

GYNECOLOGIC PROBLEMS
AP081

Urinary Incontinence

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PATIENT EDUCATION

Leakage of urine is called **urinary incontinence**. It is a common problem for women. Some women with urinary incontinence leak only small amounts of urine. Others have frequent or severe leakage.

Living with urinary incontinence can be difficult. You may find yourself skipping social events or limiting your activities. You may be embarrassed to talk about your symptoms with a health care professional. But if incontinence is affecting your life, you can choose from many treatment options.

This pamphlet explains

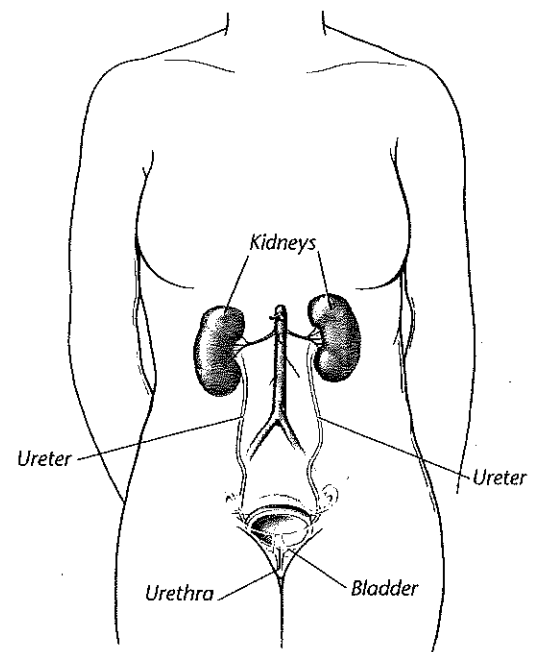
- signs and symptoms of urinary incontinence
- types of urinary incontinence
- some of the causes of urinary incontinence
- diagnosis and treatment

Signs and Symptoms

"Urinary incontinence" simply means "leaking urine." Incontinence can range from leaking just a few drops of urine to complete emptying of the **bladder**. It is common for other signs and symptoms to occur along with urinary incontinence:

- **Urgency**—Having a strong urge to urinate
- **Frequency**—Urinating (also called voiding) more often than what is usual for you
- **Nocturia**—Waking from sleep to urinate
- **Dysuria**—Painful urination
- **Nocturnal enuresis**—Leaking urine while sleeping

The Female Urinary Tract



The urinary tract is made up of the kidneys, ureters, bladder, and urethra. During urination (also called voiding), the muscles around the urethra relax. The muscle of the bladder then contracts, and urine flows through the urethra and out of the body. When the bladder is almost empty, the muscles around the urethra contract. The bladder muscle relaxes, and the urine stops flowing.

Types of Urinary Incontinence

Based on these signs and symptoms, urinary incontinence in women can be divided into three main types:

1. Stress urinary incontinence (SUI) is leaking urine when coughing, laughing, or sneezing. Leaks also can happen when a woman walks, runs, or exercises.
2. Urgency urinary incontinence is a sudden strong urge to urinate that is hard to stop. Women with this type may leak urine on the way to the bathroom. If you have an overactive bladder (OAB), it means that you have symptoms of urgency and frequency that may or may not include incontinence.
3. Mixed incontinence combines symptoms of both SUI and urgency urinary incontinence.

Causes

There are many causes of urinary incontinence. Often, there is more than one cause. Some causes of urinary incontinence are easily diagnosed. Others are more complex. Some of the causes include the following:

- **Urinary tract infection (UTI)**—Bladder infections are common in women. Signs may include pain, frequent urination and, sometimes, blood in the urine. UTIs sometimes cause leakage. UTIs are treated with **antibiotics**.
- **Diuretic** medications, caffeine, or alcohol—Incontinence may be a side effect of substances that cause your body to make more urine. Your health care professional may advise changing your medication or limiting intake of caffeine and alcohol to help improve your symptoms.
- **Pelvic floor disorders**—These disorders are caused by weakening of the muscles and tissues of the **pelvic floor** and include urinary incontinence, **accidental bowel leakage**, and **pelvic organ prolapse**.
- **Constipation**—Long-term constipation often is present in women with urinary incontinence, especially in older women. Treating constipation may help with urinary symptoms.
- **Neuromuscular problems**—When nerve signals from the brain to the bladder and **urethra** are

disrupted, the muscles that control those organs can malfunction, allowing urine to leak. Muscle control problems can occur in conditions such as diabetes, stroke, or multiple sclerosis.

