Urology Consultants, Ltd.

Center for Continence Care and Pelvic Medicine

Is Your Bladder Controlling Your Life?

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Does the sudden, uncontrollable desire to urinate cause an interruption to your daily activities, as it sends you running to the nearest bathroom?

Does access to a bathroom play a role in determining where you sit when dining with friends, when you schedule appointments, or how you perform your daily activities?

Does coughing, sneezing or laughing cause you to have embarrassing wetting accidents?

If you answered "yes" to any of these questions, you likely suffer from urinary incontinence or bladder dysfunction.

If you suffer from bladder or urinary leakage problems, you are not alone. Urinary incontinence is one of the most common diseases in women, affecting over 17 million within the United States. Although incontinence affects individuals of all ages and both sexes, women are twice as likely to suffer from incontinence as men. Compared with other common chronic diseases among adult women, the prevalence of incontinence is higher than that of hypertension, depression, and diabetes. Because this problem is so common, the overall economic burden of urinary incontinence in the Unites States is more than $26 billion annually, with the routine care and consequences associated with chronic leakage making up well over 50% of these costs (i.e. pads and diapers, clothing, laundry costs, skin care products, medications). More importantly, the constant fear and stress of coping with the embarrassment of urinary incontinence can hinder one's confidence and lead to introverted behaviors and social avoidance. By causing restrictions to daily activities, incontinence and bladder problems can significantly impact one's overall quality of life. Unfortunately, only about 10% of women with urinary incontinence seek treatment, as many falsely believe that incontinence is a natural and expected part of aging.

Many more suffer quietly out of embarrassment or lack of an awareness of available treatment options. Appropriate treatment can free women of these fears, and allow for a return to the full life they deserve.

The first step toward appropriate treatment is determining the type of incontinence or bladder problem you have. Not all incontinence is the same. There are several distinct types of urinary incontinence, and their treatment options vary considerably. But before we get started, a few things to remember:

You are not alone.
You do not need to live with this condition.
There are many things available to you to treat this condition and improve your quality of life.

Defining the Problem

The most common types of urinary incontinence in women are stress incontinence, urge incontinence and mixed incontinence. The most common bladder symptoms are associated with an overactive bladder (OAB) and result in a sudden urge to urinate and urinary frequency during the day and/or night.

Stress Incontinence

Often associated with pelvic floor trauma, such as pregnancy, childbirth, and pelvic surgery (i.e., hysterectomy), stress incontinence is due to weakened or damaged pelvic floor muscles and connective tissue, which are important for providing support to the urethra and bladder. The weakened pelvic floor allows small amounts of urine to leak during bouts of abdominal straining, such as coughing, sneezing, laughing, lifting or exercising.

Urge Incontinence

Urge incontinence is primarily a problem with the function of the bladder. When the bladder contracts it increases the pressure within the bladder, triggering a sudden strong desire to urinate. When this urge is so strong that you cannot overcome it, involuntary leakage occurs. Most often there is little warning time, causing you to quickly dash to the bathroom, and is associated with moderate to large amounts of leakage. This type of incontinence is often associated with symptoms of an overactive bladder (OAB).

Overactive Bladder (OAB)

OAB is a syndrome associated with urinary urgency with or without urge incontinence, frequency of urination (more than 8 visits to the toilet per 24-hour period), and often nocturia (more than 1 visit to the toilet during sleeping hours). These symptoms are suggestive of over-activity of the bladder wall, which leads to spontaneous contraction of the bladder muscle without you giving it permission to do so. A real source of irritation to the bladder, which may also cause such uncontrollable contracts---infection, tumors, and stones---, must first be ruled out before the diagnosis of overactive bladder can be made.

Another common problem leading to symptoms of an overactive bladder are attributing to chronic spasticity of the muscles of the pelvic floor (known as pelvic floor muscle dysfunction). When these symptoms are associated with chronic pelvic pain, a diagnosis of interstitial cystitis (IC) may be made. One word of caution: IC is a diagnosis of exclusion (everything else possible must be ruled out) and requires a thorough, sophisticated evaluation prior to making the diagnosis.

Mixed Incontinence

Many women suffer from both types of incontinence, stress and urge. As the treatment options for these two problems differ, it is important to recognize the degree of each problem and impact on the patient, with regards to quality of life. This will require a multi-dimensional treatment plan in order to achieve dryness.

Do any of the above symptoms describe problems that you have? In spite of commonly believed notions, no amount of urinary leakage is normal. These conditions can cause a tremendous negative impact to your quality of life, and yet they are readily treatable. The first step is recognition of the problem, followed by a thorough evaluation by a urologist who specializes in these types of problems.

<u>What to expect at the office visit</u>

The visit will start with a traditional history and physical examination. This will be similar to a yearly visit with your primary care physician, including a full abdominal and pelvic exam. The evaluation may also include an examination of the urine for infection, blood, or abnormal cells (urinalysis, urine culture, urine cytology), placement of a small catheter into the bladder after a trip to the bathroom to check for normal bladder emptying (post void residual assessment), and a visual evaluation of the inner lining of the bladder and urethra through a small scope (Cystoscopy). All of these things can be accomplished on the first office visit, which should take approximately half an hour. Depending upon the type of problem(s) detected, a specialized bladder stress test may be needed to evaluate detailed function of the bladder (multi-channel urodynamics). This test requires a separate visit, which takes approximately one hour, and helps to determine the appropriate types of treatment.

<u>Treatment Options</u>

Remember that not all types of urinary leakage or bladder symptoms are the same. Appropriate treatment plans will vary depending on the type of symptoms present.

