Regain Control of Your Active Life – Treatment Options for Incontinence and Pelvic Organ Prolapse
Nearly one quarter of all women in the United States have some sort of pelvic floor disorder such as urinary or fecal incontinence, and more women are likely to be affected as the population ages. Cleveland Clinic’s Center for Female Pelvic Medicine and Reconstructive Surgery is a state-of-the-art, specialized center offering a multidisciplinary team approach for women with urological conditions. The center provides individualized treatment with the latest procedures targeted at comprehensive evaluation and management of disorders from urinary and fecal incontinence to pelvic organ prolapse, in addition to offering complex pelvic reconstruction by open, vaginal, laparoscopic, and robotic–assisted routes, urethrovaginal reconstruction, fistula repair, neuromodulation, vaginal aesthetics, and treatment for bladder, vulvar, and vaginal pain disorders.

What is Incontinence?

Millions of women experience involuntary loss of urine, called urinary incontinence. Some women may lose a few drops of urine while running or coughing. Others may feel a strong, sudden urge to urinate just before losing a large amount of urine. Many women experience both symptoms. Incontinence can be slightly bothersome or totally debilitating. It keeps some women from enjoying many activities with their families and friends. Urine loss also can occur during sexual activity, causing tremendous emotional distress.

Women experience urinary incontinence twice as often as men due to pregnancy and childbirth, menopause and the structure of the female urinary tract. But both women and men can become incontinent from neurologic injury, birth defects, stroke, multiple sclerosis, and physical problems associated with aging.

Incontinence occurs because of problems with muscles and nerves that help to hold or release urine. The body stores urine in the bladder, a balloon-like organ. The bladder connects to the urethra, the tube through which urine leaves the body. During urination, muscles in the wall of the bladder contract, forcing urine out of the bladder and into the urethra. At the same time, sphincter muscles surrounding the urethra relax, letting urine pass out of the body. Incontinence will occur if the bladder muscles suddenly contract or the sphincter muscles are not strong enough to hold back urine. Urine may escape with less pressure than usual if the muscles are damaged, causing a change in the position of the bladder.

Types of Incontinence

- **Stress incontinence** – is one of the most common forms of incontinence in women and is readily treatable. Coughing, laughing, sneezing, or other movements that put pressure on the bladder cause urine to leak from the bladder. Physical changes resulting most commonly from pregnancy, childbirth and menopause often cause stress incontinence.

- **Urge incontinence** – or overactive bladder – causes the loss of urine for no apparent reason while suddenly feeling the need or urge to urinate. The most common cause of urge incontinence is involuntary bladder contractions. The bladder may empty during sleep or after drinking a small amount of water. Usually, this is accompanied by frequent urination and the need to get up in the middle of the night.

Urinary incontinence should not be considered a disease, but rather a symptom or sign of an underlying problem, which may include pelvic organ prolapse. It should not be considered a “normal part of aging” but a condition that can be treated.
Pelvic organ prolapse is a very common condition, affecting roughly half of women who have had children by vaginal delivery. It occurs when one or more of the organs in the pelvis (bladder, uterus, rectum, small or large bowel) drops down due to a weakened or stretched pelvic floor muscle and/or loss of vaginal support. This downward descent may result in protrusion of the vagina, uterus, or both.

In addition to vaginal childbirth, prolapse development can be attributed to several factors, including advancing age and obesity. Hysterectomy, chronic straining, and abnormalities of connective tissue or connective-tissue repair predispose some women to disruption, stretching or dysfunction of the connective-tissue attachments of the vagina, resulting in prolapse.

What is Pelvic Organ Prolapse?

Symptoms of Pelvic Organ Prolapse

Depending on which organs are involved in the prolapse, different symptoms may occur. Below is a list of some common symptoms:

- **Urinary incontinence, frequency and/or urgency**
- **Weak or prolonged urinary stream**
- **Feeling of incomplete emptying**
- **Needing to change position to start or complete voiding**
- **Urgency to defecate**
- **Straining during defecation**
- **Incontinence of flatus, or liquid or solid stool**
- **Sensation of or seeing a bulge or protrusion in the vagina**
- **A sense of pressure or heaviness in the vagina**
- **Painful sexual intercourse**
**Incontinence Treatments**

Chronic incontinence can originate from a variety of circumstances. The nature and mix of therapeutic measures are tailored to the individual patient.

**Exercises** - Exercises to strengthen or retrain pelvic floor muscles and sphincter muscles can reduce urinary leakage.

**Electrical stimulation** - Brief doses of electrical stimulation can strengthen muscles in the lower pelvis in a way similar to exercising the muscles. This will stabilize overactive muscles and stimulate contraction of urethral muscles.

**Biofeedback** - Using electronic devices, or diaries, to track when bladder and urethral muscles contract, control over these muscles can be gained. Biofeedback can be used with pelvic muscle exercises and electrical stimulation to relieve stress and urge incontinence.

**Timed voiding or bladder training** - Timed voiding and bladder training are techniques that use biofeedback. By keeping track of voiding and leaking, patients' bladders can be emptied before leaking. Biofeedback and muscle conditioning—known as bladder training—can alter the bladder's schedule for storing and emptying urine.

