Ureteral Stent Placement

This information will explain what a ureteral stent is. It will also tell you what to expect during your ureteral stent placement procedure at Memorial Sloan Kettering (MSK).

About Your Ureters and Ureteral Stent

Your ureters are tubes inside your body that drain urine (pee) from your kidneys to your bladder. If one of your ureters is blocked, your urine won’t drain properly. When this happens, your kidney fills with urine and swells. This is called hydronephrosis. It can be caused by a tumor pushing on your ureter, kidney stones, or scar tissue.

A ureteral stent is a thin tube that’s placed in your ureter to help drain urine from your kidney (see Figure 1). One end of the tube is inside your kidney, and the other end is in your bladder.
Ureteral stents can be used for several weeks, months, or years. They’re used to:

- Let urine flow through your blocked ureter.
- Keep your ureter open.

**Before Your Procedure**

Before your procedure, your nurse will teach you about what to expect during your ureteral stent placement. They will also give you information about how to get ready for your procedure. Be sure to follow the instructions they give you. Call your doctor’s office if you have any questions.

**During Your Procedure**

On the day of your procedure, a nurse will place an intravenous (IV) line in one of your veins. You will get fluids through your IV. You will also get medication to help make you more comfortable during your procedure.

To place the stent, your doctor will first insert a cystoscope (thin, flexible tube with a camera) through your urethra (the small tube that carries urine from your bladder to outside your body) and into your bladder. They will use the cystoscope to find the opening where your ureter connects to your bladder. Once they can see this opening, your doctor will thread a ureteral stent through the cystoscope and into your ureter. After the stent is in place, the cystoscope will be removed.

**After Your Procedure**

**In the hospital**

After your procedure, you will be taken to the recovery area, called the Post-Anesthesia Care Unit (PACU). A nurse will check your pulse, breathing, and blood pressure regularly. If you feel any pain, your doctor may prescribe pain medication to help you feel more comfortable.

You will stay in the PACU until you’re fully awake. Once you’re awake, your nurse will go over your discharge instructions with you before you go home.
At home
It’s important to drink more water than usual for the first 24 hours after your procedure. Drink 8 to 10 (8-ounce) glasses of water.

Don’t do any physically demanding activities for the first 24 hours after your procedure. Examples of demanding activities include lifting objects heavier than 15 pounds (6.8 kilograms) or any activities that use your abdominal muscles (abs). After 24 hours, you can go back to doing your normal activities.

While You Have Your Stent
After your stent placement procedure, you may feel a “pulling” sensation when you urinate (pee). You may also have:

- Frequent urination, which is the need to urinate more often than usual.
- Urgent urination, which is a strong, sudden urge to urinate, along with discomfort in your bladder.
- Pelvic pain, which is pain in your lower abdomen (belly).

These symptoms usually go away with time. Your doctor or nurse will talk to you about what symptoms you might feel. Your doctor may give you medication to help with bladder symptoms.

You may sometimes see blood in your urine while you have the stent. This may happen for as long as the stent is in place. Sometimes, it happens after increased activity or long car rides. If you see blood in your urine, drink more water than usual until the blood goes away.

Stent replacement
Your stent will need to be replaced about every 3 to 6 months. Your doctor or nurse will tell you when it needs to be changed. Leaving your stent in place for too long can lead to:

- Your ureter becoming blocked
- Kidney stones
- Infection
Call You Doctor or Nurse if You Have:

- Chills.
- A fever of 101 °F (38.3 °C) or higher.
- A burning feeling during urination.
- Cloudy urine.
- A foul smell to your urine.
- Pain on either side of your abdomen, or kidney area.
- Any questions or concerns.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.