

**DEPARTMENT OF NEUROLOGICAL SCIENCES
SECTION OF MOVEMENT DISORDERS**

**PATIENT INFORMATION SHEET
Botulinum Toxin Injections**

Indications for the Procedure: Certain movement disorders including: cervical (neck) dystonia, blepharospasm (a dystonia that affects the eyes), Meige's syndrome (dystonia that affects the face and eyes), limb (arms and legs) dystonia, truncal (abdomen, waist, back) dystonia, and hemifacial spasm (movements that involve only one side of the face or the other) may be treated with injections of botulinum toxin (i.e. BOTOX[®] (botulinum toxin type A) or Myobloc[™] (botulinum toxin type B)). Injecting the affected areas (i.e. neck muscles, eye muscles, facial muscles, etc) with botulinum toxin weakens the nerves around in these areas and results in a decrease in the contractions of the muscles which otherwise cause the involuntary movement and pulling of the muscles.

Botulinum toxin type B (Myobloc) is also used for treating drooling in patients with Parkinson's disease. The toxin is injected into the salivary glands to decrease the amount of fluid that is produced.

Description of the Procedure: Depending on the area to be injected the patient will be asked to sit in an upright chair (e.g. cervical dystonia and arm dystonia), or may be asked to lie down on an exam table (e.g. blepharospasm, leg dystonia) so that the patient is in the most comfortable position to receive the injection and so that the patient is in the most appropriate position for the physician to get at the muscles to be injected.

The physician will assess the movements by touching the areas with his/her hands to help identify the muscles to be injected and in some cases to activate the muscles so that he/she can see the movements. The area to be injected will be cleaned with an alcohol wipe. With a small, thin needle, the physician will administer the required amount of botulinum toxin into one or more muscles. In some cases (i.e. cervical dystonia) the physician will use the Electromyographic (EMG) guidance to help him/her locate the muscles of the neck to be injected. If EMG guidance is used the patient will hear the sound of the muscles that are affected (activated) by the dystonia; these are the muscles that the physician will be targeting.

Risks of the Procedure: There may be some discomfort from the needle being inserted into the muscles. Some patients experience bleeding and/or bruising at and around the area that was injected (especially the area around the eyes where the skin is thin). If bleeding occurs it is temporary and stops within a few minutes. If a bruise forms it will disappear in a few days. Other side effects, may include, dry mouth, blurred vision, aching or pain at or around the area that was injected and swallowing problems. Serious complications from this procedure are very rare and may include infection, botulism type symptoms and death.

Alternatives to the Procedure: Alternatives to this procedure include oral medications and in some cases denervation surgery or deep brain stimulation.

Probable Consequences of Refusing the Procedure: It is the patient's choice to receive or not to receive botulinum toxin injections for the treatment of their dystonia. Injections of botulinum toxin have been shown to help dystonic disorders, if the patient refuses the procedure then he/she will not experience any benefit that might be experienced had he/she agreed to the injection.

Person(s) Performing the Procedure: Physicians of the Movement Disorder Group at Rush University Medical Center (including attending physicians or a Movement Disorder fellow) who have been trained and have experience in the use and procedure for administering botulinum toxin will perform the injection(s). Movement Disorder fellows are licensed physicians receiving specialty training in Movement Disorders. The portion(s) of the procedure they perform will be based on their level of training and under the direct supervision of the attending physician.

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