

BOTOX® neurogenic detrusor overactivity (NDO)

Your doctor has prescribed BOTOX® (onabotulinumtoxinA) to help manage your bladder symptoms. BOTOX works by temporarily weakening overactive muscles that may cause frequent urination, urinary urgency or leakage of urine.

This booklet has been designed to help you learn more about how BOTOX may help your bladder symptoms that are caused by your neurological problem (i.e., multiple sclerosis (MS), spinal cord injury (SCI), spina bifida, or other).

UNDERSTANDING BOTOX

What is BOTOX?

OnabotulinumtoxinA (also known as BOTOX) is a medication made from a toxin that is produced by a bacteria called *Clostridium botulinum*.

How does BOTOX work?

BOTOX works by partially blocking the nerve impulses to a muscle group or organ (i.e., the bladder). **BOTOX decreases excessive contractions of the bladder.** The muscle relaxation is reversible and its effect lasts for a limited time (usually 3-6 months).

When injected into the bladder wall, BOTOX acts to prevent urine leakage from uncontrolled contractions. Studies have shown BOTOX reduces urine leakage in patients who have a neurological condition, such as MS or SCI.

How often will I get BOTOX treatments?

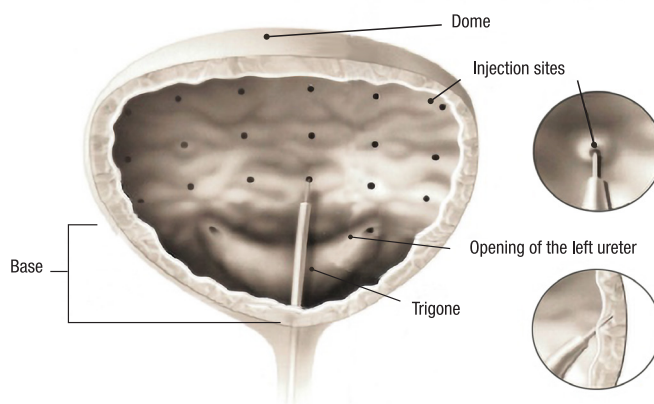
Improvement may happen quickly, within 24-48 hours after injection. The maximum effect usually appears within the first 2 weeks. The effect should last up to 6 months. In some people, it will last only 3 months, but others may have a longer lasting effect. Each patient is different.

It is very safe to repeat BOTOX. Most patients will have repeat treatments every 6 months.

Your doctor will schedule treatments at an interval that is appropriate for you.

BOTOX should only be given by doctors with the appropriate qualifications and experience in the treatment and the use of required equipment.

How is BOTOX administered?



Your doctor will pass a small telescope (cystoscope) into the bladder. BOTOX is then injected into the bladder wall with a very small needle through the cystoscope. The procedure is usually done under local anesthetic, meaning you will be awake. The procedure is very well tolerated. In some cases, your doctor may suggest you have the procedure under sedation/general anesthetic in the operating room.

The picture above shows the bladder wall and the areas where BOTOX can be injected.

The entire procedure takes about 20 minutes, but the injection part of the procedure takes about 5 minutes.



Cystoscope into the female bladder



Cystoscope into the male bladder

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How are the next treatment sessions scheduled?

Your doctor will schedule a followup visit after the first injection. You may be asked to come to that appointment with a full bladder so that your doctor can check how well you empty the bladder following the procedure (uroflow and bladder scan). Your doctor will determine whether a repeat treatment is right for you. Repeat treatments may be scheduled based on how you responded to the previous injection, and your underlying neurologic condition.

You and your doctor will decide the interval and dose of BOTOX that are best for your bladder condition.

If you feel that the effect of BOTOX is not optimal, let your doctor know.

Will I need to be catheterized after receiving BOTOX?

Urine retention (not being able to urinate) is a rare complication after having a BOTOX injection, affecting 1-5% of patients. In such cases, a small tube called a catheter can be placed into the bladder through the urethra in order to empty the bladder. If you already perform self-catheterization prior to your procedure, then this is not a risk for you. Your doctor may have you learn to catheterize yourself prior to the procedure if they are concerned that you won't be able to urinate.



THINGS TO CONSIDER BEFORE TREATMENT

When should BOTOX not be used?

