



# Urology Consultants, Ltd.

Center for Continence Care and Pelvic Medicine

## URINARY INCONTINENCE

### **What is urinary incontinence?**

Urinary incontinence is the uncontrollable loss of urine. The amount of urine leaked can vary from only a few drops when you cough or sneeze to entirely emptying your bladder without warning. It is far more than a physical problem with many people suffering emotional consequences such as depression, isolation, and loss of dignity. Fortunately there are successful treatment options to help control incontinence.

### **How common is urinary incontinence?**

You are not alone! This is a common condition that can occur at any age. It is estimated that 1 in 3 women will suffer from significant urinary incontinence at some point in their lifetime. While less common, incontinence affects millions of men as well. Despite the frustrations caused by the loss of bladder control fewer than half of all people with incontinence seek help, often because of embarrassment or because they don't realize that help is available,

### **What are the types of urinary incontinence?**

You may not realize it, but there are different types of incontinence. You may also have a combination of different types of leakage. Determining what type of incontinence you have or which is the most bothersome is important because the treatment options may differ significantly.

- **Stress Incontinence** - This is usually experienced as leakage with coughing, sneezing, laughing, lifting, exercising, doing activities, sexual relations, or anything that increases pressure on the bladder. The amount of leakage is usually small (drops), but can be more severe.
- **Urge Incontinence** – This is also known as “overactive bladder”. This type of leakage is usually associated with frequency of urination, a need to urinate frequently at night, and an intense urge to urinate with very little warning. Often leakage occurs when a person just can not get to the bathroom in time. This is not really a problem with the bladder, but more of a problem with abnormal signals to the bladder from the nerves and muscles.



- **Overflow Incontinence** – This occurs when the bladder can not fully empty. This may be caused by a blockage or narrowing of the urethra such as an enlarged prostate in men, scar tissue, or a prolapsed bladder. Overflow incontinence may also occur when the bladder stops contracting due to medications, nerve injury, or chronic overstretching of the bladder muscle. Symptoms include dribbling urine throughout the day, a weak urinary stream, or the feeling of a need to urinate, but sometimes can't.
- **Mixed Incontinence** – This is common condition which includes a combination of one or more of the above.



### **How is incontinence evaluated?**

The first step is to tell your doctor about your bladder control problem. A full history will be taken to understand your pattern of leakage and determine what type of incontinence you have. In women, a pelvic exam will likely be performed to check for problems or abnormalities. In men the penis and prostate will be examined.

Other tests you may have:

- **Urinalysis and Culture** – Testing of a small sample of urine for signs of infection
- **Cystoscopy** – A small lighted telescope used to examine the inner lining of the bladder
- **Urodynamics** - A small catheter placed in the bladder and rectum to monitor pressures in the bladder. The sensors are then connected to a computer to record the bladder's behavior.

### **What are the treatment options for incontinence?**

The treatment options for incontinence depend on the type of incontinence you have. Your symptoms, age, and any underlying medical problems may also affect your treatment.

The main treatment options are listed below. If you have a mixture of types of incontinence, more than one treatment may be necessary.

#### Stress Incontinence

Behavioral therapy  
Pelvic floor muscle exercises  
Bulking agents  
Surgery

#### Urge Incontinence

Behavior therapy  
Pelvic floor muscle exercises  
Biofeedback  
Medications  
Neuromodulation  
Botox injections

#### Overflow Incontinence

Self-catheterization  
Neuromodulation

## Behavioral therapy

**Timed Voiding** – timed voiding means urinating on a set schedule instead of waiting until you have the urge to urinate. This empties the bladder and helps to avoid accidents.

**Bladder Retraining** – If you have urinary frequency and urge incontinence, you may be able to use Kegel exercises to “retrain” your bladder. Each time you feel the urge to urinate, try to stop the feeling by contracting your pelvic floor muscles. Try to hold your urine a little bit longer each time. Then calmly walk to the bathroom.

