A MONOGRAPH FROM THE UROLOGY CARE FOUNDATION

Stress Urinary Incontinence

Urology Care FOUNDATION™
The Official Foundation of the American Urological Association

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Stress Urinary Incontinence (SUI) Expert Panel (2011) (Update 2015)

Chair

Kathleen Kobashi, MD
Virginia Mason Medical Center

Participants

Kathryn L. Burgio, PhD
University of Alabama at Birmingham, Department of Medicine

E. Ann Gormley, MD
Dartmouth-Hitchcock Medical Center

Deborah J. Lightner, MD
Mayo Clinic

Elizabeth R. Mueller, MD
Assistant Professor, Department of Urology and OB/GYN, Loyola

Diane Newman,
MSN, ANP-BC, FAAN, BCB-PMD
University of Pennsylvania Medical Center

Harriette Miles Scarpero, MD
St. Thomas Hospital

Update 2015

Benjamin M. Brucker , MD
New York University Langone Medical Center
Department of Urology and Obstetrics & Gynecology

Victor W. Nitti, MD
New York University Langone Medical Center
Department of Urology and Obstetrics & Gynecology

Foreword

One of every three women will experience Stress Urinary Incontinence (SUI) at some point during their lives. Too many of them "live with" the condition, too embarrassed to seek help or thinking that it is a "normal" part of aging and having children. No matter what their age, there are treatments that can help.

In an effort to eliminate this discomfort and provide facts about SUI, the Urology Care Foundation assembled an independent panel of urologists and health care professionals who treat the condition of SUI in the spring of 2011. These individuals volunteered to review scientific information and clinical guidelines and share their professional experiences concerning SUI as part of the Urology Care Foundation's Urology for Women Initiative. The information was further updated in early 2015.

It was paramount that an authoritative document about this condition be created to achieve three principal goals:

1) to enlighten the general public about Stress Urinary Incontinence, 2) to educate health care professionals so they can improve the quality of care provided to patients, and 3) to provide millions of women with knowledge that empowers them to make lifestyle changes to decrease their risk of SUI and to understand the reality that they are not alone if they have SUI.

Additionally, women who seek medical advice should feel comfortable and equipped to discuss their condition, as well as management and treatment options. This effort is a major step toward removing the unnecessary stigma associated with SUI and to better serve our patients.

It's time to talk about Stress Urinary Incontinence!

Kathleen Kobashi, MD

Virginia Mason Medical Center
Chair, Urology Care Foundation Stress Urinary Incontinence Expert Panel (2011)

Victor W. Nitti, MD

New York University Langone Medical Center (2015)

Introduction

This monograph has been developed to educate health care providers and women about a form of urinary incontinence (the involuntary loss of urine) known as Stress Urinary Incontinence (SUI). The subject of incontinence can be embarrassing for people to talk about and therefore SUI is still not openly and publicly discussed; not even among some health care providers. We intend for the information presented here to encourage open discussions and understanding of the condition, with more women seeking information and treatment.

We expect this information will stimulate women to share their experiences and what they have learned about SUI to inform each other and help reduce the stigma associated with SUI. Lastly, please visit www.UrologyHealth.org to find information on other forms of incontinence that also occur in men and women such as incontinence caused by overactive bladder (OAB) and neurogenic bladder.

Defining Stress Urinary Incontinence

Definition

Stress Urinary Incontinence (SUI) is a common medical condition. It involves the involuntary loss of urine that occurs when physical forces on the bladder are increased during physical movement of the body. Examples of this include but are not limited to loss of urine with coughing, sneezing, exercising, or picking up heavy objects.

SUI is different from urinary incontinence that can occur from overactive bladder (OAB), another common condition. The leakage, known as urgency incontinence, occurs with a sudden strong desire to urinate that can lead to loss of urine at unexpected times.

