

Surgical Mesh for Stress Urinary Incontinence (also known as Sling Surgery) for Providers

The Urology Care Foundation and the American Urological Association (AUA) are aware that female patients may be concerned about the use of surgical mesh to treat SUI. The U.S. Food and Drug Administration (FDA) had issued safety statements on the use of mesh in other surgeries, like hernias and pelvic organ prolapse (POP). The same concerns are not relevant for SUI. Surgical mesh “sling” surgery continues to be a successful standard treatment for SUI.

SUI – WHAT EVERY PROVIDER NEEDS TO KNOW

Stress Urinary Incontinence (SUI) is urine leakage during activities that put pressure on the abdomen, such as with sneezing, coughing, laughing, exercise, lifting, bending and even changing positions.

SUI is a very common condition – 1 out of 3 women have SUI.

- Less than half of women who have urinary incontinence have discussed their symptoms with their healthcare provider.
- Any amount of leakage of urine is abnormal.
- Untreated, SUI can significantly impact a person’s quality of life.
- Women have both non-surgical and surgical options to treat SUI.

For women choosing to undergo surgery, the sling procedure using synthetic polypropylene mesh is the most common surgery currently performed for SUI.

The AUA and other leading urological subspecialty societies support the use of mesh slings.

- The AUA advises doctors that synthetic mesh slings are a suitable treatment option for women with SUI, stating that “extensive data exist to support the use of synthetic polypropylene mesh suburethral slings for the treatment of female SUI.”
- The American Urogynecologic Society (AUGS) and the Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction (SUFU) clearly “support the use of the midurethral sling in the surgical management of stress urinary incontinence.”

SUI is different from Overactive Bladder (OAB) or Urgency Incontinence. OAB is leakage that occurs with a sudden urge to urinate. Many patients have Mixed Incontinence, which is a combination of both SUI and OAB.

SYMPTOMS

- Mild incontinence is light leakage due to vigorous activity such as exercise or from sneezing, laughing, coughing or lifting.
- Moderate/more severe incontinence is leakage associated with many different types of movement such as standing up, walking or bending over. Typically, patients use absorbent pads for protection from urine loss.

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RISK FACTORS FOR SUI:

- Age
- Caucasian or Hispanic race
- Obesity
- Smoking
- Chronic cough
- Pregnancy and childbirth
- Nerve injuries to the lower back
- Pelvic surgery

If untreated, SUI can have a significant impact on a patient's quality of life, affecting day-to-day activities, participation in sports and sexual activity. It often results in embarrassment and isolation. Consequently, the health care provider should discuss these issues with the patient to determine the severity of the problem.

It is also important to dispel some common myths associated with SUI. For example, SUI is not a normal part of aging.

The goal of any treatment for urine leakage is to improve the patient's quality of life. In most cases, great improvements or a cure is possible.

SUI TREATMENTS

Non-surgical strategies to help treat and manage SUI, include:

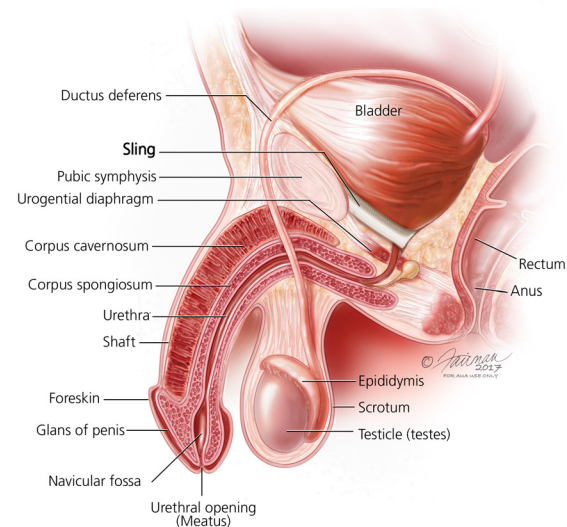
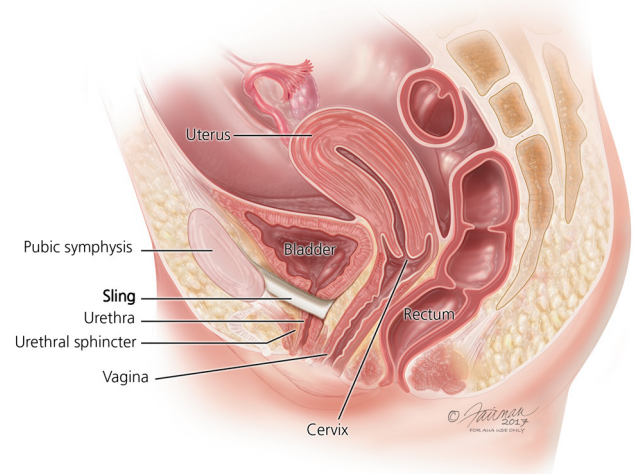
- pelvic floor muscle training
- lifestyle changes such as maintaining a healthy weight, smoking cessation and fluid/diet management
- absorbent pads
- urinary control devices such as pessaries or vaginal inserts

