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Urinary Incontinence

By Robert S. Hollabaugh, Jr. MD

Urinary incontinence is the unwanted loss of urinary control. More than 15 million Americans experience this regularly, and while it can affect men or women of any age, it is most common in females over 40 years of age. It has been estimated that 35% of women over 65 experience some form of urinary leakage. Many people think that this is "just part of getting older." While it is true that incontinence occurs more commonly in older patients, it is not necessarily an inevitable part of aging. The urinary bladder provides two functions: **storing urine and emptying urine**. Many factors may be involved in the development of incontinence, particularly any medical condition that affects the muscles of the pelvis or the nerves going to these muscles. Urologists broadly categorize incontinence into two classes: Stress Incontinence and Urge Incontinence. While the two classes share some similarities, they are treated by very different approaches; so careful evaluation is important.

Helpful Hints for Incontinence

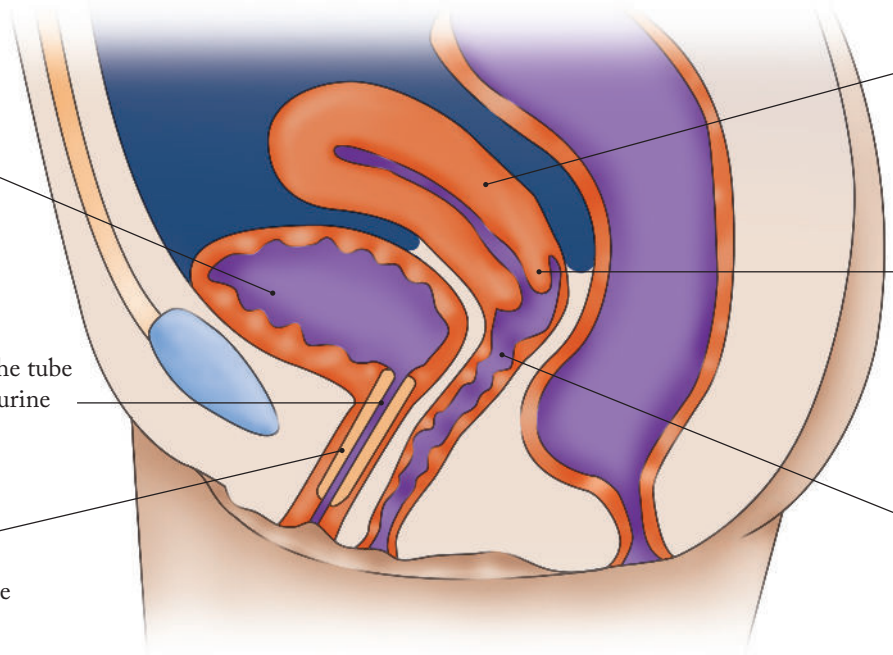
- Avoid CAFFEINE (Coffee, Tea, Colas, Chocolate)
- Avoid CARBONATED SODAS
- Avoid CITRUS JUICES and FRUITS
- Avoid ALCOHOL
- Avoid SPICY FOODS (Italian, Chinese, and Mexican type dishes)
- Stop Smoking (Smoking causes bladder muscle irritability)
- Lose Weight (Extra weight can place extra pressure on your bladder)

Stress Incontinence

Stress Incontinence is leakage that occurs when physical pressure or "stress" is placed on the bladder and leakage of urine results. Most commonly, these individuals will leak when they cough, laugh, sneeze, or lift heavy objects. Such activities put strain or pressure on the bladder. This pressure on a bladder full of urine can overcome the watertight seal of the bladder's valve (sphincter) and result in leakage. Because weak pelvic muscles fail to support the bladder and sphincter, leakage can occur even more easily. In severe cases, the leakage comes with minimal pressure on the bladder, such as just standing up or walking. Pelvic muscle weakness and sphincter incompetence can develop in response to a variety of conditions-pregnancy, hysterectomy, lack of estrogens (menopause), spinal cord injury, and heavy lifting, to name a few. Treatment of the "stress" type of incontinence focuses on strengthening the pelvic musculature and supporting the urethra and sphincter. "Kegel Exercises" are often recommended as an initial therapy to tone the pelvic muscles. To do these exercises, tighten the pelvic muscles as if you were trying to stop urination or to keep from passing rectal gas. A Kegel routine consisting of 5 repeated contractions, each contraction being 5 seconds in duration, done three to four times daily can show significant improvement after 3-6 months. This rehabilitation type therapy definitely requires patience and consistency, but usually returns positive results. Various medicines can be tried for this type of leakage; however, most medications will have minimal improvement for this type of incontinence. When conservative measures fail, surgery may be necessary to stabilize the pelvic weakness.

Many innovations have occurred in the treatment SUI over the past ten to fifteen years. The "bladder tack" of decades past in general did not have a good long-term success rate. Current understanding of pelvic anatomy and function has yielded several options that are more durable. Surgery aims to correct the two main problems associated with SUI: a **weakened pelvic floor** and/or a **weakened sphincter**.

