This material will help you understand the basics of botulinum toxin injections, and help you prepare for the procedure.

**What are botulinum toxin injections?**

Botulinum toxin type A (Botox®, Dysport, Xeomin) is a protein that causes muscle weakness. When it is injected into a specific muscle, it causes the area to relax. Botulinum toxin injections are an effective treatment for different types of muscle spasms including limb dystonia and cervical dystonia.

**What should I expect on the day of my injections?**

On the day of your injections, you will arrive at the Kellogg Eye Center or Taubman Clinic. You will have the injections in a regular exam room or clinic procedure room. At the beginning of the procedure, your doctor may touch your muscles carefully to find which muscles are affected by spasms. Your doctor will then use a small needle to inject botulinum toxin into the areas. Pain is usually mild during the injections. Each muscle will be injected 1-3 times. In some cases, your doctor may use a special machine called an electromyograph (EMG). An EMG helps find muscle spasms and guide the injections.
What should I expect after the injections?
You can resume normal activities right away after receiving your injections. Be careful not to rub the injection sites. This may make the toxin spread to other areas.

When will I notice results?
Usually, people notice improvements in their symptoms within 1 to 14 days. Let your doctor know if you do not have any improvement or if the change is small. Your doctor may decide to adjust your dosage or the location of injections. It may take a few rounds of injections before they are effective. When effective, botulinum toxin injections will lessen your symptoms, but you should not expect them to completely go away.

Are there complications after having botulinum toxin injections?
Botulinum toxin injections are a safe treatment. The most common side effects are:

- Pain, swelling or bruising at the injection site
- Muscle weakness

In addition, people with cervical dystonia may have some difficulty swallowing after injections. All of these side effects are mild and temporary. Serious side effects are unlikely, but possible. In very rare cases, botulinum toxin injections can cause muscle weakness,
loss of bladder control, or trouble breathing. Call your doctor right away if you have any of these symptoms.

**When will I need another round of botulinum toxin injections?**

Typically, the effects of the injections will last 3 months. You can receive more injections when you begin having symptoms again. The benefits of the injections will usually not decrease as you have more treatments.

**For more information, scan this code with your smartphone or visit the website listed.**

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: Kristin Maurer, BA, MPH candidate
Reviewers: Lindsey DeLott, MD and Gale Oren, MILS

Unless otherwise noted, Patient Education by University of Michigan Health System is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.
Last Revised 1/2015