



River North Pain Management Consultants, S.C.,

Axel Vargas, M.D.,

Regional Anesthesiology and Interventional Pain Management.

680 North Lake Shore Drive, Suite # 830
Chicago, Illinois, 60611

Phone: (888) 951-6471

Fax: (888) 961-6471

Clinical Coordinator: (312) 961-6471

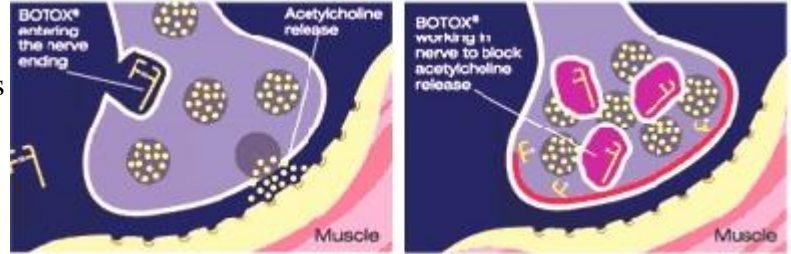
E-mail: admin@rivernorthpmc.com

www.rivernorthpmc.com

www.ibji-gw.com

BOTOX INJECTIONS FOR MUSCLE SPASM

BOTOX® is a therapeutic muscle-relaxing agent that works at motor nerve endings (nerves that lead to muscles). It is in a class of drugs called neurotoxins. When considering neurotoxin therapy, it is important to understand how the product works, the history of its use in patients, its protein content, and possible side effects. This information will help you understand more about BOTOX®: what it is, how it works, and how it can help you.



What is BOTOX®?

BOTOX® is a novel therapeutic agent derived from the bacterium, Clostridium Botulinum. Also known as Botulinum Toxin Type A, the brand BOTOX® is produced in controlled laboratory conditions and given in **extremely small** therapeutic doses. BOTOX® is indicated for the treatment of blepharospasm associated with dystonia in patients 12 years of age and above. BOTOX® is being investigated for several conditions associated with overactive muscle activity, known as myofascial pain. Botulinum Toxin Type A is the most studied of the seven different serotypes of botulinum toxin (A, B, C1, D, E, F, G). Each serotype has different properties and actions. No two are exactly alike.

How does BOTOX® work?

Normally your brain sends electrical messages to your muscles so that they can contract and move. The electrical message is transmitted to the muscle by a substance called acetylcholine. BOTOX® works to block the release of acetylcholine and, as a result, the muscle doesn't receive the message to contract. This means that the muscle spasms stop or are greatly reduced after using BOTOX®, providing predictable and reliable relief from symptoms.

BOTOX® is not a cure. For many patients, however, its effects have been dramatic - symptoms usually begin to dissipate within a few days and the effects can last up to six months.

How is BOTOX® administered?

BOTOX® is injected into the muscle. Your physician will determine the muscle(s) in need of treatment.

680 North Lake Shore Drive, Suite # 830
Chicago, IL. 60611

Phone: (888) 951-6471 Fax: (888) 961-6471 Clinical Coordinator: (312) 961-6471
admin@rivernorthpmc.com

www.rivernorthpmc.com www.ibji-gw.com

Does the treatment hurt?

A very fine needle is used for the one to three injections that are usually given per muscle. Some patients report minor and temporary discomfort from treatment.

When does BOTOX® start to work?

Usually, you will see the effects of BOTOX® within three days. The maximum benefit is reached in one to two weeks.

How long does the effect last?

Given its unique mechanism of action, BOTOX® offers sustained relief, dose after dose over the course of long-term treatment. The relief you will feel from a single treatment of BOTOX® will normally be sustained for approximately three to six months. You may notice a gradual fading of its effects. At this point you will return to your physician for additional evaluation and treatment. BOTOX® injections can be repeated in three to six months. Symptoms may vary throughout the course of the condition, and so the degree of relief and duration of effect varies from person to person. Consult your physician, who has special knowledge about how to achieve the best possible results with BOTOX® for your individual case.

How long can I be treated with BOTOX®?

Treatment with BOTOX® can typically be repeated indefinitely. BOTOX® has been used for over 10 years worldwide. Acceptable safety in long-term treatment has been well established. There are a number of factors that can impact the long-term usage of BOTOX®. These include:

1. **Setting appropriate expectations** - Changes occurring with subsequent BOTOX® injections may be less dramatic than the first injection.
2. **Appropriate muscle selection** - Identifying and injecting the affected muscle can be difficult, complicated by the changing pattern of muscle involvement and progression of the disorder.
3. **Adequate dosing** - Changes in response may require dose adjustment.

680 North Lake Shore Drive, Suite # 830
Chicago, IL. 60611

Phone: (888) 951-6471 Fax: (888) 961-6471 Clinical Coordinator: (312) 961-6471
admin@rivernorthpmc.com

www.rivernorthpmc.com www.ibji-gw.com

4. **Minimizing exposure to neurotoxin complex proteins¹** - Botulinum toxins contain proteins. In certain circumstances, when foreign proteins enter the body, the natural response is to form antibodies to the protein. When antibodies are formed, the effect may be that one is no longer able to respond to the therapy. High doses and frequent injections of botulinum toxin have been linked to the formation of antibodies. ^{1,2} Antibody formation with BOTOX® is rare. The likelihood of forming antibodies is reduced by having treatment no more frequently than about every three months. BOTOX® has approximately 5 ng of neurotoxin complex proteins per 100 unit vial, a relatively low amount of protein, which may help to further minimize the potential to form antibodies.

Is BOTOX® a new treatment?

No. BOTOX® has been used for over 10 years in hundreds of thousands of patients worldwide. The American Academy of Neurology, American Academy of Ophthalmology, and National Institutes of Health have recognized BOTOX® (Botulinum Toxin Type A) as a valuable treatment.

Is BOTOX® right for me?

Ask your physician if BOTOX® is the right treatment for you. BOTOX® should not be used during pregnancy, if you are nursing, or if you are taking certain medications. Only your physician can determine the best course of therapy. The effects of BOTOX® may be increased with the use of certain antibiotics or other drugs that interfere with neuromuscular transmission. Ensure that your physician is aware of any current medications you are taking.

What side effects may be experienced when using BOTOX®?

All medications have some side effects. With BOTOX®, side effects are usually transient and mild to moderate in nature. Some people notice temporary weakness of muscles or discomfort at the injection site. Other less common side effects may include low grade fever, or flu-like symptoms for the first 24 hours. If you have any questions regarding the use of BOTOX® treatment, please consult your physician.

680 North Lake Shore Drive, Suite # 830
Chicago, IL. 60611

Phone: (888) 951-6471 Fax: (888) 961-6471 Clinical Coordinator: (312) 961-6471
admin@rivernorthpmc.com

www.rivernorthpmc.com www.ibji-gw.com