FEMALE ANATOMY

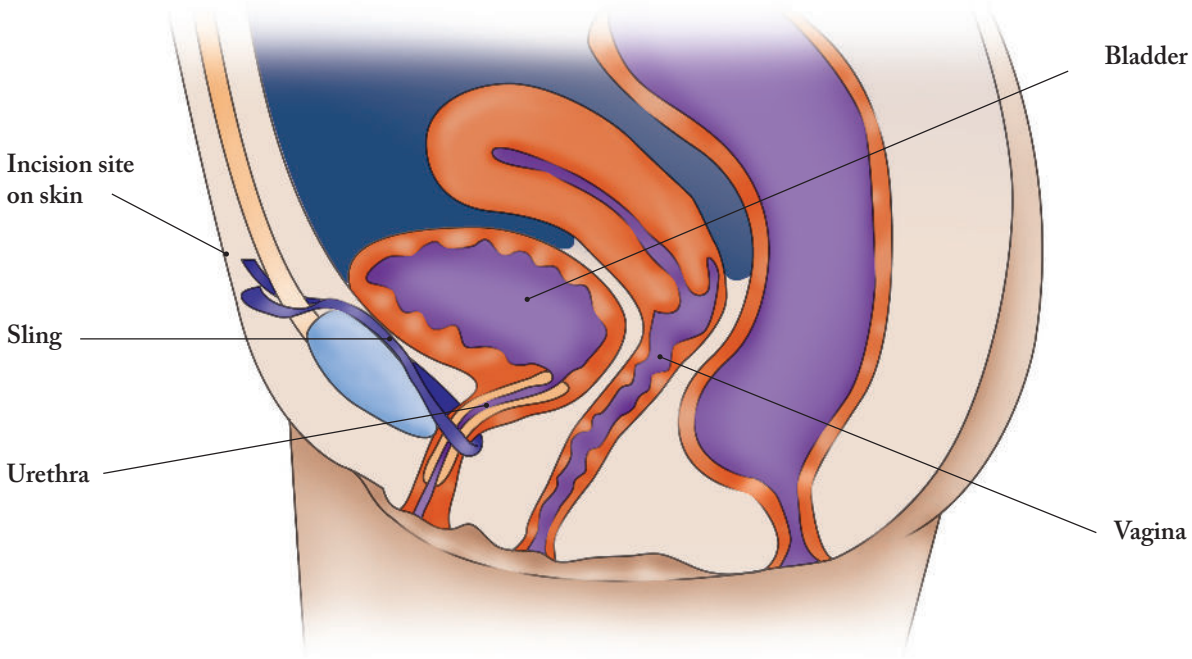


For women who are thought to have mainly weakness of the sphincter, injection of bulking agents, such as **collagen**, have been used. These treatments do not help the pelvic floor and may require more than one injection session. The procedure is usually done as an outpatient. Currently, the most common type of surgery involves creating a "sling" to stabilize and support the sphincter and neck of the bladder. The **Pubovaginal Sling** creates support that the weakened pelvic muscles could not provide. Many different materials can be used for the sling, including the patient's own abdominal tissue, cadaver tissues, animal tissues, and synthetic materials. The surgery is routinely performed in an outpatient setting under full anesthesia. Patients usually go home the same day or on the day after surgery. Regardless of the type of surgery, patients must let it heal properly in order to get successful results. Lifting and straining are the greatest threat to success as they can pull apart the surgery. Knowing this, there should be no lifting anything heavier than a phonebook for 6 weeks after surgery. More severe cases of pelvic weakness, or vault prolapse, will likely require more complex types of pelvic reconstructive surgery. Only surgeons experienced in these types of surgery should undertake such cases as the wrong operation will certainly worsen the problem. The first operation to correct the problem has the greatest chance of success. When a third or fourth operation is performed, the chances for success decrease substantially. For properly selected cases, the longterm success rates of surgery exceed 80%; however, not all cases of incontinence can be cured by surgery. Only through expert evaluation can you determine if it is likely to help in your case.

Urge Incontinence

Urge Incontinence is leakage that occurs when a person is unable to suppress the urge to urinate. Individuals will describe that the urge to urinate comes on suddenly and that they "just cannot hold it." This is usually caused by spasms or hyperactivity of the bladder, and is often referred to as "**overactive bladder**." Frequent daytime and nighttime urination often accompanies urge incontinence. Many of the causes of urge incontinence are poorly understood, but some have been well identified, including diabetes, stroke, multiple sclerosis, and other neurologic diseases. Treatment of urge incontinence usually involves medicines that help control "bladder spasms" (common brand name medications include Detrol, Ditropan,Vesicare, Sanctura and Enablex). "Behavioral Modification" can also be helpful in stabilizing the "overactive

PUBOVAGINAL SLING



bladder" by using timing schedules for urination, limiting fluid intake and changing diet habits (avoiding alcohol, caffeine, and spicy foods). Surgery is not usually helpful in cases of urge incontinence, because incontinence surgery is mainly designed to restore pelvic support and usually does not help control bladder spasms. In severe cases of urge incontinence, a "bladder pacemaker" (called Interstem) can be surgically implanted to help alleviate symptoms of urgency and frequency. This is usually a last resort and is recommended only when conventional medications are unsuccessful.

