

Stress Urinary Incontinence (SUI): A Patient Guide



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About the Urology Care Foundation	[back cover]

Stress Urinary Incontinence Expert Panel

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Tracy's Story



Tracy Shepler is a retired hair dresser and mother of five. After her third child was delivered by caesarian section, she was diagnosed with stress urinary incontinence (SUI). SUI is a condition where physical movement or activity (such as coughing, sneezing, running) puts pressure (stress) on the bladder. This stress causes urine to leak. Tracy couldn't stop the leaks on her own, so she went to her OB-GYN. Tracy's OB-GYN performed a surgery to insert a vaginal mid-urethral sling. But she still had leakage problems.

A few years later, a friend told Tracy to go see a urologist. The urologist said Tracy should get a new sling. "I was very nervous, but the urologist was very comforting," says Tracy. The procedure was done a few days before Christmas. But, the timing of the procedure around a busy holiday and the unfortunate event of a trapped house pet combined for a less-than-ideal recovery. "My cat was stuck in a hole and when I reached to rescue her, I felt my stitches rip!" Tracy said. The procedure was repeated, and this time with much better success.

"My advice for someone with urine leakage is to see a urologist," Tracy urges. "Based on your symptoms, you can get help. My SUI was best treated with sling surgery. I would also tell people to rest well during this type of recovery. The doctors know best!" Tracy jokes, recalling her cat issue. "Also, find a health care team with a great, positive attitude—and a physical therapist to help you perform bladder control exercises," she adds. Tracy says the exercises are hard to do every day but they truly help.

Tracy now says she feels an 80% improvement over her SUI symptoms. "With good care and rest, you can get better!"

Introduction: The Bladder's Job

The bladder's job is to hold urine until you're ready to release it. When the bladder is working well, you can do what you'd like, when you'd like, without worrying about leaks. You can go to work, school, 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's 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. The fear of being far from a bathroom can be all you think about.

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 relief.

***All words that appear in blue are explained in the glossary.**

How Does the Urinary Tract Work?

FEMALE URINARY TRACT

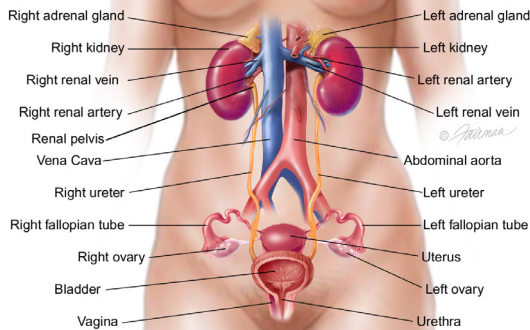


Image © 2016 Fairman Studios, LLC

MALE URINARY TRACT

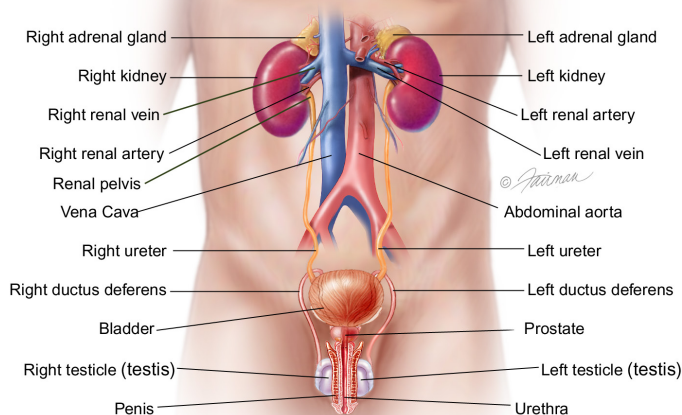


Image © 2016 Fairman Studios, LLC

Your **bladder** is 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.

The **urethra** is the tube that carries urine out of your body. It is surrounded by **sphincter muscles** which 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're ready to urinate, 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 over urination. There are two main types of urinary incontinence:

- Symptoms of **Stress Urinary Incontinence (SUI)**:
 - o 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.
- Symptoms of **Urge Urinary Incontinence (UUI)**, or **overactive bladder (OAB)**:
 - o There is a sudden, uncontrollable need to urinate. 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".

What is SUI?

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 with 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.