Symptoms of SUI

Women can experience a spectrum in the amount of urinary leakage ranging from loss of only drops to tablespoons or more. The degree of SUI a woman has is very subjective, and personal to her. However, this level of incontinence is generally considered to be mild in women who only experience light leakage during rigorous activity such as playing sports or exercising, or from sneezing, laughing, coughing, or lifting. Conversely, larger volumes of urine loss or incontinence that occur with even low impact movements such as standing up, walking, or bending over may be categorized as moderate or severe SUI.

Risk Factors for SUI

SUI is more common among older women but is not caused simply by aging since it occurs in younger, active, healthy women as well. Caucasian or Hispanic race, being overweight or obese, smoking, and chronic cough (which places frequent strain on the pelvic floor muscles that can, in turn, cause bladder leakage) are risk factors for development of SUI. Pregnancy and childbirth, especially by vaginal delivery, increase the chances of SUI because pelvic floor muscles may stretch, weaken, or be damaged resulting in loss of bladder and urethral support and subsequent bladder leakage. Nerve injuries to the lower back and pelvic surgery are also potential risk factors for development of SUI because they weaken the pelvic floor muscles.

Prevalence of SUI

Estimates of the number of women experiencing SUI vary widely because there is no one definition of the condition (Luber, 2004). However, urinary leakage is a common medical condition and while there is a wide variation in its reported prevalence, most studies report that 25-45% of women have experienced some degree of incontinence in the past year and approximately 2/3 will have SUI or SUI plus urgency incontinence. (Milsom, Altman, Cartwright, *et al.* 2013). This publication is for those women. About one-third of women age 30 to age 60, and one-third of women under the age of 30 experience urinary incontinence (Hunsakaar, Arnold, Burgio, *et al.* 2000). For women over the age of 65 more than half report some kind of urinary leakage (Gorina, Schappert, Bercovitz, *et al.* 2014).

Stigma of SUI

SUI can interfere with quality of life. It may affect day-to-day decisions about social activities. Women may be embarrassed about their bodies and hesitant to talk about urinary leakage to loved ones and friends. SUI can affect intimate relationships and may limit sexual interaction (Mallet, Bruebaker, Stoddard, *et al.* 2008). Any of these issues can result in feelings of isolation and hopelessness. But everyone has a different ability to tolerate urine leakage. Some women are only bothered by heavy or large amounts of leakage whereas others are bothered by any leakage. Women often manage SUI by using mini pads, menstrual pads, incontinence pads or adult diapers.

To know if SUI is a problem for her, a woman can ask herself: "Is SUI limiting my daily activities? Have I stopped playing sports? Have I stopped other recreational activities or changed my lifestyle in any way because I'm afraid of urine leakage? Have I become uncomfortable with myself and my body? Am I avoiding sex because I am worried that I may leak urine and be embarrassed?"

Women do not have to manage SUI by themselves, and they do not have to resign themselves to living the rest of their life with SUI if they do not wish to. Treatment is available for this condition.

Myths about SUI

There are many myths about SUI. Examples of misinformation include: "SUI is a normal part of being a woman." "If you get treatment early, you'll prevent it from getting worse." "SUI is a normal, inevitable part of aging – it only happens to older, not younger women." "Surgery is the only way to treat SUI." "SUI can't be treated." "SUI surgery is not permanent and will only last a few years." "The FDA recalled mesh slings used to treat SUI" "The longer I wait, the less successful surgery will be so I should have surgery right away." "Urine leakage happens because of a dropped bladder." "I could have prevented it with pelvic exercises." "My mother had SUI, so I have it – it's hereditary."

What a Woman Can Do if She Thinks She Has SUI

Women can educate themselves about SUI by researching credible online resources or by talking with their primary health care provider, who may perform a basic evaluation or refer them to a specialist (see Section V for information and resources). Women can also keep a bladder diary to record their leakage episodes, a tool that can be helpful for their providers.

Seeking Professional Help

A woman can seek advice from her health care provider about her incontinence. This is important because SUI is not something all providers are aware of, and that means it sometimes goes undiagnosed and untreated. If her provider is trained or experienced with treating SUI, they may be able to perform some basic tests and suggest lifestyle changes to help reduce urinary leakage. However, since these basic tests do not confirm the presence of SUI, they may refer a woman to an incontinence specialist.

