

Helping Hand[™]

Nephrostomy Tube

A nephrostomy (neff ROSS toh mee) tube is a tube that is put into the kidney to drain urine directly from the kidney.

Urine is made by the kidneys and normally drains down into the bladder through tubes called ureters (YOUR ett uhrs), **Picture 1**. Sometimes urine cannot drain the way it should because of an infection, swelling after surgery, trauma, kidney stones, or a congenital (present at birth) defect of the urinary tract. In these cases, a nephrostomy tube is needed.

Nephrostomy tubes can be put in either by a radiologist in the Interventional Radiology Department or by a surgeon in the operating room. The nephrostomy tube will be placed through the skin of the lower back into the kidney. Small stitches or an adhesive securement device (or both) will be used to hold the nephrostomy tube in place.

Food and Drink before the Procedure

Your child may have CLEAR LIQUIDS up to 2 hours before surgery. After that, he or she may have nothing else to drink. Clear liquids are those you can see through that have no pulp or food bits in them. Examples of clear liquids are water, apple juice, white grape juice and Pedialyte.



Picture 1 The kidneys, ureters, and bladder inside the body.

- Your child may have breast milk up to 4 hours and formula up to 6 hours before surgery and water or Pedialyte up to 2 hours before surgery. All other liquids, semi-liquids and solid foods MUST BE STOPPED 8 hours before surgery.
- Gum, cough drops and hard candy are not allowed. If your child has been chewing gum, surgery will be delayed 2 hours from the time the gum is spit out. If the gum has been swallowed, surgery will be delayed 6 hours from the time it was swallowed.

At the Hospital Before the Procedure

An IV (intravenous tube) will be put into one of your child's veins. This will give fluids (liquids) to your child during the procedure.

During the Procedure

Parents can wait in the procedure center waiting room while the child has the tube put in. Most children will be given medicine to relax (sedation). Sometimes children will need medicine that will make them go fully to sleep instead (general anesthesia).

Once the child is relaxed or asleep, a small needle is put through the lower back and into the kidney. A small wire is threaded through the needle. Pictures from an ultrasound or x-ray help the doctor to guide the needle into just the right spot. The nephrostomy tube is then put over the wire into the kidney. A medical dye (called **contrast**) is injected into the nephrostomy tube to ensure correct placement.

When the doctor is sure the tube is in the correct place, he or she will use small stitches or other devices to hold it in position. Usually the outside end of the tube is then placed into a drainage bag that will catch urine. If the tube is not expected to drain much, it may not be connected to a drainage bag but drip onto a gauze dressing (bandage) instead.

After the Procedure

- Your child's doctor will tell you whether your child will stay in the hospital after the procedure (inpatient) or if you can expect to go home after the procedure (outpatient). Either way, your child will go to a recovery room for 45 minutes to 1 hour after the nephrostomy tube has been put in. The time could be shorter or longer depending on how your child is feeling.
- After the nephrostomy tube is put in, your child may complain of pain at the site where the tube enters the body. If your child has pain, it may be helpful for him or her to rest or have distractions available such as quiet toys, music, games, books, or movies. You may also give medicine for pain (see the **Pain Control** section on page 3).
- The nephrostomy tube may be connected to a drainage bag that will empty the urine. You will be shown how to empty the bag if needed. A gauze dressing (bandage) may also be used to absorb drainage.

Site Care

- Keep the area around the tube clean with half-strength peroxide (peroxide mixed with the same amount of water).
- Change the gauze dressing (bandage) weekly or more often if the dressing has a lot of drainage on it (more than half of the dressing covered with drainage). Remove the bandage carefully. Do not pull at the tube or insertion site. Clean the site with half-strength peroxide. Pat dry gently. Put new gauze and tape over the site. These supplies will be given to you before you go home.
- Change the spot where the bandage is taped to the skin every day. This will help keep the skin from becoming red or itchy.
- Keep the tube secured with tape to keep it from being pulled on.

Activity

Your child can go to school and take part in light day-to-day activities. He or she can play quietly (coloring, walking, playing with toys, etc.) and enjoy other activities that are comfortable. Activities that involve running or jumping are not allowed while tubes are in place.

Pain Control

- For children over 6 months old, you may give your child ibuprofen (Children's Motrin[®]) or acetaminophen (Children's Tylenol[®]) for pain. Follow the directions on the package for the age and weight of your child.
- Do not use ibuprofen (Motrin[®], Advil[®]) if your child is under 6 months old.
- Loose-fitting clothing can also help make your child more comfortable.

What to Watch for at Home

- Urine leaking around the tube.
- Bright red blood in the urine that makes all of the urine look bright red. Pink to light red urine is normal after a nephrostomy tube is put in.
- Fever (see the **When to Call the Doctor** section, below). This could be a sign of an infection.

When to Call the Doctor

- If your child's pain is not helped by medicine (see **Pain Control** section, above).
- If the nephrostomy bag is draining pus or green or yellow fluid.
- If your child has a **fever** for 24 hours a temperature of 101 degrees Fahrenheit or higher taken under the tongue (oral) or a temperature of 102 degrees Fahrenheit or higher, taken in the child's bottom (rectal).
- If there is bright red blood in the urine that makes all of the urine look bright red.
- If the tube comes out, cover the open site with gauze and tape to absorb any drainage, and **contact Urology immediately at 614-722-6630**.