For some people, these options may not be enough, and they may choose surgery. Current surgical options include:

- sling surgery (most often with a midurethral synthetic sling)
- bladder neck suspension (also called retropubic suspension, Burch suspension or colposuspension)
- urethral bulking injection (helps the sphincter close off the urethra during times of increased pressure with possible repeated injections needed)

WHAT IS SURGICAL MESH?

Today, mesh slings are the most common surgery used to treat female SUI worldwide. During this surgery, a strip of material (a "sling") is placed under the bladder neck or urethra. The sling improves support of the bladder neck and/or urethra to help prevent urine leaks. Slings can be made from one's own tissue (autologous graft), donor tissue (typically skin or fascia) or surgical mesh. Synthetic surgical mesh is used to treat a number of health problems, most commonly hernias. Today, surgical mesh is made of Type I, macroporous, monofilament and non- carcinogenic polypropylene.



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SURGICAL MESH IS A STANDARD TREATMENT FOR SUI

In its SUI Guidelines (www.AUAnet.org/education/guidelines/incontinence.cfm), the AUA points to many scientific studies that support the use of mesh slings to treat SUI. Mesh sling surgery is less invasive than other surgical options, and patients tend to recover more quickly than with autologous or bladder neck surgeries. The AUA's guidelines continue to list mesh slings as a "standard" treatment for SUI.

There are two primary mesh slings – retropubic midurethral sling (RMUS) or transobturator midurethral sling (TMUS). Both are safe and effective in treating SUI. One type is not favored over the other.

All surgeries carry a risk of side effects. Side effects can result from sling surgery, no matter what type used. These side effects can include difficulty voiding, or even inability to void in rare cases. Pelvic pain and/or pain with intercourse can occur, rarely, following sling surgery, and in certain cases might require sling excision. The FDA found that other long-lasting side effects from treating SUI with mesh seem to be rare.

Exposure of the mesh into the vagina (mesh erosion) after surgery is a side effect that happens about 2% of the time and is unique to synthetic mesh. In most cases, exposure may be treated effectively in a fairly straightforward manner. However, some women with exposure do require further surgery.

A consultation with a urologist or female pelvic medicine reconstructive surgeon is encouraged to help inform your patient about the risks and benefits of each surgical option.

RECENT FDA SAFETY STATEMENTS ABOUT SURGICAL MESH

The Urology Care Foundation and the AUA aim to clarify the FDA's stated concerns about the use of transvaginal mesh to treat SUI versus pelvic organ prolapse (POP). POP is a serious health problem in which female pelvic organs - such as the uterus or bladder - fall into the patient's vagina. This can cause a vaginal bulge and often a sense of pressure or discomfort.

POP and SUI are different health issues with different surgical treatments. The surgeries that use mesh to treat each health issue have their own unique risks and benefits.

Mesh used for POP repair must help support the "fallen" or "dropped" female pelvic organs continuously. Mesh to treat SUI only supports the urethra during "stress", such as coughing, laughing or exercising. Mesh used to treat SUI is different. SUI mesh is smaller and is placed in a different location than mesh used to repair POP.

In 2011 and 2013, the FDA stated concerns about the use of transvaginal mesh to repair POP (<http://1.usa.gov/1HghbDi>). **In 2014 and 2016, the FDA indicated that mesh for SUI does not carry the same risk as transvaginal mesh for POP repair.** In 2016, the FDA put transvaginal mesh for POP in a higher risk category than mesh for SUI. The FDA's final rule can be found at: <http://1.usa.gov/1ne31wL>. The FDA clearly states that this rule does not apply to mesh for SUI.

Mesh slings used to treat SUI are recognized to be safe, and long-lasting side effects are rare. Mesh slings are a standard treatment for SUI.

IF A PATIENT HAS ALREADY HAD SURGERY WITH MESH TO TREAT SUI DO THEY NEED TO HAVE IT REMOVED?

Surgical mesh is designed to be a permanent implant. If a patient has had this surgery and is not having any side effects, there is no need to remove the mesh. Mesh removal could have its own side effects, including injury to tissues near the mesh or recurrent incontinence.

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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 health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more, visit the Urology Care Foundation's website, **UrologyHealth.org/UrologicConditions** or to go **UrologyHealth.org/FindAUrologist** to find a specialist near you.

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