Seeking help takes time and resources out of a woman's life, and that is not always an easy thing to do. She may be taking care of her family or busy with work while managing her symptoms, and these demands can make it difficult to balance her own health and emotional needs with those of others. This may understandably delay her seeking treatment. Delaying treatment does not make it less effective. However, everyone deserves a life free of the embarrassment and worries associated with SUI. Women exhibiting symptoms, as with any condition, should seek medical assistance as soon as they can.

Getting the Dialogue Started:

How to Begin

Some women feel that the symptoms associated with SUI, and incontinence in general, are shameful or too embarrassing to talk about with their health care provider. If that is the case for a woman, she may wish to bring it up as soon as possible in the visit with her provider or to the provider's nurse. This may be easier than waiting until the end of the visit when she may be more anxious bringing up the subject or have little time left for adequate discussion with health care provider. She might say, "I am having a bladder control problem (or leaking urine). Are you the right person for me to talk to?" If not, she can ask for a referral to a urinary incontinence specialist.

How is SUI Determined?

The Initial Evaluation

A woman's health care provider will want to be certain that the urine leakage is due to a problem with her urinary sphincter (a small "ring" of muscle that wraps around the urethra or urinary tube) or pelvic floor muscles and not a problem with her bladder. There are some basic ways to determine this including:

- Asking about her symptoms and when her leakage occurs.
- Conducting a physical exam, including a pelvic exam and assessment of the strength of her sphincter or pelvic floor muscles.
- Asking the woman to cough during an examination to see if urine leakage is seen.
- Doing a urinalysis to rule out infection.

A woman should ask her health care provider for feedback about the results and what they indicate. Basic tests can point to the likelihood of SUI but sometimes cannot confirm it for certain. If that is the case more extensive tests may be needed to make this determination. These tests do not necessarily confirm the presence of SUI, but are sufficient if a woman is considering conservative treatments such as non-surgical options or behavioral treatments.

Bladder Diary

The health care provider may ask a woman to keep a bladder diary to record her leakage episodes, a tool that can be helpful to her and her providers.

The SUI Evaluation

A woman may need to have a more thorough evaluation by a urinary incontinence specialist to be certain she has SUI, especially if surgery is being considered as a treatment strategy. Sometimes patients have symptoms that are more complex, and more advanced testing is needed. It is important to choose a specialist whose practice includes a focus on women and SUI and who is well-experienced with performing SUI surgeries.

The examination may include one or more of the following tests:

- Completing one or more validated questionnaires that ask about her lifestyle and medical history.
- Conducting a physical exam, including a pelvic exam and assessment of the strength of her pelvic floor muscles. The exam also includes an evaluation during coughing and/or bearing down. During a pelvic exam the examiner will also determine the presence of a bulge, which might represent pelvic organ prolapse. Prolapse includes anterior prolapse, often called a cystocele (when the wall between a woman's bladder and her vagina weakens and allows the bladder to droop into the vagina), apical or uterine prolapse (falling or sliding of the uterus from its normal position in the pelvic cavity into the vaginal canal) or posterior prolapse, often including an enterocele (the small bowel presses against and moves the upper wall of the vagina) or a rectocele (the rectum presses against and moves the back wall of the vagina, producing a bulge).
- Wearing a pad while exercising for a set amount of time. The weight of the pad is then measured after activity to see how much urine has been lost.
- Performing a stress cough test. This is done when a woman's bladder is comfortably full and the care provider looks at the urethra (the part of a women that connects the bladder to the outside) to see if there is leakage of urine when a women coughs.
- More advanced testing, called urodynamics may also be performed in certain cases. During this testing one can observe how the bladder holds urine and empties urine. Such testing can be as simple as measuring the force of urine flow (uroflowmetry) or how completely the bladder empties with a handheld bladder scanner (post void residual-PVR). In some cases more involved urodynamics may be used to measure the pressure in the bladder when it is filled with fluid (Cytometrogram-CMG) and to see exactly what happens when the bladder begins to leak urine. This more advanced testing requires a catheter to be placed in the woman's bladder.

