

Managing **NLUTD**

What is NLUTD?

Neurogenic Lower Urinary Tract Dysfunction (NLUTD), also referred to as neurogenic bladder, occurs when control of the bladder is impaired due to either injury or disease of the nervous system. Symptoms of NLUTD vary depending on the location and extent of damage to the nervous system. There are multiple ways that NLUTD can result in bladder dysfunction: overactive NLUTD, underactive NLUTD, detrusor sphincter dyssynergia (loss of coordination between the bladder and sphincter muscles), and combinations of these.

Please see our fact sheet "What is NLUTD?" for more in-depth information.

How can I manage NLUTD and get back to living my life?

There is no cure for NLUTD. However, with treatment of NLUTD you can live a healthy and full life. Managing your symptoms is important to prevent complications such as urinary tract infections (UTIs) and damage to your kidneys. Managing symptoms is also important for your mental and emotional health and for your ability to get out in the community, socialize, work and play. Your urologist or other healthcare providers can help you find the treatment methods that fit your symptoms and lifestyle. These are some of the options:

- Lifestyle changes such as urinating at scheduled intervals, urinating twice at each visit to the bathroom, or limiting foods, drinks, supplements, and medications that can irritate the bladder.
- Pelvic floor therapy to help strengthen and coordinate pelvic floor and bladder muscles.
- Oral medications or BOTOX® injections to relax the bladder.
- Urinary catheters to empty the bladder. Catheterization may be either "in and out" (also called intermittent) at scheduled times during the day or "indwelling" to continuously empty the bladder into a collection bag. Either type can be performed via the urethra or a surgically created opening (stoma).
- Surgical options may be helpful, such as:
 - Bladder augmentation, using a portion of the bowel to increase bladder size and capacity;
 - Urinary diversion, which allows for easier access to catheterization through a stoma (surgical opening) in the lower abdomen.
 - Sphincterotomy, which involves making an incision in the urethral sphincter or sphincter resection to remove a portion of the sphincter, allowing urine to flow out of the bladder more easily.
 - Artificial sphincter, which reduces incontinence through an inflatable cuff around the urethra. There is a pump under the skin to deflate the cuff.

Which treatment options may be appropriate for each type of NLUTD?

Management options are individualized for each person based on their bladder function, symptoms and goals. In general, these are the treatment options that may be considered for each type of NLUTD.

| Management Option | Overactive NLUTD | Underactive NLUTD | Combination Overactive/ Underactive | Detrusor Sphincter Dyssynergia |
|---|------------------|-------------------|-------------------------------------|--------------------------------|
| Timed Voiding | X | X | X | |
| Double Voiding | | X | X | |
| Limiting food, drinks, supplements, and medications that irritate the bladder | X | | X | |
| Pelvic Floor Therapy | X | X | X | |
| Oral medication to relax bladder | X | | X | X |
| BOTOX® injections to relax bladder | X | | X | X |
| Emptying bladder with urinary catheter | X | X | X | X |
| Bladder Augmentation | X | | X | |
| Urinary Diversion | X | X | X | X |
| Sphincter Resection | | X | X | |
| Sphincterotomy | | | | X |
| Artificial Sphincter | | X | X | X |

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