

URODYNAMIC TESTING

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Urodynamic Evaluation

Urodynamics is an in-depth evaluation of the function of the lower urinary tract (bladder and bladder outlet or urethra). These studies are important in diagnosing problems of urinary incontinence (leakage), urinary retention (inability to urinate), or frequency and urgency of urination. The evaluation involves placing a small catheter (tube) through the urethra into the bladder to measure the pressure. In many instances, a small tube is also placed into the rectum to measure the pressure inside the abdomen. Occasionally x-rays may be taken during the study to more closely evaluate and document the anatomy and shape of the bladder. Urology Associates has partnered with Round Rock Medical Center to develop a state-of-the-art Urodynamics Lab with x-ray capability ("Video Urodynamics"), which will be able to provide diagnostic and therapeutic services for patients beginning June 2002.

Urodynamic testing is frequently referred to as "a bladder pressure test." Actually, it is more analogous to a house inspection. Just as an inspection on a house will give valuable information to a prospective homeowner, a urodynamics test "inspects" the cause of urinary symptoms. By providing proper *diagnosis* (based on urodynamics results), your doctor will be able to more appropriately *treat* your symptoms. Research has consistently shown that providing treatment based on urodynamics results greatly improves the outcome.

Urodynamic testing is performed on an outpatient basis and should not interfere with one's daily activities and does not require hospital admission. There are small risks, as with any procedure, that are possible.

Risks of Urodynamic Testing

A small risk of urinary infection is present. However, the test is performed sterilely and frequently prophylactic (preventative) antibiotics are given to prevent any infection. Some patients may notice urinary burning or frequency for the few hours immediately following the test. This is usually short-lived, and if you notice bleeding or intense pain or fever, notify your physician immediately.

For patients who are immunosuppressed on steroids or have certain medical diseases such as diabetes or immune system problems, or who are prone to

urinary infections, antibiotic administration may be needed before the test and after. Please notify your physicians if any of these scenarios apply to you.

There is absolutely no risk of long-term bladder damage or dysfunction from urodynamic testing. Conversely, urodynamics can help more accurately diagnose the problem leading to a more proper and direct treatment course.

Preparation for Urodynamic Evaluation

It is very important to complete a "bladder diary" before coming for your urodynamic test. A bladder diary is a physical record keeping of your urinary habits. For two or three days before your urodynamic test, measure the amount urinated each time you urinate and write it down on your bladder diary sheet. Bring this with you when you come for your urodynamic evaluation. Drink plenty of fluids before arriving, and come in with what you feel like is a comfortably full bladder.

You will first be asked to urinate into the toilet and empty your bladder completely. Notify the urodynamics nurse if you have had any recent trouble or change in urination that would indicate an infection (fever, bleeding, burning). After this you will have a small catheter placed inside the urethra as well as a small catheter inside the rectum. Each will be connected to a computer which will measure/monitor the pressure. Frequently an EMG (muscle response indicator) will be attached to the pelvic floor as well. The fluid is used to fill the bladder and try to "reproduce" your urinary symptoms. For patients with leakage or incontinence, you will be asked to cough or strain to try to reproduce incontinence and determine the exact nature and severity of incontinence. For patients with neurogenic bladder (nerve-related bladder condition), the pressure within the bladder during filling is of paramount importance. When you feel the strong desire to void and simply cannot hold any more, you will be allowed to urinate with the catheters in place. This generates a "pressure flow study." This will actually measure the pressure in your bladder during your urine flow while you are emptying your bladder. This can be very important for a variety of bladder conditions and especially for men with urinary symptoms.

Frequently x-ray studies will be used during urodynamic testing to provide what is called a "video urodynamic test." This is the "gold standard" for urodynamic testing and combines pressure testing with anatomic x-rays of the bladder. This is frequently important for complicated cases of incontinence, leakage, voiding dysfunction, urinary symptoms, and for patients with neurogenic bladder.

The urodynamics nurse will briefly go over a "do's and don'ts list" after the procedure, but your physician will ultimately be responsible for interpreting the test and discussing the implications with you.