Another new option for treating severe cases of urge incontinence is **Botox**. Nearly everyone has heard of Botox related to cosmetic applications. Botox can also be injected into the bladder to control severe symptoms of urgency and urge incontinence. The procedure is performed using a scope to look into the bladder and inject areas of the lining of the bladder. While it is a relatively new therapy, it offers yet another option if traditional therapies are unsuccessful.

Complex Testing

In many instances, a patient may have symptoms of both types of incontinence. These cases need to be carefully evaluated so that appropriate measures can be recommended. Physicians treating incontinence should have thorough knowledge of bladder function and pelvic anatomy. When any hint of confusion arises regarding the cause of the leakage, further testing needs to be done. A variety of other bladder problems may have leakage as a symptom, but require radically different therapy. Conditions that may have similar symptoms include urinary tract infection, enlarged prostate (males only), or bladder cancer. In evaluating these more complex cases, urologists commonly employ sophisticated testing using cystoscopy and urodynamics. **Cystoscopy** involves using a fiberoptic camera to inspect the inside lining of the bladder. Visual inspection of the bladder mucosa can be done in an office or outpatient setting and will allow detection of anatomic irregularities or cancers. **Urodynamics** is a bladder function test that gives information about the behavior of the bladder during filling and voiding. Each of these tests provides valuable information in determining the course of treatment in complex cases.

To the average patient, most cases of incontinence seem identical. Commonly, a patient will tell her doctor that she is leaking "just like her friend who was cured by surgery," and that she wants the same surgery. Experts at the Conrad Pearson Clinic, who treat all types of incontinence,

can help decide what will or will not work. Defining the subtleties of each case makes a tremendous difference in the outcomes of therapy. If urinary leakage is frustrating your life, contact the experts in Urinary Control at the Conrad-Pearson Clinic. Make sure that you are getting the most sophisticated evaluation available to ensure the best results.

Kegel Exercises

Nearly everyone has heard of Kegel exercises, usually related to an OBGYN's recommendation to women after childbirth. However, the Kegel routine can be effective to both men and women in exercising the pelvic floor muscles to regain urinary control. However, one must do the exercise properly. Many cases fail simply because the patient is not trained properly or is not exercising the proper muscles. Kegel's are NOT simply "tightening up the belly muscles" or "clinching the buttocks." The best way to correctly perform Kegels is as follows. For the first week, learn to isolate the proper muscle for urinary sphincter control. Whenever you feel the urge to urinate, go to the restroom and let the urine flow begin; then stop the stream midstream. Pay attention to the muscle you are contracting to stop the stream, as this is the sphincter muscle. Then in the weeks to come, you can exercise this muscle at times other than when you are urinating. To do a repetition of Kegels, one must tighten up the muscle and hold it for a count of 5, then relax it. A repetition of Kegels means you "Tighten-count to 5-Relax" five times in a row. This should be done multiple times each day as a daily exercise. Try to do it every time you come to a stoplight in your car or every time you see a commercial on the television. Linking your Kegel Routine to an activity of daily living will insure that you do it multiple times every day- FOREVER. These exercises develop tone for the sphincter and greatly help in regaining or maintaining urinary control.

Timed Voiding Technique

Timed Voiding can help to avoid abrupt urges to urinate. To do this, determine the usual frequency of "emergencies," and then plan trips to the bathroom sooner than the emergency develops. For example, if you have emergencies every 2 hours, plan trips to the bathroom every 90 minutes. When you have been successful for several days in a row, increase the interval by 15 minutes. Th e goal is to be able to hold off urination for an interval of 4-6 hours. For this to work, you MUST stick to the plan as you are increasing the time interval. Plan to devote 4-6 months to "recondition" the bladder.

Bladder Retraining Technique

Bladder Retraining Technique can help the bladder hold urine better. Follow these instructions. When you feel the urge to urinate, stop what you are doing, sit down or stand still, and remain still. Squeeze your pelvic muscles quickly several times, but do not completely relax the muscles in between contractions. Relax the rest of your body by taking severaldeep breaths. Concentrate on suppressing the urinary urge, and wait a few minutes to let the urge subside. Then walk, DO NOT RUSH, to the bathroom. (Rushing to the bathroom trains the bladder much like Pavlov's dogs were conditioned to salivate) Repeat this routine whenever abrupt urges begin. Over time, the bladder may recondition.

Stress Urinary Incontinence Recommendations vs. Urge Incontinence Recommendations

STRESS URINARY INCONTINENCE RECOMMENDATIONS	URGE INCONTINENCE RECOMMENDATIONS
1 Lose weight	1 Dietary Modifications
2 Stop Smoking	2 Stop Smoking
3 Kegel Exercise Routine	3 Lose weight
4 Empiric Trial of medications	4 Bladder Retraining / Timed Voiding
5 Evaluation of Pelvic vault stability	5 Medications
6 Surgical Intervention (PV sling)	6 Nerve Root Stimulators/Botox
	(rarely consider surgical therapies)

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