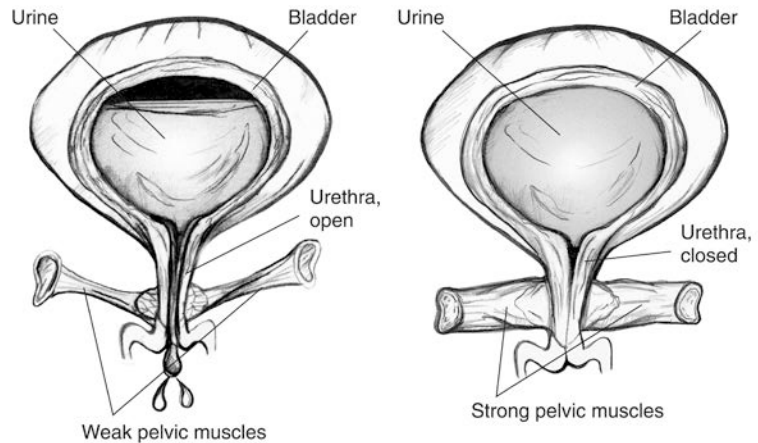
**Dietary Changes** – Some foods may act as bladder irritants and diuretics making you urinate more often. These include caffeinated drinks and alcohol.

## Pelvic Floor Muscle Exercises (Kegel Exercises)

The pelvic floor muscles act as a hammock to hold the bladder and urethra in place. These muscles function as the “on and off” switch for the bladder and also help keep the urethra closed. Kegel exercises help with the identification, control, and strengthening of the pelvic floor muscles and often help improve bladder control.

### How to do Kegels:

Tighten the muscles of your pelvis as if you were trying to stop your urine stream, *but do not do the exercise while you are urinating*. Count to ten, then release. Try not to move your leg, buttock, or stomach muscles. Do at least 10 of these exercises at least three times a day. You can do these exercises while doing something else such as watching TV or reading.

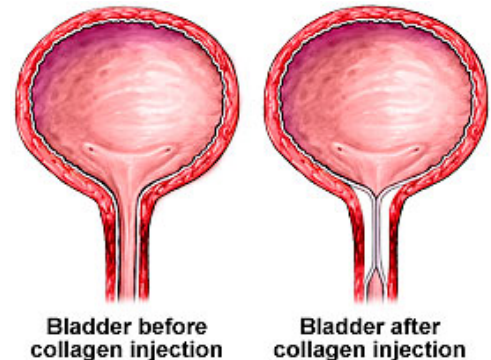


In **Biofeedback** a specially trained therapist can help you maximize these exercises. In this technique a small sensor is placed in the vagina or rectum. When you contract and relax, your muscles give off signals. The sensors read these signals and show them on a computer screen. This way you can learn whether you are exercising the right muscles. Biofeedback is often combined with several behavioral techniques.

## Specific treatments for stress incontinence

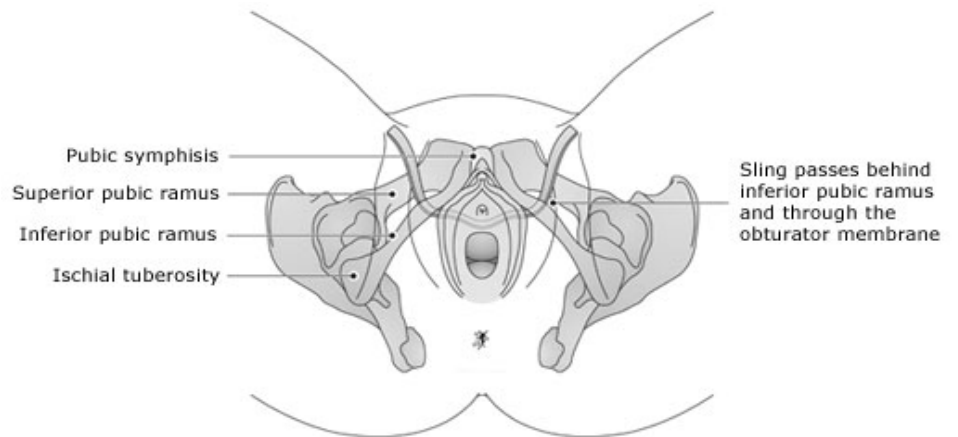
### Bulking Agents

Material, such as collagen or silicone, can be injected underneath the skin of the urethra to help “bulk up” or coapt the tissue creating a tight seal. The procedure is minimally invasive and can be done in the office or in the hospital in an outpatient setting using a cystoscope. While effective, the procedure may need to be repeated at some time down the road if your incontinence returns.



