

## Stress Incontinence

Stress incontinence is a form of urinary incontinence, where a person experiences a sufficient, uncontrolled leakage of urine. Characteristics of this condition include urine leak with movement. The interventions for stress incontinence may include pelvic floor exercises, administration of alpha-adrenergic agonists, the placement of a pessary or surgery. Stress incontinence often affects women with a history of cystocele or multiple vaginal births.



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### Symptoms

#### Urine Leak with Movement

##### [Urine Leaking while Running](#)

Stress incontinence is characterized by the involuntary leakage of urine with movement.

#### Cough or Sneeze

##### [Coughing Coffee-pot and Sneezing-in-tissue](#)

Movements such as coughing or sneezing may cause the involuntary loss of urine because of the increased intraabdominal pressure that occurs with these actions. Leakage is more common while standing or sitting and is not common when lying down.

#### Increased Intra-abdominal pressure

##### [Up-arrow Abdomen Pressure-gauge](#)

Increased intraabdominal pressure may cause uncontrolled leakage of urine when bladder muscle contraction is absent. The additional pressure in the abdomen overtakes the urethral sphincter control and causes leakage of urine.

### Pathophysiology

#### Laxity of Pelvic Floor Muscles

##### [Drooping Pelvis Muscle](#)

Pelvic floor muscles support the bladder and urethra. When they are weak, they decrease the ability of the urinary sphincter to maintain tone during increased abdominal pressure, which will cause a leakage of urine.

#### Urethral Sphincter Insufficiency

##### [U-wreath Sphinx](#)

The sphincter squeezes to prevent urine from leaking through the urethra. If this support is insufficient, the urethral angle may drop and bladder pressure can exceed urethral pressure, which causes urine to leak uncontrollably.

### Treatment

#### Kegel Exercises

##### [Keg Exercise](#)

Kegel exercises are a form of pelvic floor muscle training that may help with urine leakage by keeping muscle around the urethra strong. The exercises consist of repetitive pelvic floor muscle contractions during times of voiding and non voiding. This strengthens the pelvic floor to in order to decrease urine leakage.

## **Pessaries**

### [Pisser-ring](#)

A pessary is a firm, removable ring inserted into the vagina that is used to decrease urine leakage. The pessary compresses the urethra against the upper posterior portion of the symphysis pubis and elevates the bladder neck. This corrects the angle between the bladder and urethra and causes an increase in outflow resistance.

## **Alpha-adrenergic Agonists**

### [Alpha-adrenal-gland Agonist](#)

Alpha-adrenergic agonists, such as phenylpropanolamine or midodrine, may be used for the treatment of stress incontinence. The bladder neck contains a high amount of receptors that are sensitive to alpha-agonists. These medications contract the bladder neck, increasing the urethral resistance to urinary flow. Studies have shown that these medications have little efficacy and they are no longer used for primary treatment.

## **Surgery**

### [Surgeon](#)

Surgery may be needed to correct stress incontinence. This may include collagen injectable therapy, tension-free vaginal tape (TVT) surgery, vaginal sling procedures, anterior or paravaginal repair, retropubic suspension surgery or the placement of a urinary sphincter.

## **Associations**

### **History of Vaginal Birth**

#### [Hx of Vagina-violet Birth](#)

A patient with a history of vaginal births may be more susceptible to stress incontinence, as childbirth may cause strain and weaken the muscles of the pelvic floor.

### **Cystocele**

#### [Sister-seals](#)

Stress incontinence is associated with cystocele, or anterior prolapse, which occurs when the tissues between a woman's bladder and the vagina weaken and stretch. This causes a herniation of the bladder, causing a bulge in the anterior vaginal wall.