



Neurogenic Bladder When Nerve Damage Causes Bladder Problems

Urology Care FOUNDATION™

The Official Foundation of the
American Urological Association

WHAT IS NEUROGENIC BLADDER?

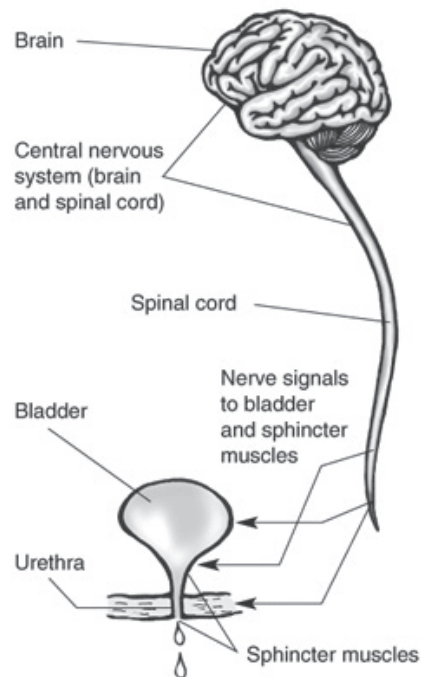
Millions of Americans have neurogenic bladder. Neurogenic bladder is when a person lacks bladder control due to a brain, spinal cord or nerve problem. This includes people with Multiple Sclerosis (MS), Parkinson's disease and spina bifida, and people who have had stroke or spinal cord injury. Major pelvic surgery, diabetes and other illnesses can also damage nerves that control the bladder.

WHAT GOES WRONG?

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 bladder emptying. If these nerves are damaged by illness or injury, the muscles may not be able to tighten or relax at the right time.

In people with neurogenic bladder, the nerves and muscles don't work together well. The bladder may not fill or empty in the right way.

BRAIN, NERVES & BLADDER WORKING TOGETHER



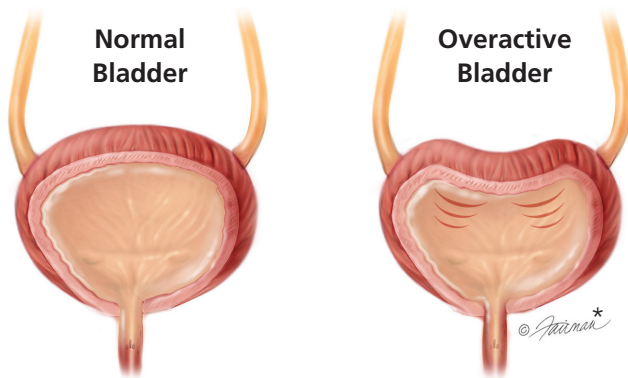
SIGNS AND SYMPTOMS

The symptoms of neurogenic bladder differ from person to person. Symptoms also depend on the type of nerve damage they have had.

Neurogenic Bladder

When Nerve Damage Causes Bladder Problems

Bladder muscles may be **overactive** and squeeze more often than normal. Sometimes this squeezing causes urine to leak before you're ready to go to the bathroom (incontinence). With "overactive bladder" (OAB), you feel a sudden urge to go the bathroom that you can't ignore. After this "gotta go" feeling, some people leak urine—a few drops or a gushing amount. Another OAB symptom is going to the bathroom frequently (more than eight times in 24 hours).



In other people, the bladder muscle may be **underactive** and not squeeze when it needs to. The sphincter muscles around the urethra may also not work right. They may stay tight when you are trying to empty your bladder. With underactive bladder symptoms, you may only produce a "dribble" of urine. You may not be able to empty your bladder fully (urinary retention). And sometimes you may not be able to empty your bladder at all (obstructive bladder).

Some people have symptoms of both overactive and underactive bladder. People with MS, stroke and herpes zoster are more likely to have both kinds of symptoms. Both overactive and underactive bladder sufferers can get repeated UTIs (urinary tract infections). UTIs are often the first symptom of neurogenic bladder.

DIAGNOSIS

Neurogenic bladder involves the nervous system and the bladder, and doctors will conduct different tests to determine the health of both. Talking to your health care provider about your symptoms can be an important first

step. Your provider may ask you for your medical history and your daily habits. They may also give you a physical exam. A physical exam for women may look at the abdomen, pelvis, and rectum. For men, the abdomen, rectum and prostate may be checked. You may also need to leave a urine sample to be tested for infection.

