

## **Stress Urinary Incontinence:**

Urinary incontinence is a condition that affects both men and women. Some estimates suggest that one in three women may have some form of incontinence. In general, there are two common types of incontinence: stress incontinence and urge incontinence.

### **Detection and Diagnosis**

Stress urinary incontinence occurs when there is a sudden increase in pressure to the bladder due to a mechanical change of the pelvis. When bladder pressure is greater than the urethral pressure, leakage of urine may occur. This could happen while coughing, sneezing, laughing or running. The pelvis is composed of muscles called levator ani muscles that act as a supportive “hammock.” Increased urethral mobility occurs when these muscles and other structures are weakened, which leads to urinary leakage called type II stress urinary incontinence.

### **Treatment Options**

Multiple treatments are available to improve stress urinary incontinence. These include Kegel exercises, pelvic floor therapy, and minimally invasive surgical procedures that may be up to 85-95% successful.

### **Kegel Exercises**

Stress urinary incontinence involves a completely separate pathway of therapy versus other forms of incontinence. Few medications are available with FDA approval for improving symptoms. Kegel exercises applied appropriately may be performed 50-60 times per day. For instance, 15-20 squeezes can be performed at one time. Kegel exercises improve stress urinary incontinence 50-70%, especially if pelvic floor therapy is applied.

### **Minimally Invasive Treatments**

#### **Urethral Injections**

If Kegel exercises are not successful, minimally invasive forms of therapy are available. Urethral injections using collagen, Coaptite (calcium-based material), or silicone may offer 60-70% improvement with an initial injection. Minor complications include transient urinary retention, frequency, urgency, burning, or failure whereby a second or third injection is needed. Typically, this method is applied for a poor surgical candidate or for someone who would like to avoid the use of a sling. Injections may also be utilized following a sling if further therapy is needed.

#### **Pessary**

Pessary placement, which is like a large doughnut shaped diaphragm, may be used to possibly decrease stress urinary incontinence as well as vaginal prolapse. It is a foreign body and risk to vaginal tissue may occur, even with frequent changes and care.

#### **Urethral Slings**

Urethral slings presently have the greatest success rates and are now considered by many the gold standard for treatment of stress urinary incontinence. Minimally invasive slings and virtually noninvasive slings with only one vaginal incision are available to improve stress urinary incontinence to greater than 85-95%. Studies have shown that pubovaginal slings can maintain continence 85% long-term.

The procedure typically involves needles placed at the labia. A synthetic sling, which is the same material used in a general hernia surgical repair, is connected to the needles after a small vaginal incision is made.

There is also a risk, as with any surgical procedure, of bleeding, infection, pain, and sling extrusion. Sling extrusion is easily repaired in the office. Occasionally, with type III incontinence, a person may still experience incontinence. Mild urethral injections may be used to bulk the urethra and further decrease urinary incontinence following a sling procedure, if necessary.

Postoperative restrictions include:

- lifting limited to 10 pounds during a 6-week period.
- no strenuous activity for 6-weeks.
- no straining, including avoiding constipation (over-the-counter MiraLAX may be used for 1-4 weeks in order to avoid constipation depending on use of narcotics).

Only light activities, such as sitting with light arm weights, walking, and slow stair climbing. You may feel lethargic due to your body's healing process or anesthetic effects which may also affect the bladder following surgery and delay its function. There is also a possibility that you may still need a pad for protection in individual cases, as we cannot guarantee a 100% cure, but we can realistically improve your present situation.

Although some cases are not as direct as others, successful treatment depends on an understanding of the diagnosis and providing a proper examination with appropriate tests that directs the best form of therapy.