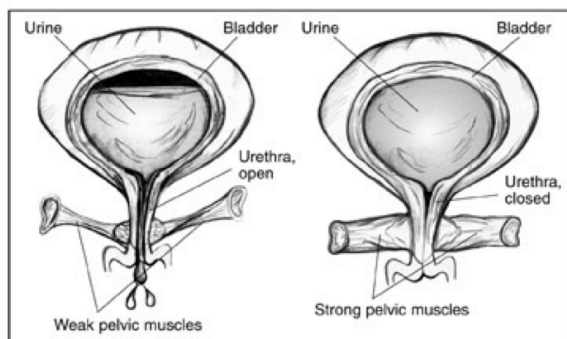
More people have SUI than you may think. About 1 in 3 women have this problem at some point in their lives. Men get SUI, but not that often. Men may have problems after surgery or because of an injury.

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.

What Causes SUI?

The most common risk factors for SUI are:

- Gender: females are more likely to get SUI
- Pregnancy and childbirth
- Nerve injuries to the lower back
- Pelvic or **prostate** surgery
- Chronic coughing
- Smoking (which leads to chronic coughing)
- Being overweight



Front view of bladder. Weak pelvic muscles allow urine leakage (left). Strong pelvic muscles keep the urethra closed (right).

National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

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'm afraid of urine leakage?
- Have I become uncomfortable with myself and 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 manage and treat SUI.

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.
- It is hereditary. My mom had it and so will I.
- I could have prevented it.
- There is nothing that can be done for it.

GET DIAGNOSED

How is SUI Diagnosed?

Though it's not easy to talk about, your health care provider should know if you feel your urinary leakage is a problem. Don't be embarrassed; providers are trained to talk about these matters. If they don't feel like they can help you, ask to be referred to a specialist. **Urologists** and Gynecologists are doctors who specialize in incontinence. Some will even have additional certification in **female pelvic medicine and reconstructive surgery (FPMRS)**.

It is 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. These records will give your provider clues about what's happening. Bring the diary with you the next time you see your provider. You and your health care provider will review it together.

There are a few things your provider will want to know, to help them make a diagnosis. At first they will ask about your urinary symptoms (When do you leak? How often? How much?). Your provider will 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 how strong your pelvic floor muscles and sphincter muscles are with a Kegel test.

TESTS

Your provider may want to confirm the diagnosis of SUI and rule out other reasons for your urinary leakage by ordering some tests for you. You may be referred to a specialist for these tests. Tests include:

- A **urinalysis** or urine sample which tests for a **urinary tract infection** or blood in the urine.
- A **bladder scan** after urinating. This shows how much urine stays in your bladder after you urinate.
- **Cystoscopy** uses a narrow tube with a tiny camera to see into the bladder to rule out more serious **urinary tract** problems.
- **Urodynamic studies** (UDS) are done to test 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.

GET TREATED

Treating Stress Urinary Incontinence

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 will work best for you.

LIFESTYLE CHANGES, EXERCISE AND PRODUCTS

- **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 can reduce leaks. Bladder training, or using a schedule for bathroom visits, may also help.

- **Pelvic Floor Muscle Exercises:** Also known as **Kegels**. Daily Kegels are proven to strengthen your pelvic floor, which supports the bladder and other organs. By exercising these muscles (consciously contracting and releasing pelvic floor muscles daily) you will make them stronger to prevent urine loss. It's important to do these exercises correctly and often.
- **Products:** 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 to be a major problem in your life.

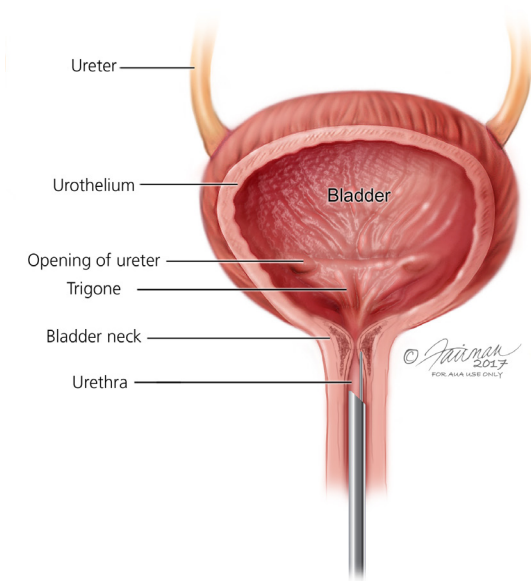
- **Medical Devices for Women:** If your pelvic floor muscles are weak and you are female, a device may be inserted to manage SUI symptoms. Examples are vaginal devices, **urethral plugs**, and **pessaries**. A vaginal device adds support to the urethra through the vagina, called a sling. A urethral plug blocks the urethra. There are no approved urethral plugs available in the U.S. A vaginal pessary is a firm yet flexible device that is inserted to reposition and support the urethra and/or uterus. They can be prescription or bought over-the-counter, and fitted by your health care provider.
- **Medical Device for Men:** Men may be offered a penile clamp/clip to prevent SUI leaks. These external clamps may be used to restrict the flow of urine from the penis.
- **Drugs:** At this time there are no drugs approved in the U.S. 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 TREATMENT OPTIONS