Once these tests are completed, here are some questions to ask the provider:

- What is my urinary leakage problem?
- Do you think that I have SUI?
- If so, which of the tests showed this?

If she has SUI, a woman should be comfortable working with her specialist. Trust in her provider is important to getting the right management or treatment choices in a caring environment. She will know that she is in the right place if the specialist she chooses seems knowledgeable and offers many choices for treating SUI, as well as being sensitive to her needs and lifestyle. If this is not the case, she should feel free to seek another opinion.

Non-Surgical Management of SUI

Conservative Approaches

There are many ways to manage or treat SUI that can improve a woman's quality of life. Conservative, non-surgical approaches such as pelvic floor exercise or wearing incontinence pads to minimize embarrassing accidents are best for some women, but others may prefer surgery. The choice depends on a woman's needs, goals, and lifestyle but should be made after consulting a health care professional.

Behavioral treatments can be safe and effective ways to treat SUI. They improve bladder control by changing a woman's habits and teaching her new skills. They include pelvic floor muscle training, daily exercises, lifestyle changes, and urinary control devices.

Questions to ask the provider about conservative non-surgical treatment:

- What are the conservative, non-surgical options for my type of bladder problem?
- Which of those do you recommend for me and why?
- What are the risks?

Pelvic Floor Muscle Training

Pelvic floor muscle training strengthens the pelvic floor muscles. These exercises, sometimes called "Kegels", contract and relax the muscles that are part of the pelvic floor. The pelvic floor is a "hammock" of muscles that holds the pelvic organs in place. Bladder control depends on muscles working together when the bladder is filling. The bladder muscle should be relaxed and the muscles around the urethra, the pelvic floor, should be tight. Exercise helps support the bladder and other organs such as the uterus, and control the outlet of urine.

The first step in pelvic floor muscle training is to locate the correct muscles. This is important because exercising the wrong muscles will not help with incontinence, and can actually make matters worse.

It may not be as simple as just voluntarily stopping the stream of urine or tightening the bottom muscles so it is important to find the right muscles. Once a woman learns which muscles they are, she will be able to exercise them and make them stronger to help reduce or eliminate stress urine loss.

There are several ways for a woman to find the pelvic floor muscle – she should feel a slight pulling in the rectum and vagina. Every person is unique, and different techniques work for different people.

Technique #1 – Squeezing muscles of the anus as to prevent passing gas will help to locate the pelvic floor muscles. A woman should feel a "pulling" sensation at the anus when using this technique.

Technique #2 – A woman can lie down and insert a finger into her vagina, trying to squeeze the muscles around her finger with her vaginal muscles. She should be able to feel the sensation in her vagina, and feel the pressure on her finger. If she cannot detect any movement with one finger, two fingers can be used.

Pelvic Floor Muscle Exercises (PFME) are not harmful, and should be both easy and relaxing for patients. Pelvic floor muscle support usually improves within six weeks after starting exercises, and three months should bring more significant results.

Vaginal Palpation

A common way to teach pelvic floor muscle control is for the health care provider to do a pelvic (vaginal or rectal examination) to demonstrate where the muscles are. The provider will ask her to contract her muscles a few times so that he or she can help her find the right muscles and learn to exercise them correctly in her daily life. It is important to be sure that she is not using the wrong muscles.

Women who have difficulty identifying pelvic floor muscles and/or doing exercises properly can be referred to a physical therapist that specializes in pelvic floor rehabilitation.

Biofeedback

Biofeedback is another method of teaching pelvic floor muscle control that uses special instruments that measure what the muscles are doing. The goal is to control a woman's urine leakage with active practicing of the muscle so the equipment is no longer needed. Biofeedback about her muscle function helps her to prevent urine leakage. Studies show that women achieve similar rates of continence using pelvic floor muscle training with or without biofeedback.

