Stress Urinary Incontinence Patient Guide
Table of Contents

Introduction .................................................. 3

GET THE FACTS
  How Does the Urinary Tract Work? ......................... 3
  What is Urinary Incontinence? ................................. 3
  What is Stress Urinary Incontinence (SUI)? ............... 4
  SUI Signs and Symptoms .................................... 4

GET DIAGNOSED
  How is SUI Diagnosed? ..................................... 4

GET TREATED
  Lifestyle Changes ........................................... 5
  Medical Treatments ........................................ 5
  Surgical Treatments ....................................... 5
  Products and Devices ...................................... 7

OTHER CONSIDERATIONS
  Preventing Future Problems ............................... 7
  Questions to Ask Your Doctor ............................. 7

GLOSSARY ................................................... 8

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Introduction

The bladder’s job is to hold urine until you are ready to release it. When the bladder is working well, you can do what you would like, when you would like, without worrying about leaks. You can go to work, school, and shop, take long car trips, exercise or enjoy a good movie without a break.

Most people use the bathroom 6 to 8 times within 24 hours (no more than once during the night). With a healthy bladder, going to the bathroom can be put off until it is a good time to go. You should not leak urine.

Urinary incontinence is a problem with bladder control, leading to urine leaks. Millions of people in the United States live with this problem. It stops men, women and children from doing the things they like. You may even have a fear of being far from a bathroom because of stress urinary incontinence (SUI).

If this happens to you or a loved one, talk with your health care provider about your symptoms. There are many ways to manage and treat this problem. With your health care provider, you can find help.

GET THE FACTS

How Does the Urinary Tract Work?

- **Bladder**: The place where urine is stored until you are ready to release it. It is made of elastic tissue that can stretch as the bladder fills and muscle fibers that can squeeze when it needs to empty.

- **Urethra**: The tube that carries urine out of your body. It is surrounded by sphincter muscles that help keep the urethra closed and stop urine from leaking out. Your fascia and pelvic floor muscles help hold the bladder and urethra in place within the pelvis.

- When you are ready to pass urine, the brain signals the bladder muscle to contract (squeeze). At the same time, your urethral sphincter muscles relax and open. These actions cause urine to be forced out through the urethra and the bladder then empties.

What is Urinary Incontinence?

**Urinary incontinence** is a problem with the loss of control when you pass urine. There are two main types of urinary incontinence:

- **Stress urinary incontinence (SUI)** is when a small to moderate amount of urine is released, without control. This happens when the pressure on your bladder increases. An example of this is when you cough, sneeze, or laugh.

- **Overactive bladder (OAB)** is a sudden, uncontrollable need to pass urine. Leaks may be moderate to large.

The difference between SUI and OAB is anatomical. SUI is a urethral problem. OAB is a bladder problem. SUI happens when the urethra cannot stop the sudden increase in pressure. This can happen when you cough or bend over. With OAB, the bladder will spasm and squeeze uncontrollably.

Many people with SUI also have OAB. When they have both types of incontinence, it is called “Mixed Incontinence”.

*All words that appear in blue italics are explained in the glossary.*
What is SUI?

Stress Urinary Incontinence (SUI) is when urine leaks out with sudden pressure on the bladder and urethra causing the sphincter muscle to open briefly. With mild SUI, pressure may be from sudden forceful activities, like exercising, sneezing, laughing or coughing. If your SUI is moderate or more severe, you may also leak with less forceful activities, like standing up, walking or bending over. These leaking “accidents” can be a few drops to enough to soak through clothes.

More people have SUI than you may think. About 1 in 3 women have this problem at some point in their lives. Men get SUI, but not that often. Men may have problems after surgery or because of an injury.

You have to be your own best advocate if you have symptoms of incontinence. Knowing what to look for and what to expect will help you manage your symptoms.

SUI Signs and Symptoms

To know if SUI is a problem for you, ask yourself:

- Am I afraid to be too far from a bathroom or a change of clothes?
- Have I stopped exercising or playing sports?
- Have I changed the way I live because I am afraid of urine leakage?
- Have I become uncomfortable with my body?
- Have my symptoms changed my relationships with friends or family?
- Am I avoiding sex because I am worried that I will leak and become embarrassed?

If you answer yes to some of these, you should know that there is hope. There are many ways to handle, manage and treat SUI.

How is SUI Diagnosed?