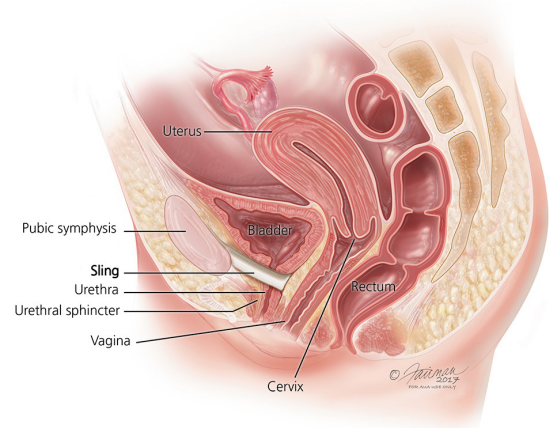
Choosing to have surgery is very personal. If surgery is suggested, there are many options. It helps to learn as much as you can before you decide. You can work with a Urologist or Gynecologist with experience in SUI surgery. FPMRS are certified in SUI and other pelvic surgery. Learn the risks and benefits, and what to expect during and after surgery.

Injections and Surgical options include:

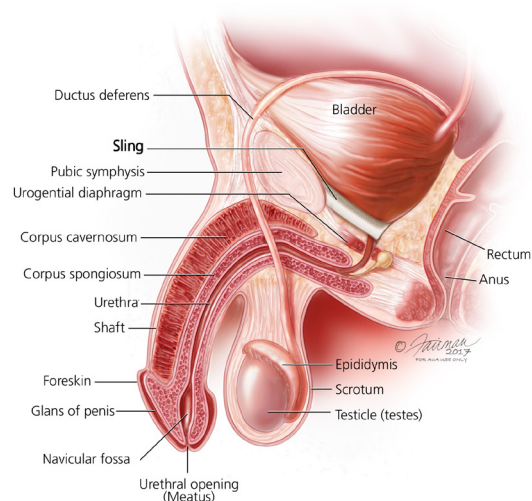
- **Urethral Injections/ Bulking Agents:** Urethral injections are used to “bulk up” the urethra. “Bulking agents” are injected into the urethral sphincter to improve the way the sphincter closes.



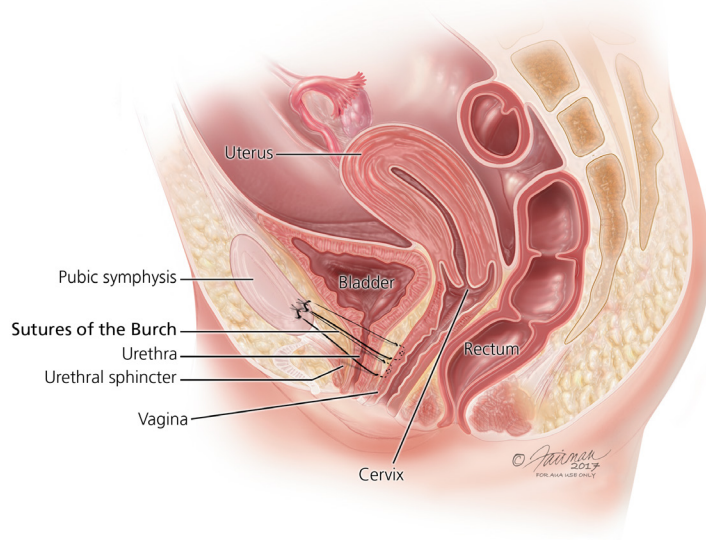
- **Sling (for Women):** The most common surgery for SUI in women is “sling” surgery. For this, a small strip of material (a sling) is placed under your urethra and stops it from moving downward during activities. It acts as a hammock to support the urethra and the neck of the bladder. Many sling techniques have been developed. The **mid-urethral sling** is the most common type of surgery to correct SUI. The sling is a narrow strip of synthetic mesh. It is placed under the urethra. There are a lot of techniques used, such as retropubic, transobturator and single-incision. The differences between these are how the mesh material is placed under the urethra. The **traditional sling (autologous)** is when a strip of your own tissue is taken from the lower abdomen or thigh and used as a sling. The ends of the sling are stitched in place through an incision in the abdomen.



