Overactive Bladder

A PATIENT'S GUIDE



<u>Tennessee</u>

The most personal care for life's most personal issues."

865-351-6644 tnurology.com Tennessee UROLOGY



GOTTA GO...AGAIN?

Do you find yourself running to the bathroom with an overwhelming need to urinate immediately?

Does the urge to urinate increase dramatically throughout your day?

Do you experience urine leakage following a sudden urge to urinate?

Do you wake up several times a night to go to the bathroom?

If you answered yes to any or all of these questions, you may be one of the millions of men who suffer from urge incontinence or overactive bladder (OAB).

Overactive bladder is a group of urinary symptoms such as an uncontrollable urge to urinate or urine leakage caused by this frequent urge.

OVERACTIVE BLADDER IS COMMON

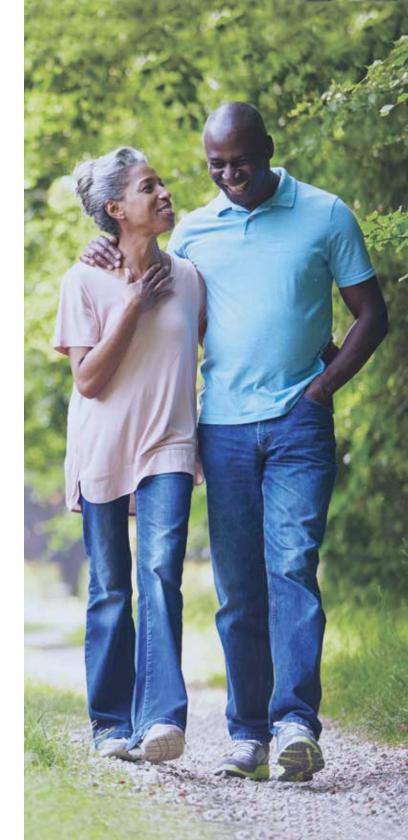
In fact, more than 30 million Americans have overactive bladder. While OAB is more common as you age, it is not a normal condition at any age.

You don't have to suffer in silence. Tennessee Urology's incontinence specialists can help.

Many men of all ages who suffer from bladder control problems sometimes feel embarrassed and alone and often shy away from daily activities they enjoy including exercise, shopping, socializing and even sexual activity.

The good news is, you don't have to feel embarrassed or allow urinary incontinence to control your life any longer. Our incontinence specialists have helped men of all ages manage bladder control problems. There are a number of successful treatments for OAB and our physicians are committed to helping restore your quality of life.

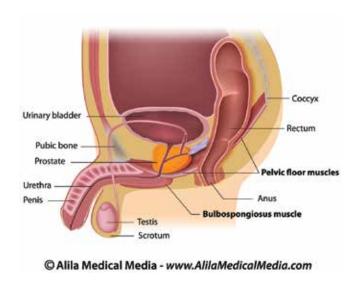
According to a national study, about 16% of adult participants met the criteria for OAB and prevalence increased to 40% for adults over age 80.



HOW THE URINARY SYSTEM WORKS

Your bladder is a balloon-shaped organ that sits in the pelvis, expanding to hold urine and contracting to release urine. It is supported by pelvic floor muscles that hold the bladder in place. The urethra is the tube that carries urine from the bladder out of your body. Sphincter muscles keep the urethra closed and hold the urine in your bladder until the brain sends your body the signal that it's "time to go." When these pelvic floor muscles are strong, the urethra is supported and no leakage of urine occurs. However, when these sphincter muscles are weak, the urethra is not supported and urine is allowed to leak.

In OAB, urine leaks when your bladder inappropriately contracts or squeezes even when your bladder is not full. This causes the sudden urge to urinate or that "gotta go" feeling. It can happen frequently throughout the day and even at night time during sleep.



SYMPTOMS OF OVERACTIVE BLADDER

- A strong and sudden urge to urinate or that "gotta go" feeling that you cannot control; this is the most common symptom of OAB.
- Urine leakage or incontinence the urge to urinate may cause your bladder to leak a little or a lot.
- Increased frequency of urination you may need to go to the bathroom many times throughout the day.
 Going to the bathroom more than eight times per day is usually what your doctor means by frequent.
- Waking up at night to urinate.

WHAT MAY TRIGGER URGENCY?

