What is Neurogenic Bladder?

Neurogenic Bladder, also known as Neurogenic Lower Urinary Tract Dysfunction, is when a person lacks bladder control due to brain, spinal cord or nerve problems. Several muscles and nerves must work together for your bladder to hold urine until you are ready to empty it. Nerve messages go back and forth between the brain and the muscles that control when the bladder empties. If these nerves are harmed by illness or injury, the muscles may not be able to tighten or relax at the right time. In people with neurogenic bladder and neurogenic lower urinary tract dysfunction, the nerves and muscles do not work together well. The bladder may not fill or empty in the right way.

Millions of Americans have neurogenic bladder. This includes people with Multiple Sclerosis (MS), Parkinson’s disease and spina bifida. It also could include people who have had stroke, spinal cord injury, major pelvic surgery, diabetes or other illnesses.

What are the Symptoms?

The symptoms of neurogenic bladder differ from person to person. Symptoms also depend on the type of nerve damage causing the problem.

**Incontinence:** Bladder muscles may be overactive and squeeze more often than normal. Sometimes this squeezing causes urine to leak before you are ready to pass urine.

**Overactive Bladder (OAB):** With OAB, you feel a sudden urge to pass urine. After this feeling, some people leak urine—a few drops or a gushing amount. One more symptom is passing urine – more than 8 times in 24 hours.

**Underactive Bladder:** With underactive bladder symptoms, you may only dribble a bit of urine. You may not be able to empty your bladder fully (urinary retention) or may not be able to empty your bladder at all (obstructive bladder).

Some people have symptoms of both overactive and underactive bladder. Those with MS, stroke and herpes zoster are more likely to have both kinds of symptoms. People who suffer from both overactive and underactive bladder may have many urinary tract infections (UTI). UTIs are often the first sign of neurogenic bladder.

How is Neurogenic Bladder Diagnosed?

Since neurogenic bladder involves the nervous system and the bladder, your doctor may run many tests to determine the health of both. Talking to your doctor about your symptoms can be a vital first step. Your doctor may ask you for your medical history and your daily habits. Sometimes doctors may suggest you use an assessment tool or keep a bladder diary to help diagnose your condition. You may also be asked to do a pad test. In this, you wear a pad that has been treated with a special dye and the dye changes color when you leak urine.

Physical exams may be needed as well. For women, the doctor may look at your belly, pelvis and rectum. For men, the belly, rectum and prostate may be checked.

Other tests may include a urine test to look for infection or urodynamic testing to measure how your urinary tract is working. An x-ray or scan may also to help diagnose you.
How is Neurogenic Bladder Treated?
When neurogenic bladder is watched closely and treated, patients can see large improvements in their quality of life. Some ways to manage neurogenic bladder may include:

Lifestyle Changes
For those with less nerve damage a good first step may be lifestyle changes, or sometimes called behavioral treatments. These are changes people can make in their daily life to control symptoms. Some lifestyle changes for neurogenic bladder are:

Scheduled voiding: Instead of going when you first feel the urge, you try to hold it and pass urine at set times, this can lengthen the amount of time you can hold your urine. In some cases, your doctor may ask you to try to go to the bathroom even if you do not feel the need, to try to empty your bladder at routine times.

Limit certain foods and drinks: Some foods and drinks have been found, anecdotally, as irritants to the bladder. Some people have found spicy foods, coffee, tea and colas to be bothersome. It may be of great value to try to notice how food and drinks effect you and your symptoms.

Double voiding: This can be helpful for those who really have a hard time getting their bladder empty, or have the steady feeling to void after already passing urine. With double voiding, after passing urine, you wait a few seconds to a minute and then relax and try again to empty the last bits of urine from your bladder.

Delayed voiding: If you have OAB symptoms, you start by delaying urination a few minutes. You slowly increase the time to a few hours. This helps you learn how to put off voiding, even when you feel an urge.

Pelvic floor exercises: These may help you relax your bladder muscle when it starts squeezing. Your nurse or doctor can tell you about this exercise in more detail.

Medical Treatments
When lifestyle changes do not help enough, your doctor may ask you to try some other choices, such as prescription drugs or catheters.

OAB drugs can help to relax overactive bladder muscles. These may be taken by mouth, or delivered through the skin with a gel or a patch.

Underactive bladder drugs are used if you need help to empty your bladder as they may help make the nerves that control the bladder more active.

Catheters are often used for underactive bladder. This small tube is inserted into your urethra to help your bladder empty fully. There are two types. A continuous catheter stays in place to drain urine at all times. An intermittent catheter is the type you put in yourself many times a day to empty your bladder. Intermittent catheters may be hard for some people with hand coordination problems.

Other treatments may include shots of botulinum toxin, electrical stimulation of nerves or surgery.

The treatment choices offered to you will depend on the cause of your nerve damage and what symptoms you have. Talk with your health care provider to find the best choices to manage your symptoms. It may also be of great value to see a specialist, such as a urologist or a neurologist, who may focus on neurogenic bladder.

About the Urology Care Foundation
The Urology Care Foundation is the world’s leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more, visit the Urology Care Foundation’s website, UrologyHealth.org/UrologicConditions or go to UrologyHealth.org/FindAUrologist to find a doctor near you.

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For copies about other urologic conditions, visit UrologyHealth.org/Download or call 800-828-7866.

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