**Medications** - Medications can reduce many types of leakage. Some drugs inhibit contractions of an overactive bladder. Others relax muscles, leading to more complete bladder emptying during urination. Some drugs tighten muscles at the bladder neck and urethra, preventing leakage. And some, especially hormones such as estrogen, are believed to help muscles involved in urination to function normally.

**Injections** - Botox® injections are a new treatment option for people with overactive bladder syndrome. Botox® is injected into the detrusor muscle, paralyzing the overactive muscles.

**Pessaries** - A pessary is a firm but flexible ring inserted to press against the wall of the vagina and the nearby urethra. This device helps reposition the urethra and vagina, leading to less stress leakage and relief of pelvic organ prolapse symptoms.

**Implants** - Implants are substances injected into tissues around the urethra. The implant adds bulk and helps to close the urethra to reduce stress incontinence. Collagen (a fibrous natural tissue from cows) is most commonly used. Coaptite and Durashpere® EXP injections are similar to collagen, except that Durashpere is not a natural substance. Research shows that Durashpere is effective after one injection, whereas collagen may take several injections. Implants can be injected by a doctor in about ten minutes using local anesthesia.

Implants have a partial success rate. Injections must be repeated after a time because the body slowly eliminates the substances. Before you receive an injection, a doctor must perform a skin test to determine whether you would have an allergic reaction to the material.

**Surgical Therapy for Incontinence**

Many surgical options for incontinence have a high rate of success. Surgical therapy for stress incontinence has improved considerably and can now be performed as an outpatient procedure in most cases, without a catheter postoperatively, and with minimal pain and discomfort. Depending on the cause of incontinence, surgeons may use a vaginal, laparoscopic or open approach.

A vaginal sling, the most commonly performed surgery, can create a hammock of support to prevent stress urinary incontinence. The procedure, which involves placing a piece of synthetic mesh or tissue under the urethra, is done almost entirely through the vagina. A small incision is necessary just above the hairline or in the thigh creases for placement of some sutures or the mesh. Cleveland Clinic pelvic floor surgeons offer retropubic, transobturator, and single-incision midurethral slings for various types of incontinence.

A laparoscopic “bladder neck suspension” procedure alleviates pressure on the urethra by lifting tissue adjacent to the bladder. The entire procedure requires only a small incision at the umbilicus (belly button), resulting in a barely visible scar.

Most patients undergoing incontinence procedures alone return to normal activities in 1-2 weeks.
Pelvic Organ Prolapse Treatments

Reconstructive Surgery

Reconstructive surgery for prolapse aims to correct the prolapsed vagina while maintaining (or improving) vaginal sexual function and relieving any associated pelvic symptoms. For those patients who do require surgery, we offer laparoscopic and robotic-assisted techniques that often result in quick recovery times. Many surgeries for prolapse are conducted vaginally, leaving no scars. Laparoscopy, with or without robotic-assistance, is being increasingly sought after as a minimally invasive method for repairing more severe prolapse to quicken recovery compared with major surgery. Cleveland Clinic has pioneered laparoscopic and robotic approaches to vaginal prolapse surgery.

An alternative to reconstructive surgery is obliterative surgery, which closes off the vaginal canal either partially or totally. This procedure is typically reserved for women who are elderly, medically compromised, and no longer sexually active.

Vaginal Mesh

The use of vaginal mesh is the latest development in treatment for pelvic organ prolapse. Cleveland Clinic staff use this method cautiously, as it remains under study to determine whether it is a safe and effective option.

Six minimally invasive treatments using mesh are currently offered in the United States. For women who have more than one organ prolapse at a time, severe pelvic organ prolapse, or a previously unsuccessful prolapse surgery, the surgeon may use graft materials (supportive mesh) to repair a bladder bulge or hernia into the vagina (cystocele), intestinal bulges (enterocele) and rectal bulges (rectocele) during the same procedure, if necessary.

These mesh procedures are designed to restore normal vaginal anatomy, while providing strong and lasting support of the pelvic organs.
Experience Matters

Specialists at Cleveland Clinic have the largest experience in treating vaginal prolapse, urinary incontinence, and neurogenic and overactive bladder. And because not all patients require surgery for their conditions, we specialize in a wide variety of non-operative and minimally invasive solutions.

Cleveland Clinic urogynecologists and urologists handle a full range of services to treat incontinence and refractory overactive bladder, both of which often coexist with pelvic organ prolapse. We also handle additional incontinence management in cases of prolapse, if need be, as well as complications.

Making an Appointment

If you are dealing with pelvic organ prolapse or related incontinence, you may make an appointment with any of the following physicians:

“"I lived with leakage and other issues for 10 years, but I’d had enough. Both my aunt and my cousin recommended my doctor after the surgery fixed their problems. When I finally had the surgery, I was surprised at how easy it was. I only spent one night in the hospital and didn’t need any pain medication after that. My problems are solved. I’ve already recommended my doctor to three of my friends!”

- Barbara R
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