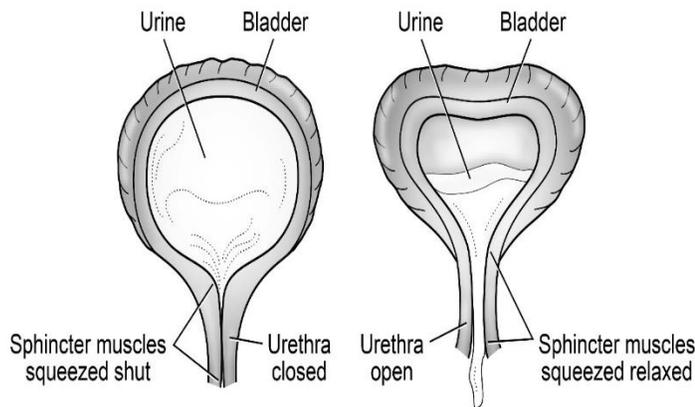


Neurogenic Bladder

The bladder has two main functions: hold and empty urine. The brain sends a signal to the muscles of the bladder to either tighten or relax. Neurogenic bladder is when these signals don't work right and the bladder muscles are not able to hold or empty urine.



Causes

In children, this may be caused by a birth defect such as spina bifida, tethered cord or other spinal cord trauma. A child may get it later in life from things like a tumor, accident or trauma.

Symptoms

Every child is different. Symptoms may depend on the cause. Below are some common symptoms and conditions that can occur:

- Urinary incontinence – the muscles in the bladder are not able to hold urine in.
- Urinary retention – the muscles are not able to relax, and the bladder cannot empty like it should.
- Hydronephrosis – stretching in the kidney may occur if the bladder is not able to empty often.
- Vesicoureteral reflux – urine in the bladder backs up into the kidneys. This may cause kidney damage.

- Urinary tract infections (UTI) – the bladder cannot empty well which causes an increased risk for infection.
- Bladder stones - when urine sits in the bladder for a long time, it may grow into a stone.
- Neurogenic bowel – damage to the nerves that control bowel habits which causes incontinence or constipation.

How It Is Diagnosed

Your child's doctor will review their health history and perform an exam. Your child may need tests to inspect the bladder and nervous systems. Tests may include:

- Renal bladder ultrasound. This checks your child's kidneys, ureters and bladder.
- Voiding cystourethrogram (VCUG). This checks for urine that goes back into the kidneys.
- Blood work. This checks if the kidneys are working well.
- Urodynamic test. This measures the pressure, size and function of the bladder.
- Magnetic resonance imaging (MRI). This checks the spinal cord for damage or looks for any changes from a birth defect.
- Cystoscopy. This looks at the inside of the bladder with a camera to check for defects.

Goals

- Prevent kidney damage and keep them working well.
- Decrease or stop wetting accidents.
- Promote self-esteem.

Treatment Options

Treatment depends on the cause. Talk with your provider about the best option.

- Anti-cholinergic medicines. These medicines help relax the bladder and relieve spasms.
- Clean intermittent catheterization (CIC) to empty the bladder at regular times.
- Medicines to prevent a UTI.
- Overnight catheter drainage.
- In some cases, surgery or bladder injections may be needed.

A care plan will be set up using the options that meet your child's needs.

Resources:

<http://www.urologyhealth.org>

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 10/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7564