MALE STRESS URINARY INCONTINENCE

Understanding its causes and evaluating treatment options

1-800-BLADDER
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Stress urinary incontinence (SUI) is the loss of urine from the bladder when physical stress is placed on it, for example, when coughing, laughing, lifting an object, or with just about any exertion. SUI most commonly occurs following a surgical procedure to remove a cancerous prostate. It can also occur after an endoscopic procedure to make the prostate smaller for an enlarged prostate. Damage and loss of function to the urinary sphincter is believed to be the cause of post-prostatectomy SUI.

What Causes SUI in Men?
Because the prostate gland wraps around the urethra, the tube that runs through the penis from the bladder, its natural structure causes many men undergoing a prostatectomy to experience post-surgery incontinence. Even nerve-sparing techniques can leave the tissue traumatized enough to induce temporary incontinence or even permanent problems with controlling urine. Controlling the bladder becomes a problem because the sphincter muscles may be too weakened to work reliably after surgery.

The urinary sphincter is a muscular valve that is located very close to the tip of the prostate, and it provides the mechanism that prevents loss of urine from the bladder. Normally the sphincter relaxes and opens when a person is urinating and closes when a person is not. When the strength of the sphincter muscle is compromised, urine may leak through the urethra. Leakage may be slight and occur only during pressure on the bladder, such as with a golf swing or a sneeze, or it may be so severe that it allows a steady stream of urine from the bladder to wet undergarments.

How Common is Male SUI?
It is not unusual for lack of bladder control to be a problem for the first few months to a year after a radical prostatectomy. In fact, studies have indicated that as many as 90% of men report leakage in the first few weeks following surgery after removal
of the catheter. Over the course of the first year following surgery, continence returns in the majority of men. However, in 5–20% of men, some degree of SUI will continue to be a significant problem.

Evaluating Incontinence
Diagnostic tests may be done to evaluate function and the exact cause of the leakage. Your physician will review your medical history and perform a physical exam to get a better sense of your condition and to consider possible treatment strategies. In particular, he or she may ask you to keep what’s called a ‘bladder diary’ where you detail your urinary habits. Your physician may also request other evaluations, including a urine flow test, blood tests, cystoscopy and urodynamic testing, among others. Ask your physician or contact the National Association for Continence at 1-800-BLADDER if you have questions about what each of these tests is intended to evaluate and what their findings may mean for you.

SUI is Treatable
Fortunately, there are effective treatment options for many cases of SUI. Medications have not yet offered any real benefit, but there are several non-surgical treatment options that may be able to help the pelvic muscles regain their strength and functionality. These include pelvic floor muscle exercises, biofeedback, electrical stimulation and external devices.

Non-Surgical Treatment Options

♦ Pelvic Floor Muscle Exercises - These exercises consist of both long and short contractions of the slow and fast twitch muscle fibers of the pelvis. The slow twitch fibers provide muscle tone over a long period of time, thus supporting the bladder and urethra. The fast twitch fibers react to sudden increases in pressure and thus primarily protect against urine leakage. Research shows that only 5.9% of men practicing PFME prior to surgery experienced continual leakage six months after surgery. In a similar group of men who did not practice PFME prior to surgery, 19.6% reported continual leakage.
Biofeedback - This is a useful treatment option in men who continue to have relatively mild incontinence or fear they are not doing their pelvic muscle exercises correctly. A special sensor is inserted into the rectum or onto the skin surface outside the anal opening and attached to a computer programmed to give feedback on contractions as they are performed. During the treatment session, the man is taught to contract and strengthen the pelvic floor muscles as he views the muscular contraction on the computer screen.

Electric Stimulation - may be added to biofeedback to send an electrical signal to the pelvic muscles to help strengthen them.

External Devices
- One widely used management option is the external condom catheter. Men who use condom catheters will have the most satisfactory experience if they have the proper size and style. External condom catheters should be changed at least once daily for good hygiene and skin protection.

Another option for men is a penile clamp or compression device, which squeezes the penis to stop the flow of urine. This device is designed for men with light to moderate leakage and must be released regularly throughout the day to avoid prolonged compression of the penis.

Pads, briefs, and absorbent underwear should be chosen for absorbency, comfort, and fit. Men may prefer those that have cloth-like outer layers for the quietest product available. It is important that size accommodates body type because the wrong size can lead to leakage. While using absorbent products, drinking an adequate amount of fluids and changing pads when they are wet to avoid unpleasant odor and skin irritation are recommended.

Surgical Treatment for SUI in Men
If you have a more serious case of SUI, you may want to consider surgical treatment. When evaluating surgical
treatments, your doctor should explain each procedure in full detail, describe the associated risks, and help determine which option is best suited for you. What follows is an overview of each procedure, but your doctor’s method may vary slightly:

**Male Sling Procedures**—For men with mild to moderate SUI (i.e., relying on fewer than five absorbent pads per day), a male sling procedure is considered a viable treatment alternative. A male sling is a small piece of synthetic mesh that is surgically implanted around the urethra; its positioning and structure provide support for the sphincter and related features of the anatomy in an effort to restore continence.

The best candidates for a male sling are men with no previous history of pelvic radiation therapy and men who have not had an artificial urinary sphincter implanted.

The surgical procedure to implant a sling takes about one hour and can be done either on an outpatient basis or with an overnight hospital stay.

**Coloplast Virtue® Male Sling:** A minimally invasive treatment designed for mild or severe SUI in male patients. Combining technologically advanced design, construction and materials, Virtue offers a potentially safer, more effective treatment solution than other male slings and possibly artificial urinary sphincters. Virtue is a permanent solution. Virtue is the only male sling that utilizes a four-arm approach that uses both elevation and compression to alleviate stress urinary incontinence. A polypropylene mesh material is implanted underneath the bulbous urethra to elevate and apply a gentle compression to prevent urine leakage.
† Transobturator AdvanCe® Male Sling: A small sling made of synthetic mesh is placed around the urethra through three small incisions. The sling supports the urethra, and possibly partially compresses the urethra. Following the procedure, a catheter may be left in place for 24 hours.

† Artificial Urinary Sphincter - For men with moderate to severe incontinence, or continuous leakage warranting five or more absorbent pads per day, the artificial urinary sphincter (AUS) is a good option. In use for over 25 years, more than 100,000 AUS devices have been successfully implanted in men to treat SUI. The AUS is implanted into the body to correct stress incontinence in men with significant sphincter damage and thus more severe leakage. The AUS has three components:

- A cuff that helps to close the urethra
- A pump placed inside the scrotum
- A pressure regulating balloon which is placed in the lower abdomen

When the man wants to urinate, he gently squeezes the pump in the scrotum, which opens the cuff around the urethra. The cuff closes itself automatically, typically after one to two minutes.

The procedure typically takes about an hour to perform and can be done either on an outpatient basis or with an overnight hospital stay. The device can usually be used beginning about six weeks after surgery. Some men are hesitant to have this prosthetic device implanted. For these men, as well as those who lack the
manual dexterity to squeeze the pump in the scrotum, a male sling is preferred. As with any surgery, there are precautions you should be aware of and steps you should take in the days and weeks following to ensure the smoothest recovery possible.

**Your Next Steps**
While loss of bladder control after prostate surgery can have a significant impact on quality of life, men should feel encouraged by the increasing number of treatment and management options available. With appropriate evaluation, problems with SUI are usually treatable.

To view an informative video on the diagnosis and treatment of Male Stress Urinary Incontinence, please visit [www.nafc.org/malesui](http://www.nafc.org/malesui).
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