



The fact is urinary incontinence is a common problem that affects one out of every 25 American.

Frequently Asked Questions

Q: *What is urinary incontinence? What causes it?*

A: When you are not able to hold your urine until you can get to a bathroom, you have what's called urinary incontinence. There are many causes including infection, medications, weak muscles, a blockage, nerve injury, birth defects, strokes, complications from surgery, physical problems associated with aging, or chronic diseases like diabetes, multiple sclerosis, and Parkinson's disease.

Q: *Who gets urinary incontinence?*

A: More than 13 million Americans experience loss of bladder control. Both women and men can have trouble, however, women suffer twice as often as men due to problems with the muscles that help to hold or release urine. Older women have more bladder control problems than younger women.

Q: *Are there different types of urinary incontinence?*

A: Yes, there are several. **Stress Incontinence**, the most common form in women, causes small amounts of urine leak during physical movement (coughing, sneezing, exercising). **Urge Incontinence** causes large amounts to leak at unexpected times, including during sleep or after drinking a small amount of water. A symptom of **Functional Incontinence** is not being able to reach a toilet in time because of physical disability or obstacles. **Overflow Incontinence** causes urine to leak due to the bladder being full and never empty. **Mixed Incontinence** is a combination, most often stress and urge incontinences together. **Transient Incontinence** causes urine to temporarily leak due to a medical condition or infection.

Q: *How will Urodynamics help my urinary incontinence?*

A: Since Urodynamics allows a very precise evaluation of the ability of the bladder to store and empty urine, it will help us understand what is and is not happening to your bladder. This allows us to target the specific problems(s) that you may be having. With this targeted therapy, we are able to achieve better results with fewer side effects.

Q: *Are any catheters involved?*

A: Yes. A small catheter or tube is placed into the bladder to allow for the infusion of sterile water and the measurement of bladder pressures. A second small catheter is placed in the rectum to measure pressures in that area. In addition, two small electrodes are placed around the anus to measure the electrical potentials in that area.

Q: *Is it painful?*

A: Not really. Patients do experience some pressure from the filing of the bladder but it is usually described as similar to normal bladder pressure. The pressure sensation is almost always gone by the time the patient leaves the office.

Q: *How much time does all of this take?*

A: Anywhere from 30 minutes to 1 1/2 hours.

Q: *How will my bladder feel after the test?*

A: Most patients feel as though they have been through a pelvic examination or prostate evaluation for men. Although the evaluation is a bit more involved than a standard pelvic exam there is generally very little discomfort. Most patients return to work or play immediately after the exam and discussion are complete.

