

ASCENSION ST VINCENTS

NEPHROSTOMY & NEPHROLITHOTOMY PATIENT HANDOUT

Radiologist who performed your procedure:

Procedure Description:

- Image-guided nephrostomy and nephrolithotomy tube placement are procedures performed to drain urine from the kidney or provide access to the kidney for treatment of kidney stones. These procedures are commonly used when urine flow is blocked or when stones need to be removed or treated.
- During the procedure, a radiologist uses imaging (such as ultrasound, fluoroscopy, or CT) to precisely target the kidney. The skin is cleaned with antiseptic, and local anesthetic is used to numb the area.
- For nephrostomy tube placement, a thin tube is placed through the skin into the kidney to allow urine to drain externally into a collection bag. This helps relieve pressure in the kidney and improve kidney function. The tube is secured to the skin with a suture and covered with a dressing.
- For nephrolithotomy tube placement, a tube is placed into the kidney to allow access for stone removal or treatment and to provide drainage afterward. The tube is secured to the skin with a suture and covered with a dressing.
- The procedure usually takes 30–60 minutes (sometimes longer). You will then be observed for a period of time to monitor for any complications.
- A nephrostomy tube usually stays in place for at least 4–6 weeks before removal to allow for proper healing.
- Nephrostomy tubes that are needed long term should be exchanged every 8–12 weeks to help prevent clogging or infection.
- A nephrolithotomy tube is usually removed by Urology during or following surgery for the urinary stones.

Benefits:

- Relieves blockage of urine flow and reduces pressure in the kidney.
- Helps protect kidney function.
- Allows drainage of infected urine or fluid when present.
- Provides access to the kidney for treatment or removal of kidney stones.
- Imaging allows the radiologist to precisely place the tube.
- Provides a minimally invasive way to manage urinary obstruction or stones.
- May avoid the need for emergency surgery in some patients.
- Most patients tolerate the procedure well.

Risks & Potential Complications:

- The following list includes some, but not all, possible complications.
- Pain is common but usually mild, typically resolves within a few days, and can be managed with over-the-counter pain medication. Severe pain can occur but is uncommon.

- Minor bleeding is common and usually does not require medical treatment. Any resulting bruising typically resolves on its own over several days. Serious bleeding that requires medical treatment (such as hospital admission, blood transfusion, or an additional procedure or surgery) can occur but is uncommon.
- Infection can occur but is uncommon. Most infections are mild and can be treated with antibiotics.
- Injury to nearby organs, bowel, blood vessels, or nerves can occur but is uncommon.
- Blood in the urine can occur and is usually temporary.
- Leakage of urine or fluid around the catheter site can occur.
- The drain can become clogged, displaced, or stop working properly and may require adjustment or replacement.
- Incomplete drainage or recurrence of blockage or infection can occur.
- Feeling faint or lightheaded (a vasovagal reaction) can occur during or after the procedure. This is usually mild and resolves quickly.
- Allergic reactions to the local anesthetic, topical antiseptic or other medications are uncommon.
- Death can occur but is rare.

Alternatives:

- Medical management alone (such as antibiotics, pain control, or observation), depending on the cause of obstruction or infection.
- Ureteral stent placement performed by urology to relieve blockage internally.
- Surgical procedures for stone removal or relief of obstruction in appropriate patients.
- Temporary observation with close clinical follow-up in select cases.
- Some patients choose no further treatment; however, this carries the risk of worsening kidney function, infection, or persistent obstruction and is generally not recommended.

Aftercare:

- A bandage will be applied over the procedure site. Change the bandage as needed and anytime it becomes wet.
- You may shower and allow water to flow over the site 24 hours after your procedure; however, do not submerge the site in water (bath, pool, hot tub, or ocean) until the drain has been removed and the site has healed.
- Do not apply lotion or ointment to the site until it has healed unless instructed to do so.
- Avoid strenuous physical activity for at least 24 hours after your procedure. Then gradually increase your activity level as tolerated.
- It is normal to experience pain and bruising after your procedure. You may take acetaminophen (Tylenol) for the first 24 hours. After 24 hours, you may switch to aspirin, ibuprofen (Motrin), or naproxen (Aleve) if acetaminophen does not adequately control your pain.
- Contact Radiology, your ordering provider, or your nurse if you have any concerns or experience any of the following: severe pain not responding to medications; significant pain or swelling at the procedure site; signs of possible infection (significant redness or purulent drainage from the procedure site, severe pain, or high fever); shortness of breath and/or chest pain worse than normal for you; dizziness or lightheadedness when standing; a faster-than-normal heart rate; or drainage from around the catheter. Call 911 in the event of an emergency.
- Weekdays 8 am to 5 pm call 308-8401 (Riverside), 296-3886 (Southside), 602-1360 (Clay) or 691-1297 (St Johns). Weekdays 5 pm to 10 pm or weekends 6 am to 10 pm call 308-8401. If outside of these hours, call the hospital operator at 308-7300 and ask to speak to the Interventional Radiologist on call.