

# Female Urinary Incontinence: What It Is and What You Can Do About It

---

## Urogynecology Patient Information Sheet

### What is Urinary Incontinence?

**Stress Incontinence** is a leakage of urine that occurs, for example, during coughing, lifting, or sneezing. This happens because the muscles and tissues supporting the bladder have been weakened. When there is an increase in pressure placed on the abdomen and bladder, such as during a cough, urine loss results. This is the most common cause of urinary incontinence. Some women have stress incontinence because the sphincter muscle, which normally acts as a “valve” that keeps urine inside the bladder, is weakened. This is important to know, because treatments for urinary incontinence may be a little different if the sphincter is weakened.

**Urge Incontinence** is the inability to control the flow of urine – it is usually due to uncontrolled bladder spasms.” Women will say, “When I have to go, I have to go!” Women with this problem have bladders that do not allow them to fill and store urine properly. Once the bladder fills with a certain amount of urine, it becomes irritable and “spasms,” resulting in leakage. This problem can be extremely embarrassing because a woman may soak through her undergarments or even the protection she is wearing.

**Overflow Incontinence** can be due to a poorly functioning bladder muscle or neurological problem. The bladder muscle does not “squeeze” or contract well enough so that it continues to fill up with urine until the urine finally “spills out.” This leakage can be provoked by straining or coughing.

Sometimes this problem occurs because of an “obstruction” of the normal flow of urine. This happens, for instance, when the bladder, uterus, or vagina has “dropped” so much that it “kinks” the passageway (the urethra) from which the urine normally flows. Sometimes simply “re-supporting” these “dropped” pelvic organs treats this problem.

**Mixed Incontinence** is the combination of any of the above. This is important to know because treatment options may differ.

## Lifestyle Changes:

1. **Stop Smoking!** Nicotine from cigarettes is a bladder irritant! When nicotine is present in the body, it acts directly on the muscle of the bladder causing it to have spasms (whether you are in the bathroom or not!). Women who smoke often also have a chronic cough. If you suffer from stress incontinence, coughing most certainly brings on more episodes of urinary loss. Women who smoke and cough often put additional pressure on the muscles and supports to the bladder, thus further weakening them.
2. **Eliminate Caffeine!** Caffeine is also a bladder irritant! When caffeine is present in the body, it acts on the muscle of the bladder causing it to have spasms. Caffeine is also a diuretic, which means it causes your kidneys to excrete more urine, thus causing you to need to go to the bathroom more often. Note: Do not go “cold turkey” on your caffeine reduction as you may get caffeine withdrawal headaches. Instead, slowly wean down the amount you ingest. Be aware of products such as colas, other soft drinks, chocolate, and tea – these all contain caffeine.
3. **Bladder Retraining** – The goal of bladder retraining is to restore your bladder to a more normal voiding pattern. A normal voiding pattern is to go to the bathroom every 2-3 hours during the day. Do not go more frequently, or “just in case” to prevent leakage as this can contribute to urinary frequency. If you urinate more frequently than every 2 hours during the day start by scheduling voiding at an interval that you can do comfortably without leakage (for example every hour or so). It is important to set up a voiding schedule and void on schedule even if you feel you don’t have to urinate. Gradually increase the time between voiding as you are able. For example you could increase your scheduled voids from every hour to every hour and 15 minutes throughout the day. Contract your pelvic floor muscles (Kegels) to help quiet your bladder and delay voiding by 10-15 minute increments so that you gradually train your bladder to void every 2-3 hours.
4. **Exercise Your Pelvic Floor Muscle** – The pelvic floor muscles are a sling of muscles that extend from your pelvic bone in front to your tailbone in back. They help to control bladder and bowel function, contribute to sexual function, organ support and good posture. These muscles can become weak after childbirth, with disuse or aging. Like all muscles they need to be exercised to stay in shape and maintain optimal function. The pelvic floor muscles contain fast and slow muscle fibers and both need to be exercised specifically.

## How to Do Pelvic Floor (Kegel) Muscle Exercises:

1. Lie on your back with knees bent, feet flat and hip width apart. Place your hand on lower abdomen to help monitor breathing and abdominal muscle activity.
2. Tighten the muscles around the vagina and rectum as if you are trying to stop the flow of urine and gas. You should feel your muscles close the vaginal and rectal openings and lift upward. Maintain normal breathing. It is OK to feel your abdominal muscles pull/sink in under your hand during this exercise. You should not feel your abdominal muscles bulge or push out.
3. To build your muscle strength
  - a. Holding contractions (slow muscle fibers) contract your pelvic floor muscles with about 80% of a maximum effort, hold for 3-5 seconds while breathing normally. Rest for a count of 10 and repeat 10 times. Do 2 sets of 10, 2 times per day.
  - b. Quick contraction (quick muscle fibers) contract your pelvic floor muscles 3 times rapidly building in intensity, rest for 10 counts and repeat 10 times. Do 2 sets of 10, 2 times per day.
4. Use your pelvic floor muscles to prevent leakage by:
  - a. Contracting your pelvic floor muscles before you are going to do any activity that has a tendency to make you leak.
  - b. Contracting your pelvic floor muscles when you need to delay voiding or feel you might leak on the way to the bathroom. Contract muscles quickly and repeatedly to quiet bladder and prevent leakage.

## The Key to Success of Pelvic Floor Muscle Exercises:

The key to success of the Pelvic Floor Muscle (Kegel) exercises is that once you can nicely isolate them, recruit them in the times of need! For example, if you anticipate a cough or sneeze coming on, try and squeeze your pelvic floor muscle first. Practice squeezing them while walking, jogging, etc. It is not easy, but with practice it can certainly help reduce urine loss.