Electrical Stimulation

Electrical stimulation is another way to teach women how to locate and control pelvic floor muscles. Usually a small probe is put in the vagina and used to contract the muscles electrically. This helps her find the right muscles and know how it feels when they are squeezing. Sometimes she will be given a portable electrical stimulation unit to take home to help her exercise each day.

After a woman has learned how to control the right muscles, she will be given recommendations for daily practice and exercise to make the muscles stronger. Daily exercises help make the muscles stronger, so they will work better when you need to use them. Daily practice in contracting and relaxing your muscles improves muscle control. The goal of pelvic floor muscle training is to be able to contract the muscles quickly and tightly just before and during physical activities like coughing, sneezing, and lifting. If done with enough strength, this keeps the bladder outlet closed to reduce or even prevent urine leakage.

Lifestyle Changes

Maintain Healthy Weight

Weight can affect SUI because it is related to bladder control. It is thought that this is due to having more pressure on the bladder and on the pelvic floor. Overweight and obese women are more prone to SUI. Therefore, it is important to maintain a healthy weight. Anecdotally, many women report that their incontinence gets worse when they gain weight and better when they lose weight. This doesn't mean that everyone has to reach their ideal weight but maintaining a healthy weight is an improvement.

Fluid and Diet Management

This option consists of increasing or reducing daily fluid intake. Incontinent patients may need to reduce the amount of caffeine or other dietary irritants (e.g. acidic fruit juices, colas, coffee and tea), while at the same time increase water intake to produce an adequate amount of non-irritating, non-concentrated urine.

A recommended water intake is six to eight glasses per day. Reducing or eliminating certain foods (e.g. chocolate, citrus fruits) may also help. Not all patients are bothered by certain foods or drinks. The only way to know if diet is a factor is to eliminate possible irritants and see if continence is improved.

Maintain Good Overall Health

Taking good care of a woman's overall health will help her to reduce episodes of SUI. This means maintaining an adequate fluid intake, not too little and not too much. Keeping bowel movements regular and avoiding constipation will also prevent incontinence.

Bladder Training / Bladder Diary

A diary is the starting point for bladder training. Patients are instructed to record fluid intake, urination times, and when urinary accidents occur. The diary allows the patient and physician to see how stress incontinence occurs.

Smoking Cessation

Smoking cigarettes increases the likelihood that a woman will develop a chronic cough, which contributes to SUI, in addition to its other health risks. This is one of the single most important things a woman can do for her health. Treating chronic cough helps reduce SUI because it reduces pressure applied to the pelvic floor muscles.

Absorbent Pads

Treatments for SUI are not perfect. If a woman's SUI cannot be resolved with conservative approaches such as pelvic floor muscle training and daily practice, lifestyle changes, urinary control devices, or surgery, it is recognized that she may need to rely on menstrual or incontinence pads from time to time. Pads may also be an appropriate strategy for women who are not bothered by their urinary leakage or who do not consider it to be a major problem in their life.

Urinary Control Devices or Inserts

Women who leak urine during high-impact exercises and other physical activities may benefit from a device inserted into the vagina that provides pelvic support.