- Hearing or touching running water
- Seeing a bathroom
- Anxiety or stress about not making it to a bathroom in time
- · Changes in position

Urinary incontinence can limit participation in activities and lower quality of life. Men with urinary incontinence have a higher rate of depression and are more likely to decrease participation in activities

WHAT CAUSES OAB?

Overactive bladder typically occurs when nerve signals between your bladder and your brain get mixed up, with the bladder sending an abnormal signal to the brain. OAB can also occur when the muscles in your bladder are too active or contract when they are not meant to, creating that sudden and strong urge to urinate. An underlying condition of Benign Prostate Hyperplasia (BPH), or enlarged prostate, can also cause OAB when the enlarged prostate presses against your urethra, irritating the bladder wall, causing frequent urination.

Factors that Put You at Risk for Developing OAB Symptoms Include:

- Aging
- Neurological conditions that affect the brain or spine, including multiple sclerosis, Parkinson's disease, stroke, cerebral palsy and spinal cord injury
- Diabetes
- Benign Prostate Hyperplasia (BPH) enlarged prostate
- Certain gastrointestinal conditions such as irritable bowel syndrome (IBS) are more commonly associated with OAB
- Certain abdominal surgeries
- Certain medications such as diuretics, sedatives and anti-depressants can interfere with the nerves that trigger bladder contractions
- Certain foods such as caffeine, alcohol and spicy foods can irritate the bladder and make OAB symptoms worse
- Obesity and being overweight

If you are experiencing symptoms of OAB, contact our incontinence specialists who understands your condition and the treatments available to help get you back to living the life you love.

HOW WE DIAGNOSE OAB

Talking with a specialist who understands what you're going through is the first step to finding the best solution for your OAB.

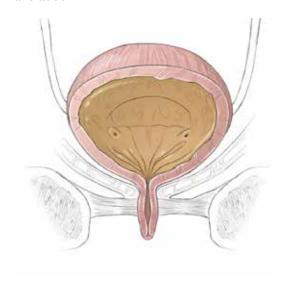
Your physician will perform a comprehensive medical history and evaluation to accurately diagnose your OAB symptoms in order to prescribe the best treatment option for you. He or she may also order additional tests including:

- Urinalysis
- Blood work
- A bladder diary Your physician may ask you to keep a daily record of how often you make trips to the bathroom, what you drink, your urine output, and when any leakage occurs, to gain a better understanding of your symptoms.

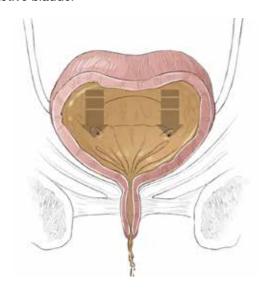
Specialized tests may also be performed to get a clear idea of the cause of your OAB symptoms, including:

- Pelvic ultrasound: This test painlessly checks for abnormalities in the bladder, urinary tract or genitals.
- Post void residual test (PVR): Determines how well you empty your bladder by measuring residual urine after voiding using a thin tube (catheter) passed through your urethra into the bladder. By measuring residual urine, your doctor can determine if there may be a nerve or muscle problem.
- Cystoscopy: A tiny instrument called a cystoscope is inserted into the urethra to find and/or remove abnormalities. This procedure can be performed in your doctor's office.

Normal bladder



Overactive bladder



URODYNAMIC SERVICES

Urodynamics is a series of diagnostic tests that evaluate the function of your bladder and urethra. It helps your doctor determine the source of your urinary incontinence symptoms and the best course of treatment. One of our skilled urodynamicists will guide you through each step of the urodynamic testing.

Your doctor will decide which of the following diagnostic tests should be performed to help diagnose and treat your OAB:

Uroflow: This test measures the speed and amount of urine you void.

Cystometrogram: This study evaluates how your bladder holds urine, measures your bladder capacity, and also determines how well you can control your bladder.

EMG: This test measures how well you can control your sphincter muscles and determines if they are working in coordination with your bladder. EMG patches may be placed near your rectum to record muscle activity.

Pressure Flow Study: This test determines if there is an obstruction in your bladder or urethra.

Videourodynamics: This study is a combination of the above tests with the addition of video pictures.