- **Anatomical problems**—The outlet of the bladder into the urethra can become blocked by bladder stones or other growths. The urethra may develop an abnormal pouch called a **diverticulum** that causes urine leakage or dribbling. A **fistula** is an abnormal connection from the urinary tract into another part of the body, such as the **vagina**, which allows urine to leak out. Pelvic surgery, radiation treatment, pelvic cancer, or childbirth may cause a fistula.

Diagnosis

The first steps in assessing urinary incontinence usually are a medical history and physical exam. Sometimes, imaging tests and bladder function tests are done if more information is needed.

Medical History

Your **gynecologist** or other health care professional will ask you to explain your signs and symptoms in detail. You may be asked to fill out a bladder diary for a few days. In it, you record the time and amount of leakage as well as the times you urinated. You also note how much liquid you drank and what you were doing when a leak occurred. A bladder diary can be downloaded from the internet, or your gynecologist may give you one to fill out.

Physical Exam

A **pelvic exam** may be done to see if you have pelvic organ prolapse and to look for other anatomical problems. A “cough test” may be done during the exam. During a cough test, you are asked to cough and bear down with a full bladder to see if urine leaks. A pad test may be done, in which you wear a pad that absorbs leaked urine. The pad is weighed for the amount of leakage. A test to measure the support of the urethra may be done. This is an important factor in planning treatment.

Treatment

Seeking treatment for urinary incontinence is a personal decision. For some women, leaking even

small amounts of urine is a problem. Others simply make changes in lifestyle, such as wearing absorbent pads and taking steps to control odor. If symptoms of urinary incontinence bother you and are having a negative effect on your life, you may want to seek treatment.

Treatment depends on the type of incontinence you have and your goals for treatment. How much your symptoms bother you is an important factor in deciding on a treatment plan.

Your gynecologist or other health care professional may first recommend nonsurgical treatment. This may include lifestyle changes, bladder training, physical therapy, and using certain bladder support devices. For urgency urinary incontinence, the treatment may involve medication. Surgery may help certain types of incontinence. Often, several treatments are used together for the best effect.

Lifestyle Changes

Making certain lifestyle changes may help decrease urine leakage:

- Lose weight. In overweight women, losing even a small amount of weight (less than 10% of total body weight) may decrease urine leakage.
- Manage your fluid intake. If you have leakage in the early morning or at night, you may want to limit your intake of fluids several hours before bedtime. Limiting the amount of fluids you drink also may be useful (no more than 2 liters total a day). If your urine is pale or has no color, you may be drinking too much. Limiting alcohol and caffeine may be helpful as well.
- Train your bladder. The goal of bladder training is to learn how to control the urge to empty the bladder and increase the time span between urinating to normal intervals (every 3–4 hours during the day and every 4–8 hours at night). After a few weeks of this training, you may leak urine less often.

Pelvic Floor Exercise and Physical Therapy

Kegel exercises can help strengthen the pelvic muscles (see box). These exercises are helpful for all types of incontinence. If you have trouble doing Kegel exercises, you may be referred to a physical therapist who specializes in women's pelvic health. **Biofeedback** is a training technique that may help

you locate the correct muscles. In one type of biofeedback, sensors are placed inside or outside the vagina that measure the force of pelvic muscle contraction. When you contract the right muscles, you will see the measurement on a monitor. This feedback lets you know that you are doing Kegel exercises in the right way. There are in-home biofeedback devices that you can use as well.

Devices

A **pessary** is a device that is inserted into the vagina to treat pelvic support problems and SUI. Pessaries support the walls of the vagina to lift the bladder and urethra and come in many shapes and sizes. Your gynecologist will fit you for a pessary to find the right one to help your symptoms. Support pessaries usually can be inserted and removed by the patient. Pessaries may provide relief of symptoms without surgery. An over-the-counter tampon-like device also is available that is designed specifically to help prevent bladder leaks.

