

# Care of Nephrostomy Tube

## What is the urinary tract?

The urinary tract is made up of the kidneys, ureters, bladder and urethra.

The kidney itself consists of the cortex (yellow highlight), the calyces (green highlight), and the pelvis (orange highlight). The cortex is the "meat" part of the kidney which contains the tubules that filter blood to remove wastes and make urine. The calyces are collecting ducts which funnel the urine being made by the tubules into the pelvis, which is the larger, single collecting space where the urine goes before draining out of the kidney. Urine drains out of the kidney pelvis, into the ureter (the tube connecting the kidney and bladder, blue highlight), and then into the bladder. Urine stays in the bladder until it is expelled from the body through the urethra by urinating.

## What is a Nephrostomy Tube?

A nephrostomy tube is a flexible tube that drains urine

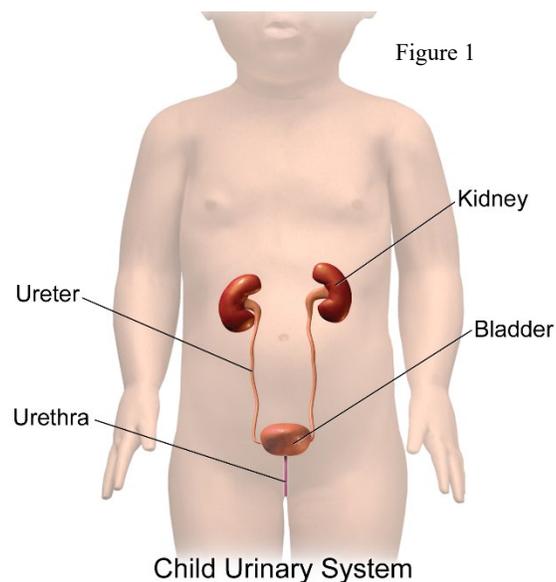


Figure 1

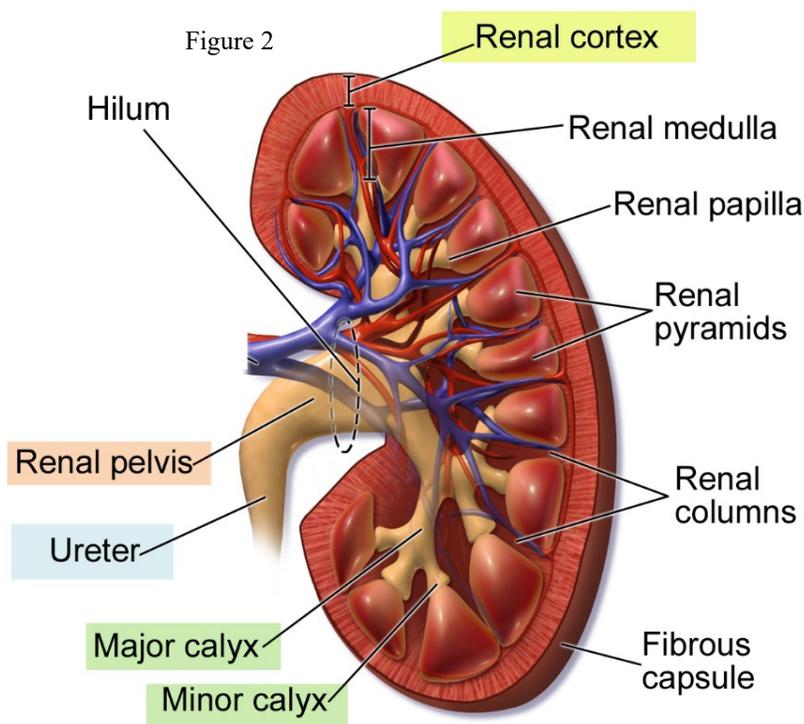


Figure 2

directly from the kidney. The tube drains into a drainage bag or into a diaper. A nephrostomy tube is used when there is a blockage or an obstruction that do not allow urine to flow into the bladder. The obstruction may be due to illness, injury, surgery, or improper formation before birth. In most cases, the nephrostomy tube is used temporarily (a few days to several months) to permit proper drainage of urine from the kidney until the obstruction has been relieved.