Q: *What else do I need to know about urodynamics?*

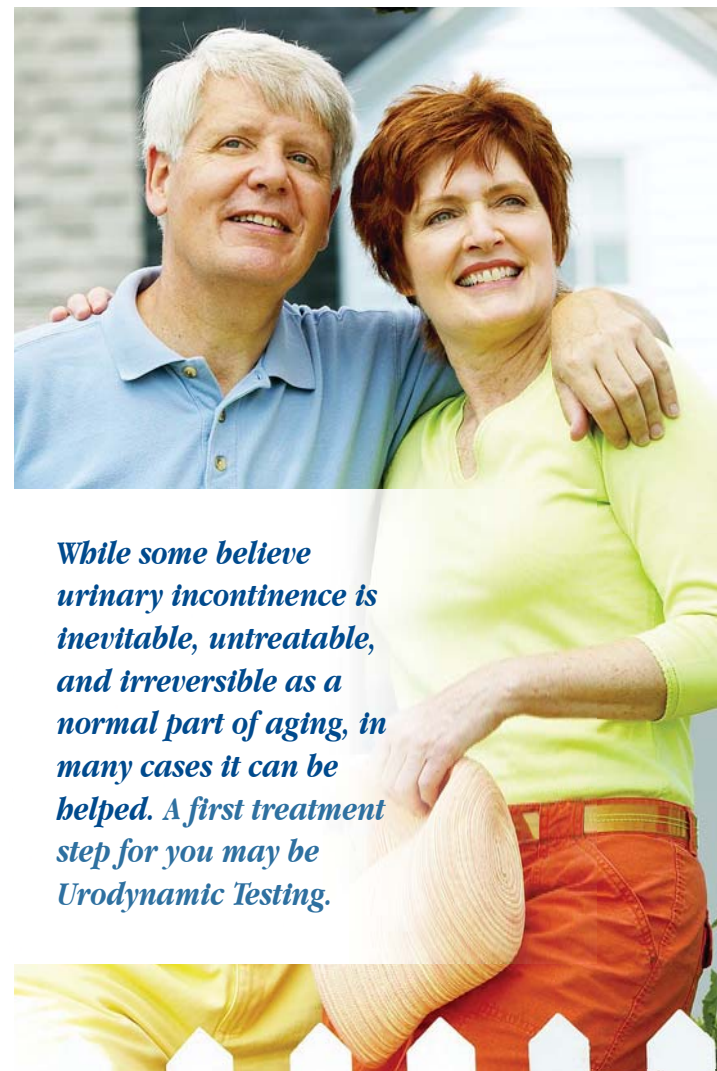
A: As with any test, the information needs to be interpreted to be useful. Keep in mind that the test will measure the bladder's function at that specific point in time and that the function of the bladder and many other organs may change over time. Your physician can discuss this issue with you.

Q: *What should I do if I have any more questions?*

A: Make a list. Your doctor and our staff will be happy to answer all of your questions to ensure that you are entirely comfortable before any testing is performed.

Urodynamics

Most Urinary Incontinence is Treatable

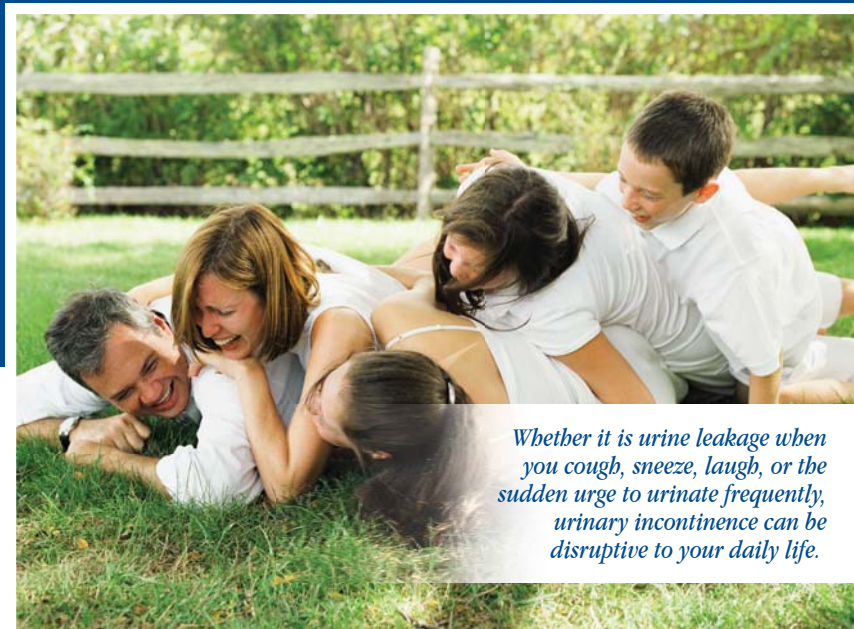


While some believe urinary incontinence is inevitable, untreatable, and irreversible as a normal part of aging, in many cases it can be helped. A first treatment step for you may be Urodynamic Testing.

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Urodynamics



Whether it is urine leakage when you cough, sneeze, laugh, or the sudden urge to urinate frequently, urinary incontinence can be disruptive to your daily life.