ABOUT THE URODYNAMIC PROCEDURE

Your urodynamic appointment will take approximately 60 minutes. A urodynamicist will be there to guide and support you throughout your testing, answering any questions you may have and ensuring your physical and emotional comfort. You will be asked to arrive at your appointment with a comfortably full bladder for testing.

- At the start of your testing, you will empty your bladder into a uroflowmeter that automatically measures the amount of urine and flow rate.
- The urodynamicist will then perform a post-void residual, which involves placing a thin tube into your bladder to measure the amount of urine remaining.
- 3. Your urodynamic study will then begin. This study will evaluate: how much your bladder can hold, how much pressure builds up inside your bladder as it stores urine, and how full it is when you feel the urge to urinate.
- Finally, the results of your study will be reviewed with you by your doctor and a course of treatment determined.

About 9 out of 10 doctor-patient conversations about OAB start because the patient brings it up. So if you think you might have the condition, don't wait for your doctor to ask about it.

TREATMENT OPTIONS FOR OVERACTIVE BLADDER

When it comes to treating the symptoms of OAB, the good news is there are a number of treatment options that can help you manage symptoms and improve your daily lifestyle. Your doctor may start with physical therapy and/or behavioral and lifestyle modifications as first line treatments. Depending on your individual needs, your doctor may use a combination of lifestyle changes and medication therapy, which often results in greater success of symptom management. Surgical options may also be discussed for treating symptoms of OAB.

FIRST LINE THERAPIES – PHYSICAL THERAPY AND LIFESTYLE MODIFICATIONS

Your doctor may suggest physical therapy or making changes to your everyday lifestyle as the first line of treatment for your OAB symptoms. While this type of behavior therapy may not alleviate all of your OAB symptoms, it can minimize them.

• Physical Therapy: The goal of physical therapy for treating OAB symptoms is to decrease urinary urgency and improve the coordination between the bladder and pelvic floor muscles for improved urinary control. Your physical therapist will perform a comprehensive internal and external exam of the pelvic floor muscles. Depending on your diagnosis and symptoms, the physical therapist will determine which of the following is the best course of action:

- Bladder training or delayed voiding This involves controlling the urge to urinate by waiting a few extra minutes after you feel the urge at first, and then gradually increasing the time between bathroom visits.
 Our physical therapists work with you on bladder training exercises for optimal results.
- Timed urination You follow a set schedule for going to the bathroom. Instead of going when you feel the urge, you train yourself, and your bladder, to go at the scheduled time of day. Your physical therapist will determine if this is right for you.
- Pelvic floor muscle exercises/biofeedback—
 Pelvic floor exercises can help prevent urine
 leakage by strengthening the pelvic floor and
 sphincter muscles. Your physical therapist will show
 you how to perform these exercises to promote
 muscle strengthening, relaxation and coordination.
 Biofeedback can help determine if you are exercising
 the right pelvic muscles.
- Behavior modification The physical therapist may recommend utilizing behavior modification to retrain your urinary system. Going to the bathroom frequently, and not just when the "gotta go" feeling strikes, is important for retraining your system.

Lifestyle Modifications to Help Improve OAB Symptoms

 Fluid and diet management – Limit or eliminate foods and drinks that may irritate the bladder such as caffeine, artificial sweeteners, chocolate, alcohol, certain sodas, citrus, and acidic and spicy foods.

- Keep a bladder diary Keep track of when and how often you go to the bathroom to urinate to help your doctor better understand your OAB symptoms.
- Absorbent incontinence pads Absorbent pads made specifically for urinary incontinence can protect your clothing and keep you dry, helping you avoid embarrassing incidents if you do experience incontinence during social situations or activities.

Medication Therapy to Treat OAB

When lifestyle changes do not improve your symptoms enough to improve your quality of life, your doctor can prescribe certain medications to treat the symptoms of OAB. Drug therapy may be used in combination with one or more lifestyle modifications.

Your physician may prescribe medications that work by relaxing the bladder to prevent bladder spasms. These medications (such as anticholinergics or Beta-3 agonists) can decrease the severe urge to urinate and may also enable the bladder to hold more urine without frequent leakage because the bladder is more relaxed.

As with most medications, it may take some time before you see an improvement in your urge symptoms. Your doctor will monitor the medication's effectiveness and dosage over several weeks to make sure the drug prescribed is working for you.

