

What You Should Know About Stress Incontinence

When you can't leave home without a supply of protective pads in your purse, and your first step on arriving anywhere is to locate the nearest bathroom, there's a good chance that you have stress incontinence. But loss of bladder control is NOT a normal part of womanhood or aging, and left untreated, it can ruin your life. Fortunately, help is as close as a call to your OB/GYN or family doctor.

What is stress incontinence?

Stress incontinence, the most prevalent type of urinary incontinence in women, actually has nothing to do with emotional stress. Instead, the term refers to urine leakage during physical activity that increases pressure (stress) on the abdomen. Approximately 66% of sufferers are women, and more than five million American women are affected.

Stress incontinence occurs when the neck of the bladder and the urethra don't close completely. This is usually due to weakening of the pelvic floor muscles, allowing the urinary bladder, bladder neck, and urethra to sag. This prevents the urethra from closing, and urine leaks out.

This Patient Handout was prepared by Patricia L. Van Horn using material from About Stress Incontinence (<http://www.about-stress-incontinence.com/>), the Beth Israel Deaconess Medical Center [Boston] Department of Obstetrics and Gynecology (http://www.bidmc.harvard.edu/obgyn/front_focus_3.asp), the National Institute of Diabetes and Digestive and Kidney Diseases (<http://www.niddk.nih.gov/index.htm>), and the womens health channel (<http://www.womenshealthchannel.com/incontinence/stress/>).

What causes stress incontinence?

Stress incontinence can occur temporarily during the week before your menstrual period, in the months after pregnancy and childbirth, or during recovery from pelvic surgery. Chronic stress incontinence can result when repeated pregnancies stretch the pelvic muscles, shift the position of the bladder and urethra, and damage the bladder nerves; or after surgery for colorectal cancer, hysterectomy, or even failed surgery to correct incontinence.

However, the most common cause of chronic stress incontinence is menopause, which explains why the majority of sufferers are older women. When the ovaries stop producing estrogen, the lining of the urethra becomes thinner and the muscles of the bladder and urethral sphincter (opening) lose their tone. If the pelvic floor muscles have also been weakened by pregnancy and/or surgery, the likelihood of stress incontinence is greater still.

How is stress incontinence diagnosed?

Many women are reluctant to discuss incontinence with their doctor. This is a major mistake. A variety of treatments are available, so there is no need to endure the embarrassment and inconvenience in silence. Stress inconti-

nence can also worsen, causing repeated bladder and vaginal infections. The condition may become so severe that you feel like a prisoner in your own home, unable to engage in any of the social and physical activities that you enjoy. Finally, your incontinence may be due to a serious pelvic or urinary condition. Only a doctor can determine the exact cause and the appropriate treatment.

Your doctor will ask about your symptoms, and probably order *urinalysis* to rule out infection. There may be some simple office tests, such as asking you to lie down and cough to look for urine leakage, and you may have to keep a urinary diary. Other tests may include blood work, ultrasound, assessment of nerve function, bladder and urine measurements, use of a tiny camera to look inside the urethra and bladder (cystoscopy), and techniques to evaluate bladder pressure and urine flow (urodynamics).

Symptoms of stress incontinence

Typical symptoms of stress incontinence include:

- Urine leakage with exercise, coughing, laughing, lifting, bending, sneezing, rising from a chair or bed, and/or orgasm
- The sensation that the bladder is always full or doesn't empty completely on urination
- Discomfort during intercourse
- The urge to urinate more often (particularly at night).

What can I do to manage stress incontinence?

Women with light to moderate leakage often wear protective pads; in fact, 33% of all menstrual pads are purchased by women with incontinence. Other choices include Depend® and Poise® pads, which are made for urinary problems. These products can be ordered from catalogs or over the Internet to avoid embarrassment. There are, however, some disadvantages to using these pads; some women feel like they're wearing diapers; the pads can be bulky and uncomfortable; and they're not a good choice for active women with severe leakage.

What are the nonsurgical options for stress incontinence?