### Mid-urethral slings

This is a surgical procedure done in the operating room usually under sedation with local anesthesia. Three small incisions are made: A less than 1-inch incision in the vagina and 2 mini incisions between the labia and inner thigh. In some cases only a single vaginal incision is made. A ribbon of mesh is then placed under the urethra and brought out through the inner thigh incisions using specially designed instruments. The sling lies under the urethra acting as a “hammock”. When abdominal pressure increases, as with a cough, sneeze, or athletic activity, the sling provides support to keep the urethra closed, preventing loss of urine. The procedure takes about 15 minutes and you can go home within a few hours.



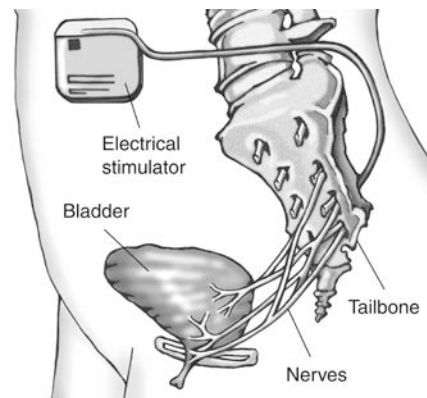
### **Specific treatments for urge incontinence**

#### Medications

In many cases medications may be prescribed to help relieve urinary urgency, frequency, and urge incontinence. These medications work by relaxing the bladder muscle and increasing the amount of urine the bladder can hold. The side effects of these medications include dry mouth and constipation; however, you may note other side effects. There are many different kinds of medications on the market. Some examples include: *Myrbetriq*, *Ditropan XL*, *Detrol LA*, *Vesicare*, *Sanctura*, *Oxytrol*, and *Enblex*.

#### Neuromodulation

This is also known as Sacral Nerve Stimulation or InterStim. It involves the electrical stimulation of the sacral nerves, located in the lower area of your spinal cord and passing through your tailbone. The sacral nerves affect bowel and bladder function and electrically stimulating these nerves may change your symptoms. InterStim has been approved by the Food and Drug Administration (FDA) since the late 1990's for the treatment of urinary urgency/frequency, urge urinary incontinence, and some forms of urinary retention. It is important to note that the therapy does not work for everybody. Because of this the therapy is performed in 2 stages. The first is a “test stage” where a special wire is placed through a natural opening (foramen) in the sacrum (tailbone) and in contact with one of the nerves that controls the bladder reflexes. This wire is then connected to an external battery which is worn on your belt for the testing period,



usually 1-2 weeks. If successful, in terms of improvement in urinary symptoms, the second stage is performed where the permanent battery, similar to a pacemaker, is implanted in the upper part of the buttock. You will have no outside parts after the second stage. Your pacemaker may require periodic reprogramming or “tune-ups” which are not painful and are done in the office.

Another form of neuromodulation is called Posterior Tibial Nerve Stimulation or PTNS. In this therapy a small acupuncture needle is placed behind the ankle bone and next to the tibial nerve. The needle is then stimulated by an external battery for about half an hour, then removed. This procedure will need to be repeated in the office every 7 to 10 days for 3-months. Then if successful, longer intervals between stimulation will be attempted.

### Botox Injections

Botox can be injected into your bladder muscle using a cystoscope. The procedure takes about 10 minutes or less and can be done in the office under local anesthesia. Botox acts by blocking the release of specialized chemicals from nerves, known as neurotransmitters, which cause muscles to contract. The effect is to temporarily weaken the muscles that it is injected into. The benefits usually last for 6 months, and then the procedure may need to be repeated if successful. The main risk is temporary urinary retention, which occurs in 3-15% of patients, depending on the dose used, and may require the use of self-catheterization to empty your bladder. If this occurs the effect is temporary.

### **Specific treatments for overflow incontinence**

#### Self-Catheterization

You may be asked to pass a small tube or catheter into your bladder several times a day to empty your urine. This is a safe procedure and once you learn it, it is not difficult or painful. A nurse will go over the procedure and give you instructions and supplies.

#### Neuromodulation

InterStim is FDA approved and effective for certain forms of urinary retention. Your doctor can give you more information.

#### Surgery

This may be required when the cause is narrowing of the urethra from scar tissue or from vaginal prolapse.