

# Onabotulinumtoxin A (Botox®) for Cervical Dystonia/Spasmodic Torticollis

## What is cervical dystonia and how is it typically treated?

Cervical dystonia is a rare neurological disorder involving involuntary muscle contractions in the neck that cause the head to twist or turn into uncomfortable and often painful positions.

Botulinum toxin injections are recommended as standard therapy to treat most patients with cervical dystonia. Botulinum toxin is produced by the bacteria *Clostridium botulinum*.

Botulinum toxin works by blocking the signals that are sent from the nerve cells to the muscles. When these signals are blocked, the release of acetylcholine is prevented and the affected muscles are unable to contract. This muscle relaxation helps reduce pain intensity. Botulinum toxin also helps manage pain by blocking the release of certain chemical messengers involved in the transmission of pain signaling (e.g., substance P, calcitonin gene-related peptide (CGRP), and glutamate).

In Canada, three types of botulinum toxin type A are available for cervical dystonia treatment:

- Onabotulinumtoxin A (Botox®)
- Abobotulinumtoxin A (Dysport®)
- Incobotulinumtoxin A (Xeomin®)

Each botulinum toxin product is a unique prescription drug and cannot be exchanged with another. At present, there is little evidence to support the use of one specific product over another. Product selection is typically based on clinician and patient preference, availability, and drug coverage.

## How is Botox® used to treat cervical dystonia?

- Botox® is injected into multiple muscles by a physician with appropriate qualifications and experience. Electromyographic (EMG) guidance may be used to determine the best location to inject the medication.
- The Botox® dose is individualized to each patient based on the neck and head symptoms experienced, specific muscles involved, location of pain, and muscle mass. A range of 200 to 360 units is common. The maximum adult dose in a three-month period is 360 units.
- Botox® only provides temporary relief. Repeated injections can be considered when the injection benefit wears off and are typically separated by at least 3 months.

## When does Botox® start to work?

Improvement in cervical dystonia typically starts within 2 weeks of Botox® injection with maximum benefit occurring within 6 weeks. The benefits often last 3 to 4 months.

CARING FOR THE BODY, MIND & SPIRIT SINCE 1869

---

Renowned for compassionate care, St. Joseph's is one of the best academic health care organizations in Canada dedicated to helping people live to their fullest by minimizing the effects of injury, disease and disability through excellence in care, teaching and research.



[sjhc.london.on.ca](http://sjhc.london.on.ca)

## What special precautions should I follow?

- Let your physician know if you are taking any anticoagulants (blood thinners). Most patients can continue their anticoagulants prior to, during, and after receiving botulinum toxin injections given the low risk of bleeding complications.
- Avoid rubbing the injection sites after Botox<sup>®</sup> injection. This prevents excessive spreading of Botox<sup>®</sup> outside the area of injection.
- Botox<sup>®</sup> should **NOT** be used in patients with neurological conditions that cause paralysis or muscle weakness (e.g., myasthenia gravis).
- The literature on Botox<sup>®</sup> injection in pregnant or breastfeeding women is limited. Speak with your health care provider if this situation applies to you.

## What are the possible side effects of this medication?

Botox<sup>®</sup> is generally well tolerated. Side effects are typically reversible with time.

- The most common side effects include slight discomfort/soreness; muscle weakness; stiffness; and/or bruising at injection site. Less commonly, flu-like symptoms may occur.
- Allergies to Botox<sup>®</sup> are uncommon.

***If you experience difficulties related to swallowing, speech, or breathing following the administration of Botox<sup>®</sup>, please seek immediate medical attention.***

## Drug cost/coverage

- If you are an Ontario Drug Benefit (ODB) recipient, Botox<sup>®</sup> drug coverage for cervical dystonia requires the “limited use (LU)” code #130. This code is valid for one year but can be renewed on an annual basis if treatment is successful.
- Botox<sup>®</sup> treatment is typically covered by private drug plans but often requires paperwork to be completed in advance.

## How should this medication be stored?

- Botox<sup>®</sup> should be stored in the refrigerator at 2 to 8°C.
- To minimize issues related to Botox<sup>®</sup> transportation and temperature control, it is best to pick up the prescription at a community pharmacy immediately before your injection appointment.
  - If your injection is being performed at St. Joseph’s Hospital, you may wish to have the prescription dispensed at the hospital’s retail pharmacy (Prescription Shop) located in the main lobby of Grosvenor Entrance 1, Zone A, Level 1.
  - If your injection is being performed at Parkwood Institute, the prescription may be dispensed at the Parkwood Institute Mental Health Care Building retail pharmacy (Prescription Shop 2) located in the lobby of the main entrance.