Your physician will also encourage you to continue your pelvic floor exercises and any diet and lifestyle modifications you have already initiated while you are on the medication to help you achieve the best results.

What are possible side effects of common OAB medications?

- Anticholinergics: dry mouth, constipation and dry eyes
- Myrbetriq[™] (mirabegron): headaches

Bladder Injections for Treatment of OAB

In some cases of refractory overactive bladder, injecting Botox directly into the bladder muscles has been found to be effective in relieving OAB symptoms. Used in small doses, Botox relaxes the bladder muscles, helping to minimize frequent bladder contractions.

Botox injections are approved by the FDA to treat adults with OAB who cannot use or do not respond to medications known as anticholinergics. Botox injections typically last six to nine months and carry a small risk of urinary retention.

Your doctor will work with you to decide if this therapy may be of benefit. If Botox injections are prescribed, your doctor will follow you closely to monitor possible side effects including urinary tract infections and urine retention.

Neuromodulation Therapy for Treatment of OAB

If other treatments such as diet modifications and medications have been unsuccessful in treating your OAB symptoms, you have other options that can help provide you with the freedom and improved quality of life you've been searching for.

Neuromodulation therapy works by addressing the communication lapse between your brain and the nerves that control your bladder. When these nerves are not communicating properly, the bladder has problems functioning as it should, resulting in incontinence issues.

Sacral Neuromodulation (SNM)

The sacral nerves, located near your lower back, relay nerve signals between your brain and the bladder, and works to control the bladder and muscles related to urinary function. In OAB, these nerves do not communicate effectively with your brain resulting in bladder control problems. Sacral Neuromodulation stimulates the sacral nerves with mild electrical pulses to modulate the signals with the brain. This treatment is safe and effective and is a viable option for patients who have not had success with lifestyle changes and first line therapies for OAB.

How Does Sacral Neuromodulation Therapy Work?

The SNM system uses a small neurotransmitter device that can be compared to a pacemaker. To make certain this therapy is right for you, your doctor will start you with a test stimulator that does not require surgery. The test typically lasts five to seven days. The test stimulator involves temporary placement of a thin wire that is worn in your lower back. The wire is connected to a small external stimulator which is worn on a belt around your waist. The stimulator sends mild electrical impulses through the wire to one of your sacral nerves to "jump start" your bladder and stimulate it to work properly.





What Does the Implantation Procedure Entail?

If your doctor determines that you're the right candidate for this treatment, the neurostimulator device can be easily implanted under the skin in your upper buttock during a short surgical procedure. You will also have a small incision in your lower back where your doctor will place a long-term electrode. The neurostimulator will send electrical pulses through the electrode to one of your sacral nerves. You will also receive a patient programmer which tells you if the stimulation is on or off and the level of stimulation. Your doctor will set the stimulator to a level that is most effective for controlling your urinary symptoms.

Are There Any Side Effects?

Side effects of Sacral Neuromodulation Therapy are uncommon but may include pain, skin irritation, infection, device problems, and lead migration. In a clinical study, however, these side effects were resolved in most cases.

Is Sacral Neuromodulation Therapy Covered by Insurance?

Yes, Sacral Neuromodulation Therapy is covered by Medicare in all 50 states and it is also covered by many major private insurance companies.



Urgent® PC Neuromodulation System

When other first line therapies are not effective for treating overactive bladder, another type of neuromodulation therapy that targets the percutaneous tibial nerve, called Urgent PC, has been proven effective for some men with urgent urinary symptoms.

What is the Urgent® PC Neuromodulation System?

Urgent PC uses percutaneous tibial nerve stimulation (PTNS) to treat individuals with OAB symptoms. Your doctor will have you seated comfortably in the office where he or she will insert a small, thin needle electrode near your ankle. The electrode is connected to a battery-powered stimulator that emits mild electrical impulses along your tibial nerve in your leg and to the nerves in your pelvis that control bladder function. The slight electrical impulses inhibit frequent contractions of the pelvic floor and bladder muscles for better urinary control and less frequent urinary urges.

How Often are Urgent PC Treatments Given?

Your doctor will prescribe a series of 12 treatments, typically given once weekly for 30 minutes. Urgent PC inhibits some of your uncontrollable bladder contractions and it may take up to six weeks to see positive changes in urinary urgency. Every patient responds differently to the therapy, which is why your doctor will closely monitor your symptoms and perform necessary maintenance treatments after the initial 12 treatments.