It is of great value for your health care provider to know if you feel your urine leaks are a problem. Don’t be embarrassed - providers are trained to talk about these matters! You may be referred to a specialist, such as a urologist or a gynecologist who specializes in incontinence. Some may even have extra certification in Female Pelvic Medicine and Reconstructive Surgery (FPMRS).

There are a few things your provider may want to discuss to help make a diagnosis. Your doctor may ask about your urinary symptoms (When do you leak? How often? How much?). Your provider may also review your medical history, perform a physical exam and may ask for tests to find the cause of leaks. For women, your physical exam may include checking your abdomen, the organs in your pelvis and your rectum. For men, it may include checking your abdomen, prostate and rectum. Your provider may also test the strength of your pelvic floor muscles and sphincter muscles.

It may also be helpful to keep a bladder diary before you see your provider. A bladder diary is a way to track how much you drink and when. It is also used to track when you have leaks and what may cause them over a period of time. This diary can give your provider clues about what is happening. You and your health care provider may review it together.

GET DIAGNOSED

Tests

Your provider may order tests to confirm the diagnosis of SUI and rule out other reasons for your urine leaks. Some tests for SUI are:

- Urinalysis or urine sample which tests for a urinary tract infection or blood in the urine.
- Bladder scan to show how much urine stays in your bladder after you pass urine.
- Cystoscopy uses a narrow tube with a tiny camera to see into the bladder to rule out more serious urinary tract problems.
- Urodynamic tests tell how well the bladder, sphincters and urethra hold and release urine. These tests can show how well the bladder works and may help find the cause of leakage. If your provider believes that you may need surgery to address SUI, these studies may be done.
You and your health care provider can talk about ways to treat or manage your symptoms. There are both non-surgical and surgical options. Not every treatment works for everyone. By getting all the information, you can work with your provider to decide what may work best for you.

**Lifestyle Changes**

Making a few changes in your everyday life may reduce SUI symptoms. For example, if you can lose weight, stop smoking (to help you cough less) and maintain good overall health, you may reduce leaks. **Bladder training**, or using a schedule for bathroom visits, may also help.

**Pelvic Floor Exercises**

**Kegel exercises** can strengthen the urethral sphincter and pelvic floor muscles. This works for both men and women. If you can learn to tighten and relax these muscles, this can often help your bladder control.

**Pads**

As a quick fix, or long-term option, absorbent pads are available. Absorbent products come in many shapes and forms. They can be pads or pull-on briefs. They can be used if leaks are not considered a major problem in your life.

**Medical Treatments**

When lifestyle changes do not help enough, your health care provider may ask you to try prescription medications. A frank talk with your provider about the risks, side effects and benefits of each medication will help you decide which might be the right one for you.

At this time there are no drugs approved in the United States to treat SUI. If you have both SUI and OAB (Mixed Incontinence), your health care provider may prescribe OAB drugs or treatments. These drugs could help reduce leaks from an overactive bladder. They do not treat SUI.

**Surgical Treatments**

Choosing to have surgery is very personal. If surgery is suggested, there are many choices. It helps to learn as much as you can before you decide. You should work with a doctor who has experience in SUI surgery. Learn the risks and benefits of all your surgical choices, as well as what to expect during and after surgery, to make the most informed choice that will be best for you.

**Slings**

**Female Sling**

The most common surgical treatment and the current standard of care for the surgical treatment of female SUI is the midurethral sling surgery. For this, a strip of soft permanent mesh is placed under the urethra to support urethral closure during actions that involve “physical pelvic stress” (coughing, sneezing, bending, lifting, jumping and running). It is a simple 10-20 minute, outpatient procedure with a small single cut in the vagina. This is easily done under limited anesthesia and linked to a very quick return to normal day-to-day activities. Long-term success rates are in the 90%. Another type of female sling surgery, the pubovaginal sling, is a **bladder neck** sling. Here the tissue used to make the sling comes from the patient’s abdominal wall (fascia), or donated tissue (bovine or cadaver).

**SUI Myths**

There is a lot of misinformation on SUI. These myths are simply not true:

- It is part of being a woman.
- It is a normal part of aging.
- My mom had it and so will I.
- I could have stopped it.
- There is nothing that can be done to help.
**Male Sling**

A **sling procedure** may be offered to treat SUI in some men. The male sling is for urethral sphincter muscle support. For this, a soft mesh tape is placed under the urethra through a cut between the **scrotum** and rectum. It supports the urethra and sphincter muscle by pushing up on the urethra and causing some coaptation (closure) of the urethra to prevent leaks. Ask your healthcare provider if this is an option for you.