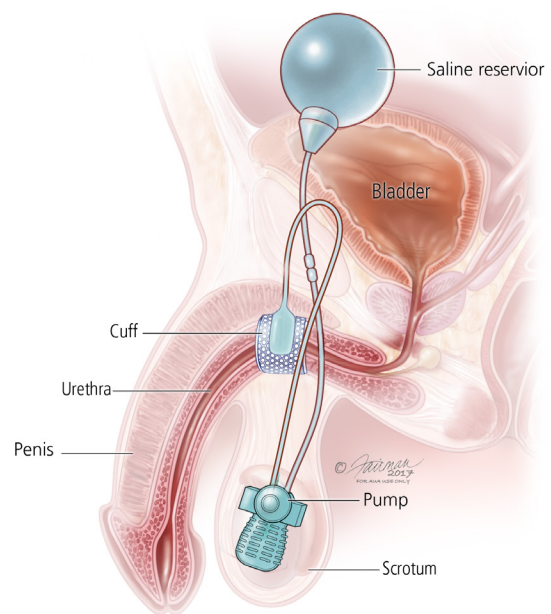
- **Sling (for Men):** A sling may also be used to treat men with mild SUI. The sling acts as a hammock to lift or support the urethra and sphincter muscles of the pelvic floor and bladder neck. Often, slings for men are made of surgical mesh. The surgical incision to place the sling is between the **scrotum** and rectum. A sling may not be good for men who have had radiation therapy to the prostate or urethra, or men with severe **incontinence**.



- **Bladder Neck Suspension:** It is also called Retropubic Suspension, Colposuspension, or Burch Suspension and is not as common as sling surgery. In this surgery, sutures are placed in the tissue along the side of the bladder neck and urethra and attached to a ligament along the pubic bone. This supports the urethra and sphincter muscles to stop them from moving downward and accidentally opening. There are certain risks with this surgery. Talk to your doctor about the risks and make sure this is the right choice for you.



- **Artificial Sphincter (for Men):** The most effective treatment for male SUI is to implant an artificial sphincter device. This surgery puts a device with three parts into your body: (1) a fluid-filled cuff (the artificial sphincter) attached around your urethra; (2) a fluid-filled, pressure-regulating balloon, inserted in your belly; (3) a pump you control, inserted in your scrotum. When you use the pump, the fluid in the balloon moves out of the cuff of the artificial sphincter allowing the urine to flow. The cuff slowly refills with fluid and closes the urethra to prevent leaks.



AFTER TREATMENT

The goal of any treatment for incontinence is to improve your quality of life. Surgical treatments usually work, especially when combined with lifestyle changes. In most cases, great improvements and even the cure of all leaks are possible for people who choose SUI surgery.

Take time to allow yourself to heal after surgery. Over time, the medical devices may need adjustments.

Stay in touch with your surgeon about follow-up care. Often, you will be asked for a follow-up visit. You may meet with your provider between 6 weeks and 6 months after surgery. Your bladder may also be tested to see how well it's releasing urine and if urine remains. If you still experience SUI symptoms or have any pain, let your provider know.

PREVENTING FUTURE PROBLEMS

One of the best ways to prevent SUI is to keep doing Kegel exercises. You should also try to keep your pelvic muscles strong. Throughout and after treatment, think about how much fluid you drink and make plans to urinate regularly. Since weight gain or activities that strain your belly and pelvis can harm surgical repair over time, try to maintain a healthy weight and limit strenuous activities.

GLOSSARY

BLADDER

The hollow balloon-shaped organ where urine is stored before it moves through the urethra. The sphincter muscles keep urine in the bladder until you're ready to urinate.

BLADDER DIARY

A way to record and track how much and how often you drink fluids, plus when you have leaks.

BLADDER SCAN

A type of ultrasound: It measures the amount of urine in the bladder using sound waves.

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.

FEMALE PELVIC MEDICINE AND RECONSTRUCTIVE SURGEONS (FPMRS)

A physician in Urology or Obstetrics and Gynecology who is trained and certified to provide care to women with complex benign pelvic problems.