- **Tampons** have been used successfully by some women to prevent SUI during exercise but have not been researched to demonstrate effectiveness.
- **Occlusive devices** are urethral inserts and patches (inserted into the urethra) that absorb the pressure inside the pelvis and reduce urinary leakage at times of high activity. Like a tampon, they are removed by pulling on an attached string. They can feel irritating at first, but most women adjust to them like one would adjust to contact lenses. They should not be worn all the time because they can irritate the urethra and lead to blood in the urine (hematuria) and increased risk of urinary tract infections. They are especially useful for reducing urinary leakage during physical exertion such as running, repeated lifting, or playing tennis.
- **Incontinence pessary** is a device that is inserted into the vagina and helps keep the urethra closed by external compression. There are different types of pessaries. The traditional incontinence pessary is a small silicone device that is inserted into the vagina and held in place by the pelvic floor musculature. It is used to support the base of the bladder. Traditional pessaries come in many shapes and sizes and must be fitted individually by a specialist. When fitted properly, they are not noticeable and the woman can go about her daily activities without discomfort. Some women wear them 24 hours a day and visit their provider periodically to have them removed, checked, and replaced. Other women wear them during the day and remove them at night. They must be removed before having sexual intercourse but they do not interfere with performing pelvic floor muscle exercises. Pessaries are safe, but they have a small risk of irritation or infection. So women who chose to use a pessary should be scheduled to visit their provider to have it checked and refitted as needed.
- **Over-the-counter, disposable pessary –** Recently, a single use, disposable pessary was approved by the U.S. Food and Drug Administration (FDA) is available over-the-counter without a prescription. This device is inserted by the woman herself, using an applicator similar to a tampon. Once inserted into the vagina, the core and cover of the device provide tension-free mid urethral support. It is designed for the temporary, situational management of stress SUI. This device is designed for a maximum of 8 hours of use in a 24-hour period. The device is removed from the vagina using a pull string. After use, it is discarded.

Women should discuss the benefits and risks and consider issues such as convenience of using these devices versus possible irritation or infection that the devices can cause.

Medications

There are no currently approved drugs in the United States to treat SUI. Sometimes if a woman has SUI and OAB a doctor may prescribe OAB medication (antimuscarinic or beta-3 agonist) to treat the overactive bladder and try to improve overall continence. These medications, however, do not treat SUI.

Surgical Management of SUI

Surgery is an important treatment option for SUI because it can reduce urinary leakage symptoms most definitively and improve quality of life (Tennstedt, Litman, Zimmern, *et al.* 2008). It is a reasonable choice, particularly if more conservative non-surgical approaches fail, or if a woman does not want to or is unable to use them.

Before going ahead with surgery, however, the patient and her specialist should both be confident that her leakage is due to SUI, is bothering her, and is significantly affecting her daily activities.

Surgery is not easily reversible, and depending on the type of surgery, is not always a long-lasting solution. Surgery also carries some level of risk. The specialist will require that her tests show clear physical signs of SUI before proceeding with any surgery.

Types of Surgery

The most current recommended surgical approaches for SUI are urethral bulking, bladder neck suspension, and slings.

- **Urethral bulking** is a standard therapy for treating SUI. The bulking materials can be either biologic or synthetic. These are injected into the layers of the urethra to "bulk" it up and help tighten up the valve muscle. The procedure is generally performed through a small telescope (called a "cystoscope") that is passed through the urethra.

  Bulking is most commonly performed in the office setting under local anesthesia. It is less invasive but also less effective than other surgical options. This procedure is typically not used for younger women since it does not last long and must be repeated multiple times over the course of her life.

- **Colposuspension** is another common surgery for SUI. It is also called a "retropubic suspension" and refers to a procedure that involves making an incision on the lower abdomen and suspending the neck of the bladder to a point behind ("retro") the pubic bone ("pubic"). This is a more invasive surgical procedure that has become less popular with the advent of the less invasive sling procedures.

- **Slings** are the most commonly used surgery for SUI. They are mainly a vaginal procedure. Slings are strips of material placed beneath the bladder neck or urethra to support and close the opening when abdominal stressors cause pressure on the pelvic floor. These slings can be made out of a variety of biologic and synthetic materials, including a woman's biologic tissue. Today, synthetic polypropylene mesh slings are the most common operation preformed for SUI worldwide.

  The material chosen to serve as a hammock, or a sling, is placed beneath the urethra to give support and increase bladder outlet resistance during activity, making it more difficult for urine to leak. One advantage of synthetic slings is a faster recovery time for patients.

Making the Decision about Surgery

Making the decision about surgery is a personal matter involving an interactive process between a woman and her health care provider. Therefore, it is important to have a full exchange and discussion about her goals and expectations, whether the type of treatment she is considering can meet those expectations, and what she can expect during and after surgery. She should feel free to express what she wants and negotiate with her health care provider about what is best for her. It is especially important to know whether SUI surgery will resolve her urinary leakage or whether surgery will worsen or cause other complications (see below for questions to ask a specialist about surgery).

