Interventional Radiology

Nephrostomy Drainage
What Is A Nephrostomy?

A Nephrostomy is a procedure in which a catheter is placed through your skin and into your kidney to drain your urine. This procedure is performed in the Interventional Radiology Department by an Interventional Radiologist. X-ray imaging helps the Interventional Radiologist guide the catheter into exactly the right place. Nephrostomy drainage is performed instead of surgery.

Why Do I Need A Nephrostomy?

The most common reason for a Nephrostomy is blockage of the ureter. The kidney makes urine, which drains down the ureter from the kidney to the bladder. When your ureter is blocked, the urine backs up into your kidney. Signs of ureter blockage include pain and fever; however, some people have no symptoms. Even if you exhibit no symptoms, a blocked ureter needs treatment because if urine cannot drain out of the kidneys, the kidney will stop working. A Nephrostomy is a way to give the urine a way to drain from the kidneys.

A Nephrostomy might be needed if a hole forms in the ureter or bladder, allowing urine to leak into other parts of your body. This leakage can cause pain and severe infection. A Nephrostomy can stop the leaking and help the hole to heal.

How Do I Prepare For My Nephrostomy Drainage Procedure?

If you are an inpatient your caregivers will help you prepare for the procedure. If you are being admitted the morning of the procedure follow these guidelines unless otherwise specified by you physician.

**Eating:**

Do not eat any solid food after midnight on the night before your procedure. You may drink clear liquids.

**Medication:**

Most people can continue to take their prescribed medicines with a small amount of liquid. If you are a diabetic and take insulin, talk to your physician about modifying your insulin dose for the day of the procedure. If you take the blood thinner, Coumadin, or any other blood thinners, you must tell your physician so that it can be stopped. Bring all medications and herbals with you.

Everyone having a Nephrostomy drainage will have blood tests done close to the day of the procedure. Before your procedure an intravenous line (IV) will be placed into your vein and antibiotics will be given through it to
help prevent infection. The IV will be used to give you other medicines and fluids during the procedure. Before the procedure begins a member of the Interventional Radiology Team will talk with you about the procedure and is available to answer questions and concerns.

What Is A Nephrostomy Drainage Like? Does It Hurt?

Before the procedure, pain medication will be started through your IV. Your Interventional Radiologist will also numb the area with a local anesthetic. You may feel some pressure during the procedure.

The Nephrostomy Drainage Procedure has three major steps:
- Placement of a needle into the kidney
- Placement of a guide wire farther into the kidney
- Placement of the drainage catheter

The procedure usually takes about one hour to perform, but this is not an absolute timeline.

What Happens After The Nephrostomy Drainage?

When the procedure is completed, you will go to your hospital room where your caregivers will monitor you. Your caregivers will let you know when and what you can eat and drink and how long you must remain in bed. Each patient’s length of stay will vary.

If you had symptoms of ureter blockage before your Nephrostomy Drainage Catheter was placed, you will notice these symptoms gradually disappear. You may be sore up to a week after the procedure.

The Nephrostomy Drainage Catheter is about the same size as IV tubing or a little smaller. The catheter will be connected to a drainage bag and your urine will drain out of your body into the bag. In some cases, the drainage bag will not be needed after a few days and the catheter will be capped off.

How Long Will I Need The Drainage Catheter?

This will depend on how the catheter was placed to begin with. If the catheter is to be placed to relieve blockage of the ureter you will need the catheter as long as the blockage is present. Stones, infection, scar tissue or a tumor can block your ureter. Some patients need this drainage catheter for the rest of their lives. If your catheter was placed because you have a hole in your ureter, you will need the catheter until the hole has
healed. If your catheter is placed in preparing you for surgery, or another procedure on your kidney or ureter, you will need the catheter until afterwards. Your physicians will discuss with you how long you are likely to need a nephrostomy drainage catheter.

**What Are The Risks Of Nephrostomy Drainage?**
Even though nephrostomy drainage is safe, complications can occur. The most frequent complications are infection and bleeding. This is why you need to stay in the hospital after the catheter is placed.

Because everyone is different, there may be other risks involved with your nephrostomy drainage that you can discuss with your physician or Interventional Radiologist before the procedure.

**What Are The Benefits Of Nephrostomy Drainage?**
If your ureter is blocked, the Nephrostomy drainage catheter will relieve your symptoms, such as pain, fever or chills.

In some cases, the catheter can help your physicians eliminate the source of the blockage. An example is if you have stones, your physician may be able to remove the stones through the catheter tract without surgery. If your ureter is blocked because of scar tissue, your physician may be able to use instruments through the catheter tract to enlarge the ureter in the scarred area. Your physician will advise you on the best options available to you.

If you have a hole in your ureter, the catheter will drain the urine and help to prevent serious infections, while the hole heals.

**What Is An Interventional Radiologist?**
Interventional Radiologists are physicians who specialize in minimally invasive, targeted treatments performed using imaging guidance. They use their expertise in reading X-rays, ultrasound, MRI and other diagnostic imaging equipment to guide tiny instruments such as catheters, through blood vessels or through the skin to treat diseases without surgery. Interventional Radiologists are board-certified and fellowship trained in nonsurgical invasive interventions using imaging guidance. The American Board of Medical Specialties certifies their specialized training. Your Interventional Radiologist will work closely with your primary caregiver or other physicians to be sure you receive the best possible care.
Your (test/procedure) is scheduled on (date) at (time) , (location)

Helpful tips:

- Wear comfortable clothes.
- Bring someone with you to drive you home after the procedure if you are not going to be admitted to the hospital.
- Leave all items such as cash, jewelry, credit cards and other valuables at home.
- Bring all your medications.
- Bring all necessary insurance information.

Notes: 

If unable to keep this appointment, kindly give 24 hours notice by calling 701-780-5800.
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