Botulinum Toxin Injections for Blepharospasm and Hemifacial Spasm

What is botulinum toxin?

Botulinum toxin is a substance produced by a bacterium (Clostridium botulinum). This chemical prevents the release of the chemical messenger called acetylcholine which causes muscles to contract.

Injections of Botulinum Toxin can be used in minute quantities to reduce the tone or strength in individual muscles. Botulinum toxin is therefore used to treat conditions such as blepharospasm or hemifacial spasm in which small groups of muscles go into spasm.

The Botulinum toxin is injected into individual muscles to reduce the tone in that muscle. It is not a cure for muscle spasms and the injections usually need to be repeated every 3 months or so according to your symptoms.

The toxin take 2-3 days to start to work and its maximum effect usually occurs 1-2 weeks after injection.

How effective is botulinum toxin treatment?

More than three quarters of patients with blepharospasm or hemifacial spasm will benefit from Botulinum Toxin injections.

What are the side effects of botulinum toxin?

Botulinum Toxin may cause a stinging sensation while it is being injected and there may be some bruising around the injection site.
Botulinum Toxin mainly just weakens the individual muscle into which it is injected. However, its effect may sometimes spread to other muscles nearby and rarely cause effects on other areas of the body. Spread of the botulinum toxin to affect other muscles can cause side effects including:

- Weak or incomplete closure of the eyelids on blinking which may cause a dry eye requiring treatment with artificial tear drops.
- Drooping of the upper eyelid (ptosis).
- Sagging of the lower eyelid and watering of the eye.
- Drooping of the side of the mouth if injections are given in the cheek area
- Double vision.

Rare side effects include:

- Allergic reaction
- Problems with swallowing or speaking
- Flu-like illness or excessive weakness

Side effects usually disappear within a few days or weeks. Although rare, you should seek urgent medical advice if you develop any problems with swallowing, speaking or breathing after botulinum toxin treatment.

**Are all types of botulinum toxin the same?**

No. There are several different types and brand names of botulinum toxin and the doses of these are NOT directly interchangeable. The type that is used in our botulinum toxin clinic is called DYSPORT.

**Are there any people who should not have botulinum toxin injections?**

Women who are pregnant or breast feeding should not have Botulinum Toxin injections.

Patients who have disorders causing muscle weakness or myasthenia gravis may also not be suitable for Botulinum toxin injections.

People who are on anticoagulants (medication to thin the blood) such as warfarin or taking medicines which interfere with muscle transmission (such as aminoglycoside antibiotics) may not be suitable for treatment but you should discuss this with the doctor.
If you consult any other doctors you should inform them that you are receiving botulinum toxin treatment.

**Do I still need to see my optometrist regularly?**

The botulinum toxin clinic is a treatment clinic. This means that the clinic is set up to give you your botulinum toxin injections but that you will not have an eye examination unless you tell us that you are having problems.

It is therefore important that you continue to see your own optometrist regularly as normal.

If you are diabetic you will also need to continue to attend the diabetic retinal screening clinic in the community for diabetic eye checks.

The clinic nurse or doctor will be happy to discuss any queries or concerns you may have.

**For further information**

Please ask for a copy of the Dystonia Society leaflets:
- ‘Blepharospasm – your questions answered’
- ‘Hemifacial Spasm – your questions answered’
- ‘What is Dystonia?’
- Information on [The Dystonia Society](#)

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