

Botulinum Toxin (Botox) for Voice Therapy

Botulinum Toxin (Botox) injections can be used to treat muscle spasms in many voice disorders. A muscle spasm is when your muscle cramps, or contracts, and is unable to relax. Botox weakens or partially paralyzes your muscles.

Common voice disorders include:

- **Spasmodic dysphonia (SD)** is a disorder that affects the muscles of your larynx (voice box). When you have these muscle spasms, your voice sounds strained or “cuts out”. In mild cases, it may cause your voice to be unstable with a change in pitch.
- **Essential tremor** is a disorder that can cause your head, hands or voice to shake. Medicine can be used to treat the shaking of your hands and head, but treatment for your voice is different.
- **Muscle tension dysphonia (MTD)** is a disorder that affects the muscles of your voice box and causes your muscles to become tense and tight when you speak. Your voice may sound “choppy” at times.
- **Respiratory dystonia** is a disorder that affects your respiratory muscles. Your respiratory muscles help you breathe. This disorder causes your muscles to spasm and you may have a hard time breathing.
- **Aphonia** is a disorder that affects your voice box. You may be unable to talk or make any sounds.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

How is Botox given?

Botox is given as an injection into your muscle. The amount of medicine used is very small. After a Botox treatment, you may not notice a change right away. Botox usually starts to work in about 3 to 5 days, but **best results may not be seen until 2 to 4 weeks after treatment**. The Botox treatment can last up to 4 months. Since Botox wears off over time, your treatment may need to be done every 2 to 4 months.

Your doctor will work with you to make a treatment plan that helps you get the best voice possible. You may get Botox treatments into one or both of your vocal cords at the same time. The amount and number of times Botox is injected can be different at each appointment.

Your treatment will be done in the clinic. You can eat before and after your injection. No blood work is needed before your injection. Botox only works in the area where it is injected. It should not cause problems with other medicines.

Possible Side Effects of Botox Treatment

Common side effects may include:

- Mild “cold like” symptoms.
- A change in your voice may happen if you are sensitive to Botox. Your voice may become weak and “breathy”. This usually lasts about 1 to 2 weeks but may last up to 1 month.
- Problems with swallowing can happen. Most of the time this is very mild and does not require a change in the food you eat. It may last 7 to 10 days.
- You may develop antibodies or become resistant to Botox. Your doctor will change your treatment if this happens.
- Using Botox over time may cause the small muscles of your vocal cord to change shape (become bowed). This can cause a weak voice and may require other treatment.
- Botox may not work for you. You may still have voice problems after this treatment. Your voice may not improve, but you may be able to speak easier.

What happens during the treatment?

- The injection is done using electromyography (EMG) guidance. The EMG machine measures your muscle activity and will help your doctor make sure the Botox is placed in the area of your muscle with the most activity or spasm.
- You may sit or lie down for the treatment.
- Your neck will be cleaned with alcohol. A medicine (Lidocaine) will be injected into your neck to numb the area. You may feel a light burning at the injection site.
- You will be asked to say a vowel, such as the letter “E”, to make your muscle contract.
- The Botox is attached to the EMG needle. The needle is placed into your muscle just below your voice box. The needle only goes in less than 1 inch. Most treatments take less than 60 seconds per vocal cord.
- You can talk during the treatment but you should not swallow. This can move the needle out of place.
- You may feel pressure or burning in your throat and ear. This should only last a few minutes. This happens because your voice box and ear share the same nerve.
- Sometimes, Botox will be given from above your vocal cords using a special scope. Your doctor will talk to you if this type of treatment is needed.

What happens after the treatment?

You may not notice much difference the day of your treatment. Starting the day after your treatment you need to be very careful with how you eat.

- Take small bites and sips. Make sure you watch for problems with swallowing or choking.
- Chew your food very well. If you have any problems with swallowing, it should only last 7 to 10 days.
- **If you have choking or swallowing problems, call your doctor right away.**

Important Things to Tell Your Doctor

Keep a daily log and write notes about how Botox has helped or if you have any problems with your first few treatments. This will help your doctor plan your next treatment. Your dose of Botox may be changed to get the best voice for you with little side effects.

Here is the information you will need to track and write down on your daily log.

Write down how long after your treatment you had:

- Any problems with swallowing.
- Problems with a weak or breathy sounding voice.
- Any improvements in your voice (stronger or better voice).

You will also need to write down the following:

- How long the Botox treatment worked.
- When the Botox treatment stop working.