Postponing Surgery

A woman can wait to have SUI surgery without causing any harm to herself. Unlike some other medical conditions, there is no evidence that delaying surgery for SUI makes the outcome worse.

Mesh in Pelvic Floor Surgery

In 2008 and 2011 the FDA released communications on the safety and efficacy concerning the placement of surgical mesh for pelvic organ prolapse. Media attention and publicly advertised personal injury lawyers' ad campaigns have led to confusion, fear, and negative perception regarding the use of synthetic material for treatment of SUI. The medical community generally has not shared the negative perception of synthetic mid urethral slings. (*Position Statement on Mesh Midurethral Sling for Stress Urinary Incontinence,* AUGS SUFU)

Organizations like the AUA (*AUA Position Statement of the Use of Vaginal Mesh for the Surgical Treatment of Stress Urinary Incontinence*, *Revised October 2013,* https://www.auanet.org/about/vaginal-mesh-for-sui.cfm) have reviewed available studies and find that there is support for the use of synthetic materials to treat SUI with minimal morbidity compared to alternative surgeries. There are advantages regarding surgical recovery, need for hospitalization, and reduced problems with urination. However, there are certain mesh-specific complications that can occur but in most patients the risks are considered acceptably low. These mesh-specific complications include prolonged pain (1%), vaginal exposure of the mesh (1-2%) and erosion into the urinary tract (urethra or bladder) (< 0.01%).

It is a good idea that if you elect to have your SUI treated with a synthetic sling your surgeon should

- have undergone rigorous training in anatomy and surgery in the pelvis.
- be properly trained in specific mesh sling placement techniques.
- be able to recognize and manage complications that may be associated with synthetic mesh sling placement.

Questions to Discuss about Surgery

If a woman's specialist is recommending surgery, the following questions may help to guide the discussion with her specialist:

Surgical Options:

- What are my surgical options?
- What is the likelihood of cure or improvement for each option?
- What are the risks?
- What procedure or operation do you recommend for me and why?
- How long will this treatment last?
- For slings: what type of sling material is the best choice for me and why?
- Is this procedure covered by my insurance?
- How many of these procedures have you done, and how many do you perform yearly?
- What happens if I don't do this procedure now?

Pre-surgery:

- Is any preoperative testing needed?
- How will you use the information in my case?
- What kind of anesthesia will I need for this procedure?
- Should I get a second opinion? Why or why not?

Post-surgery:

- What can I expect immediately after my surgery? In the first week? Ongoing?
- What is the recovery time?
- Will I be limited in any way and for how long? Can I drive?
- Can I go back to work?

SUI Resources

Health Care Providers

A variety of health care provides can handle basic questions and evaluation for possible SUI.

Primary Care Practitioners are physicians who provide both the first contact for a person with an undiagnosed health concern as well as continuing care of varied medical conditions. If a primary care provider is knowledgeable and comfortable talking about the subject of incontinence, they will discuss options. However, most will refer women to a specialist for evaluation and treatment, especially if they have already tried non-surgical approaches such as behavioral modification and found them unsuccessful.

Nurse Practitioners (NP) are Advanced Practice Registered Nurses who have completed graduate-level education (either a Master's or a Doctoral degree). There are some NPs who specialize in pelvic floor disorders such as SUI.

Physician Assistants (PA) are health care professionals licensed to practice medicine with supervision of a licensed physician.

Nurse Practitioners and Physician Assistants are often found in primary care practices, health maintenance organizations, clinics, and women's health centers. Many can diagnose and treat SUI non-surgically, and will be able to counsel and educate women on non-surgical treatment options for SUI including pelvic floor muscle exercises and lifestyle changes. They will refer women to a specialist for more extensive evaluation or consideration for an operation. There are many NPs and PAs who specialize in pelvic floor disorders such as SUI.