The treatment for **<u>stress incontinence</u>** involves rehabilitating or repairing the weakness or damage to the pelvic floor muscles and connective tissue. This includes:

- Kegels/Pelvic Floor Muscle Exercises – Rehabilitating the pelvic floor muscles through regular exercise strengthens these supportive structures to the urethra and bladder. Like any exercise regimen, it takes compliance and consistency to ensure success.

Kegel exercises alone prove most effective for prevention, post-partum rehabilitation and treatment for mild cases of stress urinary leakage. When a consistent exercise regimen is maintained, kegels have been associated with a 50-75% reduction in stress incontinence.

- Urethral bulking agents – Using a scope (cystoscope) through the urethra, a "bulking agent" is injected into the lining of the urethra to plump up the walls and provide the walls with more resistance against stress-related leakage. Common agents used are collagen and carbon particles. Both agents have proven to be safe and effective with greater than 50% short term (approximately 6 month) cure rates in the correct patient. This procedure can be done in an office or same day surgery center, and can be done with minimal anesthesia.

- Mid-urethral slings – A piece of mesh (sling) is placed under the urethra in a tension-free, hammock-like manner, and provides support to the urethra during stress-related activities. Sling procedures are done through the vagina (not the abdomen), and are therefore minimally invasive, same day surgery procedures. Long term (7-8 year data) indicates a greater than 90% cure rate.

Because the symptoms of **urge incontinence** and **overactive bladder** are primarily associated with a functional bladder problem, a combination of treatment approaches is usually most successful. This could include one or any combination of the following.

- Behavioral modification – Identifying amount of fluid consumption and dietary habits is an important first step. Caffeinated products and alcohol act as diuretics and increase the amount of urine produced. Undoubtedly, this can exacerbate symptoms of OAB and urge incontinence. In some individuals, these products (along with many other substances) can act as direct irritants to the lining of the bladder. Identifying these dietary triggers by eliminating them in a step-wise fashion can be very helpful. Adding sufficient fiber to your diet to ensure proper bowel habits is also important, as chronic constipation can worsen these types of bladder symptoms. Reductions in bladder symptoms by 50-70% can be appreciated by such behavior modifications.

  Biofeedback/Pelvic floor physiotherapy – Kegel exercises, associated with a formal program of biofeedback and urge suppression, is the mainstay for OAB treatment directed at the pelvic floor. This form of therapy teaches you how to delay voiding and gain control over these symptoms by squeezing the pelvic floor muscles when the urge to urinate occurs. This action sends reflexive signals to the bladder, which cause the bladder wall to relax. Once the urge sensation has successfully subsided, you can then proceed to the bathroom at a normal walking pace, without the threat of an inevitable leakage episode. Sometimes, due to chronic pelvic related symptoms, the pelvic floor muscles assume a constant state of spasticity. A program of pelvic floor rehabilitation will retrain these hyperactive pelvic floor muscles, and return them to their normal relaxed state of rest. Again, improvements in urinary symptoms in the area of 50-70% can be noted, but compliance with a continued program is the key to success.

Medications – A class of medications called anti-cholinergics serves as the first-line drug therapy for OAB and urge incontinence. They have a direct relaxation effect on the bladder and can help to reduce or eliminate the symptoms of urinary urgency and frequency. Oxybutinin chloride, Ditropan, Detrol, Oxytrol, Sanctura, Vesicare and Enablex are all medications from this class. They all are relatively equally effective (approximately 50-80% reduction in symptoms), and are associated with the same side effects of dry mouth, constipation, and blurred vision, which can often be limiting. Other useful options include muscle relaxants (Flexeril, Soma) and neuropathic agents (Elavil, Neurontin) for associated chronic pelvic floor spasticity or pain.

Minor Surgery – There are a few minimally invasive surgical options available, when conservative modalities don't provide enough relief.

- Botox – Botulinum toxin is a muscle paralytic agent. When injected directly into the bladder muscle through a cystoscope, the bladder muscle becomes partially inactive, and is then unable to contract spontaneously. This is most effective for eliminating symptoms of OAB and urge incontinence when abnormal bladder contractions are seen on a prior urodynamic test. Although it is being used successfully by some bladder specialists for the treatment of overactive bladder symptoms, Botox is not yet FDA approved for use in the bladder.

- InterStim – Neuromodulatory therapy acts like a mini pacemaker to the bladder and pelvic floor muscles to modulate the bladder's sensory perception and muscle activity. This too is a minimally invasive, same day surgery procedure which, when successful, provides between 70-80% improvement in symptoms of OAB and urge incontinence. This type of therapy can also be useful for the treatment of chronic pelvic pain or urinary retention, when these problems are related to hyperspasticity of the pelvic floor muscles.

Major Surgery – As a last resort, when all else fails, major bladder and bowel surgery can be performed, to include removal of the bladder (cystectomy), enlarging the bladder with a piece of bowel (augmentation cystoplasty), and/or diverting the urinary stream away from the bladder and allowing it to drain into a bag from the abdominal wall (ileal conduit). Although they may prove helpful for your debilitating urinary symptoms, these large surgeries are irreversible, and may be associated with other chronic problems and symptoms after surgery. Because of this, as well as the many other minimally invasive options available today, these surgeries are seldom performed anymore. Careful consideration must be made before proceeding with such drastic measures.

Urinary incontinence is a problem that can have a drastic impact on your daily life. No amount of urinary incontinence is normal, and it should not be accepted as a natural and inevitable part of aging. Nor is it something about which to be ashamed. Any problem that affects your overall quality of life is worth treating. Fortunately, there are many successful medical and minimally invasive treatment options available today, which have proven to be both safe and effective.