Do not use BOTOX if you:

- are allergic to, or have a sensitivity to, any of the ingredients
- have a urinary tract infection
- have any muscle disorders in other parts of your body, including myasthenia gravis, Eaton Lambert Syndrome or amyotrophic lateral sclerosis (ALS)
- are not willing and able to have catheterization initiated
- are pregnant or breastfeeding

If you take medications that thin your blood (e.g., aspirin, clopidogrel, warfarin, rivaroxaban, etc.), ask your doctor whether these medications should be paused prior to the procedure.

Let your doctor know if you receive BOTOX treatments for any other condition.

POSSIBLE SIDE EFFECTS

What side effects are associated with BOTOX treatment?

Common side effects that have been reported after BOTOX include:

- mild burning with urination
- bleeding
- urinary tract infection
- inability to empty the bladder
- muscle weakness
- muscle spasms
- tiredness
- difficulty sleeping (insomnia)
- constipation

Keep in mind that this is not a complete list of possible side effects of BOTOX. Be sure to talk to your doctor about any side effect you may experience.

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FREQUENTLY ASKED QUESTIONS

When can I stop getting BOTOX treatments?

You can stop your BOTOX treatments at any time. Your bladder symptoms will return to what they were like prior to starting BOTOX.

Is there anything I should tell my doctor while I am being treated with BOTOX?

Let your doctor know if you experience any serious side effects after treatment, such as a urinary tract infection or the inability to empty your bladder. If you experience difficulty voiding, catheterization may be required.

Tell your doctor if you experience any difficulties swallowing food, speaking, or breathing while taking BOTOX, as this could be related to the dosage. Difficulty in swallowing food, ranging from very mild to severe, can persist for 2 to 3 weeks after injection, or even longer.

You should also tell your doctor about any other medications, including any you have bought at your pharmacy, supermarket, or health food store. Some medications may interact with BOTOX.

How can I monitor my condition?

It may be helpful to keep a diary to track the number of incontinence episodes you experience each week. Share the diary with your doctor to help monitor your condition.



Can I be treated with BOTOX for urinary incontinence associated with a neurological condition if I am already receiving BOTOX treatment for another condition?

It is important that you let your doctor know that you are receiving BOTOX for another condition.

Are there any possible drug interactions associated with BOTOX?

Yes. The effect of BOTOX may be increased by certain types of antibiotics known as aminoglycoside antibiotics (e.g., streptomycin, tobramycin, neomycin, gentamicin, netilmicin, kanamycin, amikacin), spectinomycin, polymyxins, tetracyclines, lincomycin, or any other medications that interfere with the communication of nerves and muscles.

Is BOTOX covered by public or private insurance plans?

BOTOX may be covered by your provincial health plan or private insurer. Speak to your doctor to find out whether the cost of BOTOX can be reimbursed for your condition.



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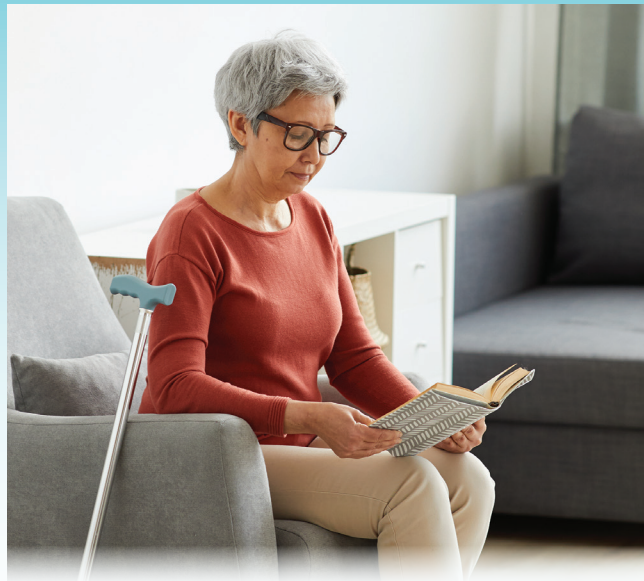
ADDITIONAL RESOURCES

For more information about urinary incontinence associated with a neurological condition, visit:

Canadian Urological Association
cua.org

The Canadian Continence Foundation (TCCF)
canadiancontinence.ca

International Continence Society
ics.org



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