### **How will I take care of my child's Nephrostomy Tube?**

The most important thing about the nephrostomy tube is to **keep urine draining from the kidney**. The tube should drain urine at all times. If it stops draining, first check the tubing for any twists or kinks and straighten out the tube immediately. If you can't find any twists or kinks there may be a plug inside the tube, in which case it would need to be irrigated or flushed by the doctor or nurse. Call Pediatric Urology if the tube will not drain. An exception to this is if the doctor has sent you home with the tube clamped off or if the tube is draining internally into the bladder. Frequently emptying the drainage bag helps monitor the amount of drainage and will also keep tension off the tube. It is usually best to empty the drainage bag at least 4 to 5 times a day, or more often if it is full.

### **How do I keep the tube secure?**

The nephrostomy tube is usually sewn in place at the skin with one or two stitches. To prevent the tube from being pulled out accidentally, always keep the tube taped to the skin near the insertion site (be careful not to pull out the tube while changing the tape!). It is also helpful to keep the tube and drainage bag tucked inside the clothing to make it less susceptible to a mishap. If the tube does fall out, call Pediatric Urology immediately.

### **How do I take care of the insertion site?**

It is normal for a small amount of mucus or crust to form at the insertion site of the nephrostomy tube. It is not necessary to remove all the crust when

cleaning the skin. Wash the skin around the tube insertion site with soap and water to gently clean off any excess dirt or drainage once a day or every other day. A small piece of gauze taped over the insertion site should be changed daily.

### **Can my child take a bath or shower?**

Sponge bathing is usually necessary as long as there is a nephrostomy tube in place. Your doctor may tell you that a shower is allowed, but tub baths should be avoided.

Swimming or contact sports are not allowed while the nephrostomy tube is in place.

### **What are the symptoms of an infection?**

Slight redness at the insertion site of the nephrostomy tube is normal.

Watch for signs of infection:

1. An increase in the redness. If the red area is larger than a dime this may indicate an infection.
2. The amount of drainage from the site soaks through more than one gauze pad per day.

Call Pediatric Urology if you note any of these signs. (see contact information on the next page)

### **Is it normal to have blood in the urine?**

As long as the nephrostomy tube is in place it is normal to see some blood in the urine from time to time (even if the urine has previously been clear). The blood is usually due to the procedure done or to irritation from the tube inside the kidney. Blood in the urine is not a cause for concern unless there are clots of blood or the color of the urine is dark red and difficult to see through.

### **When should I call my doctor?**

Call the Pediatric Urology office immediately if your child has:

- Fever over 101° Fahrenheit orally
- Vomiting or loss of appetite
- Increase pain in the side or flank where the nephrostomy tube is located
- Excessive irritability or listlessness
- Redness around the tube larger than a dime
- Drainage soaking more than one gauze pad per day
- No urine draining for over one hour
- Blood clots or dark red urine
- The tube comes out

What is the number to call?

- During business hours, weekdays between 8-5 pm call the Urology Call Center (734) 936-7030 or (866) URO-MICH (876-6424)
- After hours and on weekends and holidays call (734) 936-6267 (UMHS Operator) and ask for the Urology resident on call

## **Things to Remember**

### **Do:**

- Keep the tube taped. Replace the tape if it is wet or loose.
- Keep the tube and bag underneath clothing, if possible.
- Change the dressing daily or every other day. This is necessary for several reasons: to keep the tube site clean, to watch for signs of infection and to be sure the tube is secure
- Clean around the tube site daily or every other day with a wet washcloth or half-strength hydrogen peroxide

### **Do not:**

- Take tub baths
- Go swimming
- Participate in contact sports or vigorous activity.

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