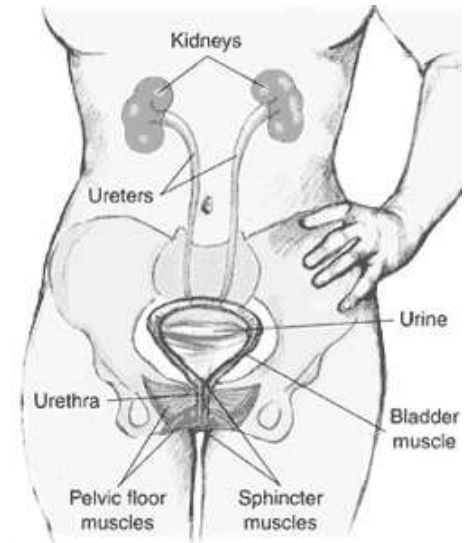


# **URODYNAMICS - A valuable test to identify and evaluate problems with urination.**

## **How the lower urinary system works:**

The lower urinary tract consists of your bladder, bladder neck, internal sphincter, urethra, and pelvic floor muscles. These all work together to store and eliminate urine. However, there are many factors that can influence the body's ability to do this job efficiently. Stress, medications, hormones, injury, illness, and age are just a few – Therefore, urination is a complex activity. To explain it simply, the bladder is a muscle-lined organ, which relaxes until you are ready to release it. The urethra is the pathway from you bladder to the outside of your body. Where your bladder and urethra meet is an internal sphincter or shut-off valve. Pelvic floor muscles support the bladder and urethra to keep them in proper position. When it is time to empty your bladder, the internal sphincter and pelvic floor should relax as the bladder contracts.



**Urodynamics (UDS)** is a series of tests that measure the body's ability to store and eliminate urine. By measuring the sensitivity and activity of the bladder muscle, UDS can determine if the bladder muscle is having spasms or not contracting at all. UDS can also provide answers to sphincter function, bladder support and bladder neck obstruction which could cause the urine to flow backwards towards the kidney. UDS can also be repeated over time to track changes in bladder function. Although a Urodynamics study is the best test presently available to evaluate the lower urinary tract, they cannot always give us the exact answer to your voiding problems.

The study usually takes about an hour and will be done in our office. No sedatives are need, and the test is generally painless...making UDS an excellent tool for identifying the right treatment for each individual patient.

**Preparation:** **1)** Eat and drink as you normally would. **2)** Take your medications as you normally would. **3)** If possible, try to have a bowel movement before coming in for your tests. **4)** Come in with a normally full bladder – You will be asked to void for a flow study at the beginning of your tests. Do not drink extra fluids. **5)** If you are on an intermittent catheterization program, catheterize as usual. **6)** If you become ill, or have an elevated temperature, please reschedule - You should be in your usual state of health when being tested.

### **UDS Procedures:**

**Uroflow:** You will be asked to urinate into a special commode linked to a computer. This will measure flow rate and overall volume.

**Cystometry:** This test measures how much your bladder can hold, how much pressure builds up inside your bladder as it stores urine, and overall bladder muscle strength. This is all done through a tiny catheter placed through the urethra and into the bladder itself. Sterile water is then slowly added to your bladder, and your sensation of when you feel the need to urinate is recorded. A second catheter is placed in the rectum to monitor external pressure on the bladder. If you are having problems with leaking, you may be asked to cough, stand, or bear down during the test to determine a leak point pressure.

**Electromyogram:** This test measures the contractions of the muscles that help control urination. Small electrodes are placed near the rectum to monitor these contractions.

**Pressure Flow Study:** This test determines the amount of internal bladder pressure generated to empty the bladder. It also records the force of the urine stream and the total volume voided.

**AFTER YOUR TEST:** It is common to experience slight burning upon urination the first few times you void after the test. Infrequently, the urine is tinged with blood. These are both due to minor trauma from the catheter and resolve quickly. No reason for alarm – These symptoms almost always clear up in a few days.