**Bladder Neck Suspension / Colposuspension**

The Burch Colposuspension, or bladder neck suspension, is surgery for female SUI that lifts the bladder neck up towards the pubic bone with permanent stitches. This is a bigger surgery with a cut through the abdominal wall (muscles and skin), to reach the deeper pelvic areas. Because of the cut into the belly, it takes a longer time to heal from this surgery compared to the more minimally invasive midurethral sling, but it can be the right choice for some patients. In some cases it can be performed laparoscopically, which lessens the recovery time after surgery.

**Bulking Agents (Injections)**

This option is used to treat female SUI by “bulking up” the inner urethral lining and making the opening of the urethra smaller. Modern bulking agents are permanent materials that are placed into the tissues around the urethra and sphincter muscle up towards the bladder neck. This helps the natural urethral closure function to stop leaks. Note that bulking agents are not FDA-approved for male SUI.

**Artificial Urinary Sphincter**

The most common treatment for male SUI is to implant a device around the urethra called an **artificial urinary sphincter**.
**sphincter (AUS).** In some cases, women may also be helped by this surgery, but due to other surgical options mentioned earlier, this is rarely needed in women. The AUS is a device with three parts:

1. An artificial urinary sphincter, which is a fluid-filled cuff placed around the urethra.
2. A fluid-filled, pressure-sensing balloon that joins to the cuff and regulates the pressure within the cuff. This balloon is placed in the lower abdomen.
3. A pump placed in the scrotum for men (and labia for women), that transfers the fluid between the cuff and the balloon to open and close the cuff (artificial urinary sphincter). The pump is easily controlled by the patient.

At rest, the AUS cuff is closed (full of fluid) to prevent leaks. When you decide to empty your bladder, you activate the pump to push fluid from the cuff. This allows the urethra to open so that the urine can flow through and empty the bladder. This surgery can cure or greatly help urinary control in about 70-80% of men. If you have had radiation, scar tissue in the urethra, or other bladder problems, then this option may not be the best for you.

**Products and Devices**

For some people, incontinence products and devices are the only way to manage bladder problems to give you more freedom to do the things you want to do.

Some include:
- External collecting systems (condom style for men, funnel and pouch for women)
- Absorbent products (pads, adult diapers, tampons)
- **Pessaries** for women designed for SUI
- Penile clamps for men to restrict the flow of urine from the penis.
- Toilet substitutes (like portable commodes)

**Preventing Future Problems**

One of the best ways to prevent SUI is to do Kegel exercises. Throughout and after treatment, think about how much fluid you drink and make plans to pass urine regularly.

If you choose surgery, it may help to watch weight gain or activities that may strain your belly and pelvis as they can harm surgical repair over time.

Typically, you should be checked within 1 to 2 weeks after surgery. After that, your doctor will let you know how often you will need to be checked (usually 6 weeks and a year after surgery). Your bladder may also be tested to see how well it is releasing urine and if urine remains. If you still experience SUI symptoms or have any pain, let your provider know.

It can help to stay in touch with your health care provider during this process to ensure you are benefiting from the treatment options available and are finding the right plan for you.

**Questions to Ask Your Doctor**

**Diagnosis Questions:**
- What is causing my urine leakage?
- Do you think I have SUI?
- What can we learn from my test results?

**Non-surgical Treatment Questions:**
- What are my non-surgical treatment choices?
- Are there any risks to these types of treatments?
- Will non-surgical treatment be enough for me?
- What can I do to improve my quality of life now?

**Surgical Treatment Questions:**
- What are my surgery choices?
- What surgery do you suggest for me and why?
- What are the risks of surgery?
- How likely is each option to improve my leaks?
- How long will this treatment last?
- What is the recovery time?
- How many of these surgeries do you perform yearly?
Abdomen
Also known as the belly. The part of the body that holds all internal structures between the chest and the pelvis.

Artificial Urinary Sphincter (AUS)
Surgical device used to treat urinary incontinence. It has three parts that are implanted surgically: a pump, a balloon and a cuff that surrounds the urethra. It prevents urine from leaking out.

Bladder
The hollow, balloon-shaped organ where urine is stored in the body. The “holding tank” for urine. When it is full, it sends a signal to the brain that it is time to void.