Internists are physicians who have completed a residency in internal medicine. They may not typically be primary care providers.

If a woman needs more extensive evaluation, it is important to find a specialist who has been specially trained to treat women with stress incontinence. Specialists can be trained from the field of urology or gynecology. That person should be well-experienced with performing incontinence surgeries.

Urologists are surgeons who evaluate and treat conditions of the urinary tract. Most urologists are very knowledgeable about incontinence, however not all of them treat SUI. A woman should make certain that the provider's practice includes a focus on treating women, that the provider is experienced with performing incontinence procedures, and that the provider informs a woman about all of her treatment options.

Gynecologists are physicians, most of whom are knowledgeable about incontinence. However, like urologists, not all of them treat SUI. Many do not perform surgery for this condition.

Female Pelvic Medicine and Reconstructive Surgery (FPMRS) specialists are urologists or gynecologists who have specialized training in female pelvic medicine and reconstructive surgery and have passed a board certification examination in FPMRS. Fellowship trained urologists or gynecologists have combined expertise in treating women's reproductive systems with treatment of the urinary tract, especially urinary incontinence and various forms of pelvic organ prolapse.

Geriatricians are physicians who treat older patients, and many are knowledgeable and able to evaluate and treat urinary incontinence.

Physical Therapists are health care professionals licensed to provide physical therapy and some have received training in pelvic floor disorders.

Online Resources

Urology Care Foundation

(www.UrologyHealth.org)

The Urology Care Foundation is committed to advancing urologic research and education. We work with researchers, health care professionals, patients and caregivers to improve patients' lives. The Urology Care Foundation is the official foundation of the American Urological Association (AUA). Visit www.UrologyHealth.org/SUI for information on SUI and the It's Time to Talk About SUI campaign. Visit www.UrologyHealth.org/VaginalMeshforSUI for patient information about mesh sling surgery for SUI. Visit www.UrologyHealth.org/OAB for more information on Overactive Bladder.

American Urological Association

(www.AUAnet.org)

The American Urological Association is a premier urologic association, providing invaluable support to the urologic community.

National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC)

(www.kidney.niddk.nih.gov/kudiseases/pubs/uiwomen/)

The National Kidney and Urologic Diseases Information Clearinghouse is an information dissemination service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health (NIH).

American Urogynecologic Society (AUGS)

(www.VoicesForPFD.org)

The American Urogynecologic Society serves patients by raising public awareness about pelvic floor disorders, providing reliable information about effective treatments available and supporting the role specialists can play in women's health care planning.

National Association For Continence (NAFC)

(www.NAFC.org)

The National Association For Continence is a national, private, non-profit organization dedicated to improving the quality of life of people with incontinence, voiding dysfunction, and related pelvic floor disorders. NAFC's purpose is to be the leading source for public education and advocacy about the causes, prevention, diagnosis, treatments, and management alternatives for incontinence.

The Simon Foundation for Continence

(www.SimonFoundation.org)

The mission of the Simon Foundation is to bring the topic of incontinence out into the open, remove the stigma surrounding incontinence, and provide help and hope to people with incontinence, their families and the health professionals who provide their care.

Society of Urodynamics Female Pelvic Medicine and Urogenital Reconstruction (SUFU)

(www.sufuorg.com)

This subspecialty society is focused on research, training and education related to conditions that effect women such as urinary incontinence. This organization along with AUGS released a position statement on Mesh Midurethral Slings for Stress Urinary Incontinence (http://www.sufuorg.com/docs/news/AUGS-SUFU-MUS-Position-Statement-APPROVED-1-3-2014.aspx). This document is a good source of information for patients and health care providers confused by recent media by synthetic materials for slings.

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Patients and providers can visit **UrologyHealth.org/SUI** for information on SUI and the *It's Time to Talk About SUI* campaign.

To order copies of patient education materials about SUI, incontinence and other urologic conditions, visit **UrologyHealth.org/Order**.

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