How Effective is this Treatment Option?

Clinical trials have demonstrated that Urgent PC treatments are effective in up to 80% of patients. In a review of about 100 patients who had success with Urgent PC, symptoms improved anywhere between two and 12 weeks. For approximately 20% of the patients, symptoms of urgency did not improve after eight weeks.

Are there any Side Effects from Urgent PC?

The most common side effects associated with Urgent PC are minimal and temporary, resulting from placement of the needle electrode. These can include:

- Minor bleeding
- Mild pain or discomfort
- Skin inflammation

Frequently Asked Questions About Overactive Bladder

Q: What is overactive bladder (OAB)?

A: Overactive bladder (OAB) is the name of a group of urinary symptoms. The most common symptom of OAB is the "gotta go" feeling, or the frequent and/or sudden urge to urinate that you cannot control. You may leak urine when you experience this urge. Having to urinate often during the night is another common symptom of OAB.

Q: Is OAB common in men?

A: Yes, many men experience OAB at some point in their life. You are not alone. In fact, some 30+ million Americans have OAB.

Q: Who is at risk for OAB?

- A: There are a number of risk factors or common causes of OAB, including:
 - Aging
 - Neurological conditions that affect the brain or spine, including multiple sclerosis, Parkinson's disease, stroke, cerebral palsy and spinal cord injury
 - Diabetes
 - Men who may have Benign Prostatic Hyperplasia (BPH)
 Enlarged prostate
 - Certain gastrointestinal conditions such as irritable bowel syndrome (IBS) are more commonly associated with OAB
 - Certain abdominal surgeries
 - Certain medications such as diuretics, sedatives and anti-depressants can interfere with the nerves that trigger bladder contractions
 - Certain foods such as caffeine, alcohol and spicy foods can irritate the bladder and make OAB symptoms worse
 - Obesity and being overweight

Q: What is the main symptom of OAB?

A: The major symptom of OAB is the strong and sudden urge to urinate that you can't control. This "gotta go" feeling has many men running for the bathroom multiple times per day. This urge may be accompanied by urine leakage in some cases.

Q: How will my doctor diagnose OAB?

A: There are a number of ways your doctor can diagnose OAB. Your doctor initially may order a urinalysis as well as ask you to keep a bladder diary. Urodynamics services are also a benefit to many patients.

Urodynamics refers to a series of diagnostic tests and studies that help your doctor determine the cause of your urinary incontinence and the best course of treatment.

Q: What are the treatment options for OAB?

- A: There are a number of treatments that can help you manage the symptoms of OAB and provide you with freedom from your urinary urges. Your doctor may prescribe one treatment alone or combine treatments for effective management of your OAB. These treatments may include:
 - Physical therapy: A physical therapist works with you on performing pelvic floor exercises, behavior modification and other techniques to improve bladder and pelvic floor muscle coordination.
 - Lifestyle changes: Modifications to what you eat and drink, keeping a daily bladder diary or even using absorbent pads may be recommended.
 - Medication therapy: Your doctor may prescribe
 a type of drug that relaxes your bladder muscles to
 stop contractions at the wrong times to minimize your
 urge symptoms.
 - Bladder injections: In some severe cases of OAB, injecting Botox into the bladder has been found to be effective in improving symptoms.

- Neuromodulation therapy: Works by addressing
 the communication lapse between your brain and the
 nerves that control your bladder. This therapy utilizes
 neuromodulation devices which stimulate the nerves
 in your pelvis and bladder to control bladder function.
 This treatment may be prescribed when other treatment
 options have failed.
- Percutaneous Tibial Nerve Stimulation (PTNS):
 Another type of neuromodulation therapy that targets the percutaneous tibial nerve. Small electrodes are inserted into the ankle. The electrical impulses in the tibial nerve can help control symptoms of urinary urgency.

Q: If I think I have OAB, who should I call for help?

A: If you are experiencing any urinary incontinence symptoms that are getting in the way of living your best life, it's important to be checked by a doctor who specializes in urinary incontinence and understands what you are going through and how to treat you.

The incontinence specialists at Tennessee Urology are here to help you.