

Advances in Overactive Bladder Therapy

By Edward Herrman, MD, Urology Partners

Do you feel the sudden urge to urinate or do you leak urine when you laugh, cough, sneeze or lift something heavy? If so, you are not alone! It is estimated that over 33 million Americans suffer from overactive bladder (OAB), which can be uncomfortable, disruptive and embarrassing.

Although there is an increased incidence of OAB with age, it is not a normal consequence of aging. It affects both men and women, but is twice as common in women with research suggesting that half of older women may have some form of incontinence.

Types of OAB

A typical bladder stores urine until there is a socially acceptable time to urinate, at which time one is able to empty their bladder completely. With OAB, your bladder muscle starts squeezing to push urine out before you're ready to go, even if your bladder isn't full. You may experience sudden and overwhelming urges to urinate that lead to leaks or having to go the bathroom too often. There are two main types of OAB, including:

Stress Incontinence

The main symptom with stress incontinence is leaking urine when you laugh, cough, sneeze, jog or lift something heavy. This is the most common bladder control problem in younger women. It results when the muscles and tissue that support the bladder become weak and stretched due to pregnancies and vaginal childbirths, weight gain or a sports injury.

Urge Incontinence

The main symptom with urge incontinence is the sudden need to urinate. It may be triggered by running water, sipping a drink or by nothing at all. Here, you may leak large amounts of urine or find yourself running to the bathroom even if your bladder is mostly empty.

Possible Causes

There are usually a combination of factors that cause OAB, including:

- Muscles and tissue that become weak and stretched due to pregnancies and vaginal childbirths, weight gain or a sports injury
- Neurologic: Diabetes, Parkinson's disease, Multiple sclerosis or stroke
- Inflammatory conditions, including infection
- Bladder cancer
- Aging: Loss of elasticity of the bladder wall, obstruction of the bladder outlet or loss of control over bladder functions due to dementia

Traditional Therapy

Behavior Modification

Reducing caffeine and limiting fluid intake, especially at night, can help. Avoid coffee, tea and caffeinated sodas. Caffeine is a diuretic, which creates more urine.

Bladder Retraining

Because stress incontinence stems from weak pelvic muscles, Kegel exercises offer a great way to strengthen the muscles around the urethral closure. Clench the muscles you would use to stop the flow of urine, hold and squeeze for 10 seconds, then relax. Do three to four sets every day. As these muscles grow stronger, so will your bladder control. Another strategy is scheduled voiding: emptying your bladder regularly, every two to four hours, even if you don't feel the need. Finally, bio-feedback provides real-time information about activity in your bladder and pelvic muscles. As you gain awareness of these functions, you may be better able to control them. Biofeedback is often used in combination with Kegel exercises.



Medication

Medications are often given to help correct problems with the bladder. Anticholinergic medications act at the bladder muscle to improve bladder capacity and relax the bladder muscle during filling. They are effective in up to two thirds of patients. Some troublesome side effects include: dry mouth, constipation or possible effects on mental status. Some medications can trigger or worsen incontinence, including certain high blood pressure medications and some types of antidepressants. Carefully review all medications you are taking with your doctor, including over-the-counter drugs or herbal remedies, as some medications increase bladder control problems and other interact with incontinence medications in ways that increase symptoms.

Advances in the Treatment of OAB

Myrbetriq

Myrbetriq is the first of a new class of drugs, an extended-release pill taken once a day. It works to stimulate receptors in the bladder's detrusor muscle causing the bladder to relax, which reduces urinary urgency symptoms. It offers a similar effectiveness of traditional medications, but without the side effects, except for a contraindication in patients with uncontrolled hypertension.

Botox

Yes, Botox, the same substance dermatologists use to smooth out wrinkles, can help relax an overactive bladder. Doctors inject Botox into the bladder muscle using a cystoscope. The result is temporary paralysis of the overactive bladder muscles. The procedure is outpatient and lasts 8-12 months. Studies have found that Botox significantly improves symptoms of incontinence and causes few side effects, although additional research is still needed to determine the risks and benefits of this technique.

InterStim® Therapy

If patients have tried OAB medications without success, InterStim® Therapy is a proven neuromodulation therapy that targets the communication problem between the brain and the nerves that control the bladder. It works with the sacral nerves located in the pelvic area near the tailbone. The sacral nerves control the bladder and muscles related to urinary function. When the nerves aren't telling the bladder to function properly, this communication problem can cause bladder control problems. The stimulation of the sacral nerves with mild electrical pulses reduces the signals to the nervous system causing the bladder control symptoms. This is an outpatient procedure under IV sedation. Doctors implant an electrode into the pelvis to directly effect the nerves which control the bladder. Success is defined as at least a 50% improvement in symptoms and has an over 80% success rate. The electrode must be removed before an MRI can be performed and has a battery that must be replaced every 3-5 years. Patients must undergo an evaluation before trying InterStim® to see if they are a candidate.

PTNS

If your overactive bladder hasn't improved with bladder retraining or medicines and you don't want to have surgery, percutaneous tibial nerve stimulation (PTNS) is an option. The doctor inserts a fine-needle electrode into the nerve just above your ankle. A mild electrical impulse is passed along the needle to nerves of the spine that control bladder function. This series of 12 treatments, scheduled about a week apart, requires no anesthesia and is over 70% effective.

Preventing Incontinence

Maintaining a healthy weight and doing Kegel exercises top the list as ways to help reduce your risk of developing incontinence. If you smoke, try to quit. Smoking can lead to chronic coughing which can stress the bladder and trigger leaks.



Take Action!

Take action to discuss your bladder symptoms with your doctor. Medicine, in combination with behavioral and exercise treatments, can help in addition to new treatments offering great advances in the treatment of OAB.

For help with your overactive bladder, please call the experts at Urology Partners at 941-792-0340, or visit us online at www.urology-partners.com to learn more.

Excerpts for article from mayoclinic.com and webmd.com



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Dr. Herrman has been in practice in Bradenton since 1992. After completing his undergraduate studies in biology from the University of Miami and the University of Connecticut, he completed a year of medical research in the field of immunology at the University of Pittsburgh before entering medical school there the following year. Dr. Herrman received his medical degree from Pitt in 1986 and pursued his residency training in General Surgery and Urology at the University of Rochester, completing his training in 1992.

Dr. Herrman practices all aspects of general urology including the treatment of prostatic disease and tumors of the urinary tract. He has particular interest in the management of stone disease, surgical treatment of male and female incontinence and erectile dysfunction. Dr. Herrman continues to pursue post-graduate training and is experienced in minimally invasive therapies including laser therapy and laparoscopic surgery of the genitourinary system.

Dr. Herrman grew up in Pittsburgh, PA as the seventh of nine children. He lives with his wife Rebecca, and his two children. He enjoys boating, fishing and sports. He is a member of the Manatee Medical Society, Florida Medical Association, and the American Urological Association. He is active in the community and recently was recognized by his peers as one of the area's top 50 physicians, as featured in Sarasota Magazine.



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