

Botox Injections for Tight Muscles

Botox is used to relax tight (spastic or dystonic) muscles in some children with neuromuscular conditions.

What is Botox?

Botox is the brand name for botulinum toxin type A. This is a drug that relaxes muscles by blocking overactive nerve signals to muscles. Botox has many medical uses, but in the Rehabilitation Clinic it is used to relax tight (spastic or dystonic) muscles. It has been used safely in children since the early 1990s. There are other types of botulinum toxin including Myobloc and Dysport, but Botox is the type most often used at Seattle Children's Hospital.

When might Botox help my child?

Botox can help relax the tight muscles in children and adolescents with cerebral palsy, brain injury, stroke and spinal cord injury. You and your doctor will discuss the reasons that Botox might help your child.

Botox can help with tight muscles that:

- Make it difficult for your child to move, walk or use their arms or hands
 - Make it hard to wear braces or splints
 - Make it hard for family to change clothes or diapers
 - Limit movement of muscles and joints
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How does Botox work?

Botox is injected into a tight muscle with a small needle. The medicine stops the signal between the nerve and the muscle. Blocking this nerve signal tells the muscle it can relax. The medicine usually starts working in 3 to 5 days.

How long does Botox last?

The effect of Botox is temporary and usually lasts from 3 to 6 months. The medicine wears off and the muscles get tight again. For some kids the benefits last a little longer. The shots may need to be repeated, but your child's provider will wait at least 3 months between injections.

What are the possible side effects?

Side effects are very uncommon, but can include pain, redness, bruising and infection at the injection site. Botox causes weakness in the muscle injected, which is the goal, but can cause weakness in nearby muscles also. Some children experience flu-like symptoms or allergic reaction.

Very, very rarely, Botox can cause side effects that are far away from the injection site and include difficulty swallowing, dry mouth, or body weakness including trouble breathing. There is some research that shows that Botox may cause scarring of the muscles over time. Discuss these side effects with your provider.

To Learn More

- Rehabilitation Clinic
206-987-2114, option 1
- Ask your child's healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.

What are other ways to manage my child's tight muscles?

There are many ways to decrease a child's muscle tightness. Different methods your provider may use include:

- Oral medicines such as baclofen, diazepam (Valium), trihexyphenidyl (Artane) or dopamine (Sinemet)
- Stretching
- Orthotics such as ankle braces (ankle foot orthoses or AFOs) or hand splints
- Positioning (adjusting the body in the wheelchair or other chair)
- Surgery to lengthen the tendons or muscles
- Neurosurgery for placement of a baclofen pump or a selective dorsal rhizotomy

How do I schedule the Botox injections?

Botox injections are done in the clinic setting without any anesthesia. Some children benefit from a medicine to help them relax. This medicine is called Versed and is scheduled differently. If your child is having multiple shots, you and your doctor may decide to have the injections done in the Outpatient Procedure Center under anesthesia. You can call the Rehabilitation Department to schedule the appointment at 206-987-2114, option 1.

What will happen during the Botox injections procedure?

Botox is a muscle injection similar to an immunization. To reduce any pain or discomfort during the injection, we use a numbing cream (lidocaine) or cold spray on the sites that will be injected. The cream is held in place with plastic wrap. This cream usually takes about 20 to 30 minutes to work after it is placed on your child. The cold spray works immediately.

Your child will sit or lie down on the exam table during the injections. They may need to remove some clothing depending on the muscles that are injected. You can sit with your child to comfort them. You can also bring a toy with you to clinic that you know might distract your child.

A nurse or medical assistant will assist your provider in gently holding the arm or leg that will be injected. They may use a muscle stimulator that is attached to the needle. This stimulator allows your doctor to make sure that they are in the correct muscle. When a stimulator is used it gives a tingling feeling to your child. The numbing cream or cold spray will help decrease the pain when the needle is placed under the skin. Your child will likely still feel the needle in the muscle and some pressure as the medicine is injected into the muscle.

We have child life specialists that can work with your child to help relieve tension, express concerns, and feel more in control about their hospital experience. If your child needs tips for coping or preparing for the injections, please ask your healthcare team about how to connect with a child life specialist.

What do I need to know for after care?

We may place a band-aid on the injection site. Your child will not have any restrictions after the Botox injections and can resume therapy, use of orthotics or splints, and a home stretching program right away. They can take a bath or go into a pool.

Your provider will see your child back in clinic in 6 to 8 weeks to evaluate their response to the Botox injections. The decision to do more injections depends on your child's response to the medicine. You will discuss this with your provider at the follow-up visit.