## Nonsurgical Treatment Options

### Pelvic Floor Rehabilitation Therapy:

1. **Biofeedback** – Some women have trouble identifying and contracting their pelvic floor muscles. Some women squeeze their rear-end muscles or thighs; some women actually push down with their abdominal muscles. The pelvic muscles are the muscles one would squeeze if she were trying to stop urine or gas from coming out (but please, do not practice while you are emptying your bladder). Some women need to be taught how to perform these correctly. Biofeedback is a program designed to help a woman correctly identify and isolate the proper pelvic muscles. Using, for instance, a vaginal probe and skin surface muscle electrodes (small sticky patches that are placed on the skin overlaying the abdominal muscles and/or the buttock muscles), a woman may actually visualize on a computer screen the activity of the muscle she is contracting. She learns when she is exercising the proper muscle and when she is squeezing the wrong muscle.
2. **Electrical Stimulation Therapy** – Sometimes the pelvic floor muscles cannot adequately contract due to nerve damage (multiple births, delivering large babies, previous pelvic surgery). Electrical stimulation is similar to biofeedback with the exception that a gentle electric current is used that directly acts on the pelvic floor muscles, causing them to contract. This helps to “bypass” the activity of the damaged nerve. The use of electrical stimulation has been shown to significantly reduce episodes of urge incontinence. There are specific nerves that rest in the pelvic muscles that, when stimulated, they cause the bladder muscle to relax. This therapy helps prevent bladder spasms and has been shown to be quite effective.
3. **Medications:** Medications can help with symptoms of both stress and urge incontinence. There are a number of medications that act to relax the bladder muscle and prevent spasms (examples: oxybutynin, hyoscyamine, Detrol, Ditropan XL). They are relatively easy to take with few side effects, the most common one being dry mouth. These medications should not be taken if you have NARROW angle glaucoma; if you have OPEN angle glaucoma, it is safe to take these medications. Other medications help to increase the muscle tone around the urethra (the tube that brings the urine from the bladder to the outside). Imipramine is an example of these medications. Local vaginal estrogen cream also increases the function of the urethra and reduces urinary urgency and frequency.

4. **Vaginal Support Devices:** Vaginal support devices can be used in an attempt to “re-support” the bladder. A vaginal support device or “pessary” is a specially designed soft plastic device (similar to a contraceptive diaphragm) that supports the bladder and the “bladder neck.” Use of this device prevents urine leakage during activity. Another option is to wear a “super” tampon, which temporarily compresses the urethra, helping to prevent urine leakage.

## **SURGICAL TREATMENT OPTIONS**

**Before a woman has surgery for incontinence, an accurate diagnosis as to the cause of the incontinence should be made.**

Your physician needs to know if the cause of your urinary incontinence is due to loss of support to the bladder, if the sphincter muscle in the urethra is functioning properly and whether or not you have bladder spasms. Bladder testing (called “urodynamics”) helps determine the cause. Surgical treatment is reserved for stress urinary incontinence. Surgery will not correct urge incontinence. If a woman has mixed incontinence (BOTH stress and urge incontinence), surgery will treat her stress incontinence but will not necessarily address her urge incontinence. Therefore, she must understand that she may need to continue taking medications in the future to treat her urge incontinence.

Surgery may be performed either through the vagina or through an abdominal incision with varying success rates from 60 – 90 %chance of cure. These include:

- . Vaginal bladder repair (“anterior repair” or “bladder lift / tuck”)
- . Combined vaginal / abdominal repair (“needle suspension”)
- . Abdominal bladder suspension (“Burch” or “MMK”)
- . Sling procedure (combined vaginal / abdominal)

**Please note:** These procedures may be done for different reasons. The cure rate may be low for a particular procedure not because it does not work, but because it was not addressing the problem correctly. Also, different surgeons have different techniques and skills that may make one procedure more effective in his / her hands.

What is most important is to discuss this with your physician. Your physician will try to do his / her best to help you, but do not be shy about asking questions.

1. Depending on your situation, you may be a candidate for a minimally invasive type of sling procedure called a “tension free vaginal tape,” which allows for a more rapid recovery and less postoperative voiding problems.
2. If the support to *your bladder is normal* but your *sphincter muscle is weak*, then you may be a good candidate for a procedure called “collagen injections.” This is an outpatient (same day) procedure done under local anesthesia. It does not take long (15 – 25 minutes), and the woman can resume her normal activities the next day. A pasty substance called “collagen” (similar to what is used in cosmetic surgery to bulk up the lips and reduce wrinkles) is injected into the part of the urethra where the weakened sphincter muscle is. It “bulks up” this area and helps “close it.” (A very uncommon risk is that a woman is not able to empty her bladder, but this is only temporary.) Since collagen is not a permanent solution and does dissolve, women usually need this procedure done more than once. It is not ideal for young, active women since it is not long lasting.
3. If your bladder has lost its support but you only have very minimal incontinence, you may be a candidate for a vaginal bladder repair (“anterior repair”). But remember – if your bladder has dropped significantly you may not be leaking much urine because the urethra is “kinked.” This needs to be evaluated first, because this may require a different procedure.
4. Most importantly, if surgery is planned, make sure you have appropriate bladder testing done before surgery to ensure that the proper procedure is being done for the proper reason. These procedures are constantly being tested and your physician may discuss other types of treatments.