Bladder Diary
The most useful bladder diary is done for 3 days. During this time, you write down what and how much you drink, as well as when you go to the bathroom. In some cases, you might be asked to measure the amount of urine you void with each trip to the bathroom. Tracking if or when you leak urine, and describing your feelings or activities when it happens will help to better see your symptoms on a day-to-day basis.

Bladder Neck
The area of thick muscle where the bladder joins the urethra. The bladder neck muscles react to signals from the brain to contract and hold urine in, or to relax and allow urine out.

Bladder Scan
A type of ultrasound to measure the amount of urine in the bladder using sound waves.

Bladder Training
Based on your bladder problem, bladder training techniques can be used to help “retrain” your bladder to follow a more normal daily voiding plan. Such programs are mixed with other pelvic floor exercises (“Kegels”), proper hydration, diet changes and other lifestyle changes. Some people feel better quickly; others may need longer to blend these things into their day-to-day life.

Cystoscopy
A test where your doctor uses a long, thin tube with a camera lens. The lens is placed through the urethra to see into the bladder. It helps with diagnosis and treatment. It is also used to remove tissue samples.

Kegel Exercises
Exercises used to control the muscles of the pelvic floor. Kegel exercises can be used to make these muscles strong, to help against SUI.

Overactive Bladder (OAB)
A condition that causes strong sudden urges to go to the bathroom that are hard to ignore. The urge may be so strong as to cause uncontrollable leaking of urine (UUI). Other common symptoms include frequent trips to the bathroom and/or getting up more than once at night to go to the bathroom.

Pelvic Floor Muscles
These muscles serve as the support, or the floor, of the pelvis, that holds the pelvic organs (bladder, uterus and rectum) in place. When you squeeze to keep yourself from passing urine, or from passing gas, you are squeezing the pelvic floor muscles. This is also called a “kegel” exercise.

Pessaries
A firm yet flexible supportive device placed in the vagina (much like a diaphragm) to help treat stress urinary incontinence (SUI) and pelvic organ prolapse (POP). Pessaries are available in many shapes and sizes to fit the needs of the patient. Proper pessary fitting is needed for success.

Prostate
This walnut-shaped gland in men surrounds the urethra at the bladder neck. The prostate makes fluid for semen.

Scrotum
The “sac” of skin that hangs below the penis holding the testicles.

Sling Procedure
A surgery that places a strip of fascial tissue or soft mesh (a “sling”) under the urethra to support it during activity. This helps close the urethra during activity to stop stress-related leaking or stress urinary incontinence (SUI).

Sphincter Muscle
A muscle at the junction between the top of the urethra and the bottom of the bladder. When contracted, it closes tightly around the urethra to keep urine in the bladder. It only opens when your brain says you are ready to use a toilet. Then it relaxes, opens the urethral sphincter and the urethra, and lets urine drain out of the bladder.

Stress Urinary Incontinence (SUI)
An uncontrollable loss of urine caused by physical stress on the pelvic area, such as with sneezing, coughing, laughing or exercising.

Urethra
A thin tube that carries urine from the bladder out of the body. In men, this tube runs through the penis and also carries semen.
**Urinalysis**
A urinalysis is a test of your urine. First, you pass urine into a sterile cup. A mid-stream sample is always best. The sample is then sent to a lab to look for infection, blood, proteins and other signs of a problem.

**Urinary Incontinence**
Uncontrollable leakage of urine.

**Urinary Tract**
The organs that take waste from the blood and carry it out of the body in the urinary tract.

**Urinary Tract Infection (UTI)**
An infection of the urine caused by an overgrowth of bacteria, viruses or fungus (i.e., yeast) growing in the urinary tract.

**Urine**
A liquid, often yellow in color, made by the kidneys that contains waste and water.

**Urodynamic Test**
A “stress test” for the bladder that helps to see how well the bladder works. It is used to record bladder feelings during filling, how much the bladder can hold, urine leakage, bladder contractions or “spasms” and the ability to empty the bladder.

**Urologist**
A doctor who specializes in the diagnosis and treatment of problems linked to the urinary tract and nearby pelvic structures.
The Urology Care Foundation is the world's leading Urologic Foundation—and the official Foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make healthy changes in their lives. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more about different urologic issues, visit UrologyHealth.org/UrologicConditions. To find a doctor near you go to UrologyHealth.org/FindAUrologist.

Disclaimer
This information is not a tool for self-diagnosis or a substitute for professional medical advice. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.