Kegel Exercises

Kegel exercises help tone the pelvic muscles. They strengthen the muscles that surround the openings of the urethra, vagina, and rectum. Here is how they are done:

- Squeeze the muscles that you use to stop the flow of urine. This contraction pulls the vagina and rectum up and back.
- Hold for 3 seconds, then relax for 3 seconds.
- Do 10 contractions three times a day.
- Increase your hold by 1 second each week. Work your way up to 10-second holds.

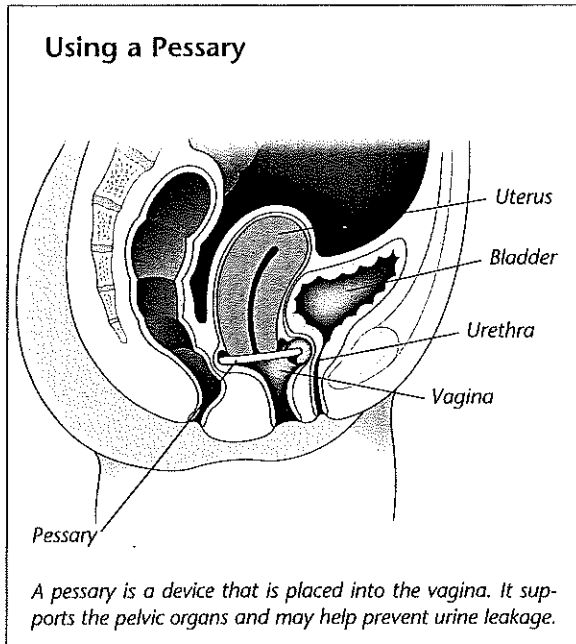
Make sure you are not squeezing your stomach, thigh, or buttock muscles. You also should breathe normally. Do not hold your breath as you do these exercises.

You can do Kegel exercises anywhere—while working, driving in your car, or watching television. But you should not do these exercises when you are urinating.

Medications

Many medications are available to help reduce the symptoms of urgency urinary incontinence and OAB:

- Drugs that help control muscle spasms or unwanted bladder contractions can help prevent leakage from urgency urinary incontinence and relieve the symptoms of urgency and frequency. They are available in pill form or as a skin gel or skin patch. A drug called oxybutynin is available over-the-counter as a patch. Possible side effects of these medications include dry mouth, dry eyes, and constipation.
- Mirabegron is a drug that relaxes the bladder muscle and allows the bladder to store more urine. This drug is used to treat urgency urinary incontinence and relieve the symptoms of urgency and frequency.
- Injection of a drug called onabotulinumtoxinA into the muscle of the bladder helps stop unwanted bladder muscle contractions. The effects last for about 3–9 months. It also is used to treat OAB. Possible side effects include UTI and, in about 5% of women, an inability to empty the



bladder. If this happens, you will need to use a *catheter* to drain the bladder. If you want to try this procedure, you should be willing to use a catheter for a few days to a few weeks if needed.

Surgery

There are different types of surgical procedures for different types of incontinence. You and your health care professional may discuss many factors before choosing the surgery that is right for you, including the risks and benefits of each type.

Surgery for Stress Urinary Incontinence. Surgery to correct SUI includes the following procedures:

- Slings—Different types of slings, such as those made from your own tissue or *synthetic* materials, can be used to lift or provide support for the urethra. The synthetic midurethral sling is the most common type of sling used to correct SUI. This sling is a narrow strap made of synthetic mesh that is placed under the urethra. The synthetic mesh sling has very high safety and effectiveness rates for treatment of SUI.
- Colposuspension—Stitches are placed on either side of the *bladder neck* and attached to nearby supporting structures to lift up the urethra and hold it in place.
- If surgery is not an option for you or has not worked for your SUI, urethral bulking may help. This is often done as an office procedure. A synthetic substance is injected into the tissues around the urethra. The substance acts to “plump up” and narrow the opening of the urethra, which may decrease leakage.

Surgery for Urgency Urinary Incontinence. When other treatments have failed or are not an option for urgency urinary incontinence or OAB, nerve stimulation may be considered. Sacral neuromodulation is a technique in which a thin wire is placed under the skin of the low back and close to the nerve that controls the bladder. The wire is attached to a battery device placed under the skin nearby. The device sends a mild electrical signal along the wire to improve bladder function. Percutaneous tibial nerve stimulation (PTNS) is a procedure that is similar to acupuncture. In PTNS, a slender needle is inserted near a nerve in the ankle