



## Surgery for Stress Urinary Incontinence

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### What is stress urinary incontinence (SUI)?

SUI is a type of urinary **incontinence**. With SUI, a woman leaks urine when she coughs, laughs, or sneezes or during certain activities, such as walking, running, or exercising.

### What causes SUI?

SUI is a **pelvic floor disorder**. These disorders occur when tissues and muscles that support the **urethra, bladder, uterus, or rectum** are damaged. In SUI, the **sphincter muscle** that controls the urethra weakens, which may occur from pregnancy, childbirth, or aging.

### What nonsurgical treatment options may help with SUI?

Lifestyle changes, such as drinking less fluid, limiting caffeine, stopping smoking, and losing weight, can help decrease the number of times you leak urine. Other nonsurgical options include pelvic muscle exercises (**Kegel exercises**), physical therapy and biofeedback, or use of a **pessary**. Another option is an over-the-counter product that is inserted into the **vagina** like a tampon. Once inside the vagina, the product presses against and supports the urethra.

### What are the surgical treatment options for SUI?

There are different types of surgery for SUI:

- Injections
- Urethral sling
- Colposuspension

Urethral slings and colposuspension can be done through an incision in the abdomen (abdominal), through the vagina (vaginal), or with **laparoscopy** (laparoscopic). Injections can be given into the tissues around the urethra without an incision.

## What factors are considered when deciding which SUI surgery is appropriate for me?

The type of surgery you have depends on many factors:

- Age
- Future childbearing plans
- Lifestyle
- Need for **hysterectomy** or treatment of other pelvic problems
- Medical history (if you have had **radiation therapy** for pelvic cancer or have already had surgery for incontinence)
- General health
- Cause of the problem

Before you have surgery, you should weigh all of the risks and benefits of your surgical options. Your health care professional can discuss these risks and benefits with you.

## How are injections for SUI done?

**Synthetic** materials are injected into the tissue around the urethra to provide support and to tighten the opening of the bladder neck. The procedure usually is performed in your health care professional's office with local **anesthesia**. A lighted scope is inserted into the urethra and the material is injected through a thin needle. The procedure takes less than 20 minutes. It may take two to three or more injections to get the desired result. The injections may improve symptoms but usually do not result in a complete cure of incontinence.

## What types of urethral slings are available to treat SUI?

There are two types of urethral slings that are used to treat SUI:

1. Midurethral sling—The midurethral sling is the most common type of surgery used to correct SUI. The sling is a narrow strap made of synthetic mesh that is placed under the urethra. It acts as a hammock to lift or support the urethra and the neck of the bladder.
2. Traditional sling—In this type of surgery, the sling is a strip of your own tissue taken from the lower abdomen or thigh. The ends of the sling are stitched in place through an incision in the abdomen.

## What are some of the benefits and risks of midurethral sling surgery?

Midurethral sling surgery usually takes less than 30 minutes to perform. It is an outpatient procedure, meaning that you usually can go home the same day. Recovery time generally is quicker than with other procedures for SUI.

If synthetic mesh is used, there is a small risk (less than 5%) that the mesh will erode through the vaginal tissue. Infection, long-term pain, and other problems can occur with the use of synthetic mesh. Additional surgery may be needed to fix these problems. Another risk is possible injury to the bladder or other pelvic organs by the instruments used to place the midurethral sling. These injuries usually do not lead to long-term problems.

## What are some of the benefits and risks of traditional sling surgery?

With traditional slings, there are none of the risks associated with synthetic mesh. However, this type of surgery requires more recovery time than midurethral sling surgery. You usually will need to stay in the hospital for a few days when having traditional sling surgery. Risks of this type of surgery include urinary problems after the surgery, such as urgency or difficulty urinating. If these problems occur, the sling may need to be adjusted.

## What is colposuspension?

In colposuspension, the part of the urethra nearest to the bladder is restored to its normal position. The most common type of colposuspension performed is called the Burch procedure. The bladder neck is supported with a few stitches placed on either side of the urethra. These stitches keep the bladder neck in place and help support the urethra.

## What are some of the benefits and risks of colposuspension?

Colposuspension can be performed with an abdominal incision or with laparoscopy. When performed through an abdominal incision, the recovery time is similar to that of a traditional sling procedure. When performed by laparoscopy, you often can go home the same day.

Risks include urinary problems after the surgery. The stitches may need to be loosened if this happens.

## What are some of the general risks associated with surgery for SUI?

The following risks are associated with any type of surgery for SUI:

- Injury to the bladder, bowel, blood vessels, or nerves
- Bleeding
- Infection of the urinary tract or wound infections

- Urinary problems after the procedure (difficulty urinating or urgency symptoms)
- Problems related to the anesthesia used

### What should I expect during recovery from an SUI procedure?

After surgery, discomfort may last for a few days or weeks. During this time, you may be told to avoid anything that puts stress on the surgical area, such as the following activities:

- Excessive straining
- Strenuous exercise
- Heavy lifting

Some women may find it hard to urinate for a while or notice that they urinate more slowly than they did before surgery. They may need to use a **catheter** to empty their bladders a few times each day. In rare cases, if a woman is not able to void on her own, the stitches or the sling may need to be adjusted or removed.

### Glossary

**Anesthesia:** Relief of pain by loss of sensation.

**Bladder:** A muscular organ in which urine is stored.

**Catheter:** A tube used to drain fluid from or administer fluid to the body.

**Hysterectomy:** Removal of the uterus.

**Incontinence:** Involuntary leakage of urine, feces, or gas.

**Kegel Exercises:** Pelvic muscle exercises that assist in bladder and bowel control as well as sexual function.

**Laparoscopy:** A surgical procedure in which an instrument called a laparoscope is inserted into the pelvic cavity through a small incision. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

**Pelvic Floor Disorder:** Any disorder affecting the muscles and tissues that support the pelvic organs; these disorders may result in loss of control of the bladder or bowels or cause one or more pelvic organs to drop downward (prolapse).

**Pessary:** A device inserted into the vagina to support the organs that have dropped down (prolapsed) or to help control urine leakage.

**Radiation Therapy:** Treatment with high-energy radiation.

**Rectum:** The last part of the digestive tract.

**Sphincter Muscle:** A muscle that can close a bodily opening, such as the sphincter muscle of the urethra.

**Synthetic:** Made by a chemical process, usually to imitate a natural material.

**Urethra:** A tube-like structure through which urine flows from the bladder to the outside of the body.

**Uterus:** A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

**Vagina:** A tube-like structure surrounded by muscles leading from the uterus to the outside of the body.

### If you have further questions, contact your obstetrician–gynecologist.

**FAQ166:** Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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