Urodynamics is the electronic evaluation of bladder function and how the body stores and releases urine. This involves computerized measurement of the bladder's ability to store and empty urine. The concept is similar to an EKG which is a computerized evaluation of the function of the heart. Urodynamic testing helps your doctor learn how well your bladder and sphincter muscles work. This test can help explain symptoms such as:

- Incontinence
- Frequent urination
- Sudden, strong urges to urinate
- Problems starting a urine stream
- Painful urination
- Problems emptying your bladder completely
- Recurrent urinary tract infections

Once the cause of your symptoms are better understood, a treatment plan can be determined. Most problems in the urinary system are caused by aging, illness, or injury.

Taking the Test

The type of test you take depends on your problem. Most urodynamic testing focuses on the bladder's ability to empty steadily and completely. It can also show whether the bladder is having abnormal contractions that cause leakage. Your doctor will want to know whether you have difficulty starting a urine stream, how hard you have to strain to maintain it, whether the stream is interrupted, and whether any urine is left in your bladder when you are done, called postvoid residual.

Test 1 – Uroflowmetry (measurement of urine speed and volume)

A uroflowmeter automatically measures the amount of urine and the flow rate—that is, how fast the urine comes out. You may be asked to urinate privately into a toilet that contains a collection device and scale. This equipment creates a graph that shows changes in flow rate from second to second so the

doctor or nurse can see the peak flow rate and how many seconds it took to get there. Results of this test will be abnormal if the bladder muscle is weak or urine flow is obstructed. Your doctor or nurse can also get some idea of your bladder function by using a stopwatch to time you as you urinate into a graduated container. The volume of urine is divided by the time to see what your average flow rate is.

Test 2 – Measurement of Postvoid Residual

After finishing, you may still have some urine, usually only an ounce or two, remaining in your bladder. To measure this postvoid residual, the doctor or nurse may use a catheter, a thin tube that can be gently glided into the urethra. He or she can also measure the postvoid residual with ultrasound equipment that uses harmless sound waves to create a picture of the bladder. A postvoid residual of more than 200 mL, about half a pint, is a clear sign of a problem. Even 100 mL, about half a cup, requires further evaluation. The amount of postvoid residual can be different each time you urinate.

Test 3 – Cystometry (measurement of bladder pressure)

A cystometrogram (CMG) measures how much your bladder can hold, how much pressure builds up inside your bladder as it stores urine, and how full it is when you feel the urge to urinate. The doctor or nurse will use a catheter to empty your bladder completely. Then a special, smaller catheter will be placed in the bladder. This catheter has a pressure-measuring device called a manometer. Another catheter may be placed in the rectum to record pressure there as well. Your bladder will be filled slowly with warm water. During this time you will be asked how your bladder feels and when you feel the need to urinate. The volume of water and the bladder pressure will be recorded. You may be asked to cough or strain during this procedure. Involuntary bladder contractions can be identified.

Test 4 – Measurement of Leak Point Pressure

While your bladder is being filled for the CMG, it may

suddenly contract and squeeze some water out without warning. The manometer will record the pressure at the point when the leakage occurred. This reading may provide information about the kind of bladder problem you have. You may also be asked to apply abdominal pressure to the bladder by coughing, shifting position, or trying to exhale while holding your nose and mouth. These actions help the doctor or nurse evaluate your sphincter muscles.

Test 5 – Pressure Flow Study

After the CMG, you will be asked to empty your bladder. The catheter can measure the bladder pressures required to urinate and the flow rate a given pressure generates. This pressure flow study helps to identify bladder outlet obstruction that men may experience with prostate enlargement. Bladder outlet obstruction is less common in women but can occur with a fallen bladder or rarely after a surgical procedure for urinary incontinence. Most catheters can be used for both CMG and pressure flow studies.

Test 6 – Electromyography (measurement of nerve impulses)

If your doctor or nurse thinks that your urinary problem is related to nerve or muscle damage, you may be given an electromyography. This test measures the muscle activity in and around the urethral sphincter by using special sensors. The sensors are placed on the skin near the urethra and rectum or they are located on the urethral or rectal catheter. Muscle activity is recorded on a machine. The patterns of the impulses will show whether the messages sent to the bladder and urethra are coordinated correctly.