INCONTINENCE

The loss of bladder or bowel control; the accidental loss of urine or feces.

KEGEL EXERCISES

Repetitive active exercises of the pelvic muscles. Exercising these muscles will improve urinary control.

MEDICAL HISTORY

Information you share with your provider about your past and present health, symptoms, diet, past surgeries and family history. With your physical exam, your complete medical history will help your provider determine a treatment plan or suggest other tests.

MIDURETHRAL SLING

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.

OVERACTIVE BLADDER (OAB)

A condition that causes strong sudden urges to urinate that are difficult to ignore. This may cause an unexpected loss of urine, frequent trips to the bathroom and getting up more than once a night to go to the bathroom.

PELVIC FLOOR MUSCLES

The hammock or sling of muscles in the pelvic floor that supports the pelvic organs (bladder, uterus and rectum).

PROSTATE

A walnut -shaped gland in men. It surrounds the urethra at the neck of the bladder. The prostate makes hormones and fluid for semen.

RECTUM

The lower part of the large intestine, ending in the anal opening.

SCROTUM

This is part of the male sex organs. It is a small sac that holds and protects the testicles, blood vessels and part of the spermatic cord. It is found below and behind the penis.

SPHINCTER MUSCLE

A muscle that surrounds the opening of an organ that opens and closes to let fluid or other matter pass into or out of an organ. Sphincter muscles keep the urethra closed until it is time to urinate.

STRESS URINARY INCONTINENCE (SUI)

An unexpected loss of urine caused by sneezing, coughing, laughing or exercise.

TRADITIONAL OR AUTOLOGOUS SLING

A strip of your own tissue is taken from the lower abdomen or thigh and used as a sling.

URETHRA

A thin tube that carries urine from the bladder out of the body. In men, it also carries semen, and it exists through the end of the penis.

URETHRAL PLUGS

Devices that are inserted into the urethra to help stop the urethra for fewer leaks. Plugs are not approved for use in the U.S.

URGE URINARY INCONTINENCE (UII)

An unexpected loss of urine following a strong, sudden need to urinate that is hard to control.

URINALYSIS

A test of a urine sample. It can show many problems of the urinary and other body systems. The sample is reviewed for physical and chemical signs of problems (under a microscope).

URINARY INCONTINENCE

A condition in which a person is unable to hold urine and prevent it from leaking.

URINARY TRACT

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

URINARY TRACT INFECTIONS (UTI)

An illness caused by harmful bacteria, viruses or yeast growing in the urinary tract.

URINE

Liquid waste filtered from the blood by the kidneys, stored in the bladder and removed through the urethra by urinating (voiding).

URODYNAMIC

A study that shows how well the bladder and urethra are storing and releasing urine.

UROLOGIST

A doctor who specializes in the study, diagnosis and treatment of urinary tract problems.

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER WHEN BEING DIAGNOSED:

- ☐ What is causing my urine leakage problem?
- ☐ Do you think that I have SUI?
- ☐ What have my test results showed?

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER ABOUT NON-SURGICAL TREATMENT:

- ☐ What are my treatment choices, other than surgery?
- ☐ Are there any risks to vaginal inserts?
- ☐ Do you recommend one option for me over another?
- ☐ Will non-surgical treatment be enough for me?

QUESTIONS TO ASK ABOUT SURGERY:

Surgery Choices

- ☐ What are my surgery choices?
- ☐ What surgery do you recommend for me and why?
- ☐ How likely is each option going to cure or improve my leaks?
- ☐ What are the risks of sling surgery?
- ☐ How long will this treatment last?
- ☐ For slings: what type of sling material is the best choice for me and why?
- ☐ Is this surgery covered by my insurance?
- ☐ How many of these surgeries have you done, and how many do you perform yearly?
- ☐ What happens if I don't do this surgery now?

Pre-Surgery

- ☐ Is any testing needed before surgery?
- ☐ Can you explain the test results to me?
- ☐ What kind of anesthesia will I need for this surgery?
- ☐ Should I get a second opinion? Why or why not?

Post-Surgery

- ☐ How will I feel right after my surgery? In the first week? From then on?
- ☐ What is the recovery time?
- ☐ Will I be limited in any way and for how long? Can I drive?
- ☐ When can I go back to work?
- ☐ What can I do to improve my quality of life now?

Notes

ABOUT THE UROLOGY CARE FOUNDATION

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**. Go to **UrologyHealth.org/FindAUrologist** to find a doctor near you.

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. 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.

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