Exercises.—Kegel exercises strengthen the pelvic floor and the muscles that keep the urethra closed. They are best learned from a doctor or nurse, and involve contraction of the muscles you use to start and stop urinating. They can be performed using special weighted cones in which you try to hold the cone in your vagina, and graduate to heavier cones as your muscles develop. The exercises take six to twelve weeks to produce results. Aids to learning Kegel exercises include:

- *Biofeedback*, which uses audio and visual cues
- *Neuromuscular electrical stimulation (NMES)*, which uses a vaginal probe and a mild electric current
- *NeoControl™*, which involves pulsating magnetic fields delivered through the seat of a special chair.

Timed Voiding and Bladder Training.—In timed voiding, you chart episodes of voluntary urination (*voiding*) and leakage. This reveals patterns that help you to plan voiding before you reach the point of leakage. Bladder training helps you to change the bladder's schedule for storing and emptying urine.

External Devices.—These are placed over the urethral opening, forcing it to close, and are removed for urination. They include:

- Small silicone caps (FemAssist®, Bard CapSure®)
- Little foam pads coated with adhesive (Impress Softpatch®, Miniguard Patch®)
- Plastic shaft-like devices with a balloon on one end and a metal tab and string on the other (Reliance®, FemSoft®) that are inserted into the urethra

Bladder Neck Support Devices

A bladder neck support device or *prosthesis* such as the *Intro!*® or *Mylax*® mechanically restores support to the neck of the bladder. A flexible, ring-shaped silicone device with two prongs on one end is inserted into the vagina with the prongs facing forward to support the urethra along each side, preventing it from sagging and leaking urine.

Pessaries.—Pessaries are stiff silicone or latex devices that are placed in the vagina to close the urethra and support the bladder neck; ring and dish pessaries are typically used for stress incontinence.

Injections.—Substances can be injected around the urethra to increase bulk, improving function and closing the urethral sphincter. These materials include collagen (natural protein from the skin, bone, or connective tissue), autologous fat from your own body, and Durasphere™ (a gel containing tiny, carbon-coated beads). Polytetrafluoroethylene (PTFE) can also be injected, but it isn't approved for use in this country because it can spread to other parts of the body.

Medications.—Stress incontinence is often treated with *alpha-adrenergic agonists* (ephedrine, epinephrine, norepinephrine), but patients with high blood pressure, an overactive thyroid, irregular heartbeat, or chest pain (angina) may not be able to use these drugs. Estrogen replacement therapy (ERT) or hormone replacement therapy (HRT) can restore

urethral health by increasing blood flow, muscle tone, and nerve response, but many women are wary due to renewed publicity about a possible link with breast cancer. However, many types of ERT and HRT are *not* associated with breast cancer, so you should discuss your options and needs with your doctor to determine whether you can use a particular hormone formulation safely.

What if my doctor recommends surgery?

Surgery is generally viewed as a last resort, but can produce excellent results. As with nonsurgical therapies, there are many types of surgery for treating incontinence. These include:

- Retropubic suspension, anterior vaginal repair, and needle suspension of the bladder neck, which use various techniques to reposition the tissue that supports and secures the bladder and urethra.
- Sling procedures, which are usually reserved for severe stress incontinence, use either a synthetic substance or tissue from your abdomen to constrict the urethral sphincter.
- An artificial sphincter, which is implanted in rare cases and uses a doughnut-shaped sac that encircles the urethra. The sac is filled with fluid, and squeezes the urethra closed. To urinate, you press a valve under your skin to deflate the sac and allow urine to flow.

Postoperative complications can include urethral obstruction, formation of adhesions (bands of scar tissue), painful urination, and recurrent urinary tract infections. Your best defense is to discuss the choice of procedure thoroughly with your doctor and make sure that your OB/GYN or surgeon has lots of experience with the operation. While surgery involves some risk, discomfort, and weeks to months for recovery, the results are worth it, and you'll probably wish that you had undergone the operation long ago.