Neurogenic bladder describes a number of urinary conditions caused by the malfunction of or trauma to the brain and the central nervous system. It occurs when the bladder is unable to relax or contract.

Millions of Americans live with neurogenic bladder. When the communication between the nervous system and bladder are disrupted by nerve damage, the ability of the bladder to fill and empty in a coordinated fashion is disrupted and may result in incontinence. The nerve damage can be caused by spinal cord injury; spina bifida; stroke; infection of the brain or spinal cord; or diseases such as diabetes, multiple sclerosis (MS) or Parkinson's disease.

Neurogenic bladder presents in two ways: overactive bladder (OAB), or underactive bladder (UAB). Overactive bladder is the sudden and urgent spasms of the bladder muscles, regardless of the amount of urine in the bladder. This condition causes a frequent feeling of needing to urinate and may cause the involuntary loss of urine. With underactive bladder, the flow of urine is blocked by the bladder muscles not squeezing when they need to, producing a “dribble” of urine or preventing the emptying of the bladder leading to urinary retention. Some people may experience symptoms of both overactive and underactive bladder. It is most common in people with MS or stroke.

The symptoms of neurogenic bladder differ from person to person and depend on the type of nerve damage. Individuals with neurogenic bladder are more prone to urinary tract infections (UTIs); this is often the first symptom of neurogenic bladder. Other symptoms include: hematuria, pain, abnormal renal ultrasound and change in renal function.

Complications of neurogenic bladder include constant urine leakage that can cause skin breakdown leading to pressure sores; and kidney damage.

Proper treatment for neurogenic bladder is critical. Many individuals with more severe nerve damage are often prescribed clean intermittent self-catheterization (CIC) or continuous catheterization by way of an indwelling catheter. Clean intermittent self-catheterization is often preferred to indwelling catheterization, which has a high risk of recurrent UTIs. CIC is when an individual inserts a catheter (a straw like tube) into the bladder through the urethra. It is left in long enough to drain the bladder, then removed and disposed and is performed several times per day. Suprapubic catheterization may be used if patients cannot self-catheterize.
Drugs may be prescribed for control of OAB and UAB symptoms. Surgery is a last resort treatment. For patients with less serious nerve damage, lifestyle changes are often the first treatments and may include scheduled voiding, diet changes, pelvic exercises or delayed voiding.

Neurogenic bladder is a serious condition, but when treated, patients experience improvements in their quality of life.

About the Author

Lesley Phelan Dally, MSSW, CCM is a social worker and certified case manager who has been practicing in the healthcare field for the last decade, primarily at Craig Hospital where she specialized in the case management of spinal cord injury rehabilitation. She has also worked in the areas of emergency psychiatric intervention and domestic violence. Lesley is a member of the Rocky Mountain Society of Urologic Nurses & Associates and the United Spinal Association. She was elected to be the Denver Regional Representative for the National Association of Social Workers in 2015 and will finish her 2 year term in August 2017. She is licensed in Colorado with a Master of Science in Social Work and is certified as a Case Manager by the Commission for Case Manager Certification. Lesley joined the Numotion Medical Supply Division in April 2016 as an Account Manager.