WHAT IS A ureteral stent?

At the end of the procedure, your doctor may insert a small, plastic tube, called a stent, into your urinary tract. A stent helps reduce your risk of serious complications, such as blockage in your urinary tract.

A stent:
• Helps control swelling.
• Allows your urinary tract to heal.
• Permits your kidney to drain.
• Helps dilate the ureter, the tube that carries urine from your kidney to your bladder.

The stent remains in your body typically for 4 to 7 days (occasionally several weeks). It makes it easier to pass stone fragments through the urinary tract and out of your body. However, some of the stone fragments might not pass until after the stent is removed.

FIGURE 2: Ureteral stent

A ureteral stent is a small plastic tube that is placed in your urinary tract to help control swelling and allow the kidney to drain urine. The stent typically remains in your body for 4 to 14 days and is then removed during a follow-up appointment.

FIGURE 2: Ureteral Stent

WHAT CAN I DO TO PREVENT more stones?

There are steps you can follow to prevent stones from coming back:
• Drink plenty of fluids.
• Restrict your sodium intake.
• Maintain a healthy weight.
• Take medicine. Some patients need medicine to help reduce their risk of developing another kidney stone.
• Make dietary changes, such as reducing your intake of soft drinks, animal protein and salt.

Your doctor will discuss a prevention plan with you after the procedure.

FOR MORE information

National Kidney and Urologic Diseases Information Clearinghouse
www.kidney.niddk.nih.gov
American Urological Association
Urology Health
www.urologyhealth.org
National Kidney Foundation
www.kidney.org

Visit www.mykidneystone.com/URS for additional educational resources.
**WHAT IS URETEROSCOPY?**

A ureteroscopy, or URS, is a type of surgery to treat kidney stones. A surgeon does the procedure in a hospital operating room or an outpatient surgery center.

**FIGURE 1: Ureteroscopy**

**WHAT HAPPENS DURING THE PROCEDURE?**

A URS usually takes 30 minutes to two hours. The doctor uses a telescope-like instrument, called a ureteroscope, to examine your urinary tract, including your kidneys, ureters and bladder. The procedure requires anesthesia. However, the doctor does not make any surgical cuts or incisions on the outside of your body. Once you are under anesthesia, the doctor places the ureteroscope into the opening of your urinary tract and into your bladder. For men, the scope goes through the penis. For women, it goes through the urethra. Using the scope, the doctor locates kidney stones and either removes the stones using a small basket or breaks them apart using laser or mechanical energy.

**WHAT SHOULD I DO BEFORE THE PROCEDURE?**

There are three important things to do before your procedure:

**Talk with your doctor. Let your doctor know:**
- All of your prescription medicines, vitamins and supplements, herbs and natural remedies, and over-the-counter drugs.
- Any known allergies you have to medicines and the contrast agent used in some X-rays.
- If you may be pregnant.

**Review the pre-operative directions. Make time to review these directions provided by your doctor.**

For example, you may need to:
- Go to appointments for medical tests before the procedure, such as an electrocardiogram (EKG), X-rays, and blood and urine tests.
- Discuss with your doctor medicines that might increase your risk of bleeding, for example, aspirin, ibuprofen, warfarin, clopidogrel and non-steroidal anti-inflammatory drugs. You may need to stop taking some of these medicines before the procedure.
- Take antibiotics, if prescribed, to help prevent infection.
- Check with your doctor on which of your regular medicines to take the morning of surgery. On that day, take these medicines with only a small sip of water.
- Have nothing to eat or drink after midnight the night before surgery (except the sip of water with your morning medicines).

**Arrange for a ride home.**

After the surgery, you cannot drive yourself home. Before the procedure, ask a family member or a trusted friend to pick you up and take you home. Most hospitals and surgery centers will not allow you to take a taxi home after the procedure.

Visit [www.mykidneystone.com/URS](http://www.mykidneystone.com/URS) for additional educational resources.

**WHAT SHOULD I EXPECT AFTER THE PROCEDURE?**

Common side effects include:
- Nausea and occasional vomiting.
- Pain is common for the first 24 to 48 hours in your kidneys, abdomen, lower back and sides. Pain may increase when you urinate. Take medicine as prescribed.
- Blood in the urine. This is normal with stents. Drinking lots of fluids helps to reduce blood clots from forming in your urine.
- Feelings of fullness and a constant need to urinate (urgency and frequency).
- A burning sensation during urination or when you move.
- Bladder muscle spasms.

At a follow-up appointment typically 4 to 7 days after the procedure, the doctor removes the stent. Patients are usually awake when a stent is removed. Your doctor may apply a local anesthetic jelly to the opening of your urinary tract (urethra) before the procedure. If it has a string attached, the doctor pulls on the string to remove the stent. Or, your doctor may use a small scope inserted into your bladder to take out the stent.

**WHEN SHOULD I CALL MY DOCTOR?**

Call if you:
- Have a temperature greater than 100 degrees F or chills.
- Find that the pain medicine is not reducing your pain.
- Cannot tolerate food or fluids.
- If you have excessive blood in the urine, which is typically red, thick and cannot see through it (like ketchup), or if you have blood clots in your urine that make it difficult to urinate, please contact your physician immediately.

Some blood in the urine is normal after a ureteroscopic procedure. Urine colors can range from light pink to reddish and can even have a brownish hue — but you can typically see through it. Medications to help with the burning sensation can turn the urine into an orange or blue color.