Some patients are asked to keep a "bladder diary" to get a better sense of their day-to-day symptoms. You may also be asked to do a "pad" test. In this, you wear a pad that has been treated with a special dye. This dye changes color when you leak urine.

Your health care provider may order other tests (urodynamic testing) to measure how your urinary tract is working. Your provider may also order an x-ray or scan to help diagnose you.

TREATMENT OPTIONS

Neurogenic bladder is a serious condition, but when it is watched closely and treated, patients can see large improvements in their quality of life.

LIFESTYLE CHANGES

For many patients with less serious nerve damage, the first treatments used are lifestyle changes. Also known as "behavioral treatments," these are changes that people can make in their daily life to control symptoms. Lifestyle changes include:

- Scheduled voiding: Some people are helped by scheduling regular trips to the bathroom.
- Diet: Weight loss and limiting intake of "bladder irritating" foods and drinks may be helpful. (Try avoiding coffee, tea, alcohol, soda, other fizzy drinks, citrus fruit and spicy foods.)
- Double voiding: Urinating and waiting a few minutes before trying to empty your bladder again may help if you can't fully empty your bladder.
- "Quick flicks": These pelvic exercises can help you relax your bladder muscle when it starts squeezing. Your health care provider can explain this exercise in more detail.
- Delayed voiding: If you have OAB symptoms, you start by delaying urination a few minutes. You slowly increase the

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time to a few hours. This helps you learn how to put off voiding, even when you feel an urge.

DRUGS AND CATHETERS

When behavioral treatments alone aren't working well to control your symptoms, drugs or catheters may be prescribed.

- **Drugs for OAB Symptoms:** These drugs relax overactive bladder muscles. These may be taken by mouth, or delivered through the skin with a gel or a patch.
- **Drugs for Underactive Bladder:** If you need help emptying your bladder, drugs that help make the nerves controlling the bladder more active may be prescribed.
- **Catheter for Underactive Bladder:** A catheter is a straw-like tube that you insert to help your bladder empty fully. If you use "continuous catheterization," your catheter stays in place to drain urine at all times." Clean Intermittent Catheterization" (CIC) is where you insert a catheter yourself several times a day. You leave it in only long enough to empty your bladder. CIC can be hard for some people whose nerve damage or other health issue causes hand coordination problems.

OTHER TREATMENTS

If these treatments don't help, your health care provider should send you to a specialist, such as a urologist who may specialize in neurogenic bladder or incontinence. They may be able to offer other tests and treatments. The treatment choices offered to you will depend on the cause of your nerve damage and what symptoms you have. Other treatments include injections of botulinum toxin (Botox®), electrical stimulation of nerves, and surgery.

THE BOTTOM LINE

Neurogenic bladder can be a lot to handle. Talk to your health care provider about any symptoms you have. Find out what can be done to manage your symptoms. When given treatment choices, think about what will work best for you and your lifestyle.

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

- What is neurogenic bladder?

- What causes neurogenic bladder?
- Can neurogenic bladder be prevented?
- Can you help me or do I need to see a specialist in neurourology? If so, how can I find the right one for me?
- Will I need to have tests to find out what is causing my neurogenic bladder?
- Would you explain each test and why you are recommending them?
- What types of treatment are available for my neurogenic bladder?
- Are there side effects from treatment?
- What are the pros and cons of each type of treatment?
- What treatment do you recommend for me and why?
- What happens if the first treatment doesn't help?
- Are there any lifestyle changes I can make that could help my symptoms?

RESOURCES

National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC)

Nerve Disease and Bladder Control
<http://kidney.niddk.nih.gov/kudiseases/pubs/nervedisease/>

National Association For Continence

www.NAFC.org; 1.800.BLADDER

Simon Foundation for Continence

www.SimonFoundation.org; 1-800-23Simon

Urology Care Foundation

Find A Urologist Tool: UrologyHealth.org/FindAUrologist

It's Time to Talk about OAB: UrologyHealth.org/OAB

MS and Your Bladder: UrologyHealth.org/NeurogenicBladder, click on "Tool for MS Patients."

Neurogenic Bladder: UrologyHealth.org/NeurogenicBladder

You may download this and print it yourself from UrologyHealth.org/NeurogenicBladderFactSheet. For copies of other printed materials about urologic conditions, visit UrologyHealth.org/Order or call 800-828-7866.