motrin®). Do not give aspirin because it may cause bleeding. If your child is prescribed an antibiotic, follow your surgeon's specific instructions. Your surgeon may supply a prescription for medicine which should help relieve bladder spasms, follow your surgeon's specific instructions.

### **What to call the surgeon for:**

- Fever with worsening redness or pus like drainage at surgical incision or catheter sites.
- If the incision starts to separate.
- The catheter(s) are not draining, you have irrigated the catheter(s), and they are still not draining urine.
- Blood clots or increasing amounts of blood in urine.
- Foul smelling or cloudy urine.
- Nausea or vomiting that is not associated with medications.
- Pain or bladder spasms that are not controlled with prescribed medications.

Call your primary care provider for any other concerns.

**Follow-up care:** Follow-up with your child's surgeon as directed following the surgery. Call your surgeon's office to schedule an appointment at (612) 813-8000 option 3.

**Questions?** This information is not specific to your child but provides general information. If you have any concerns, please call our clinic at (612) 813-8000 option 6 for the urology nurses.