Botulinum toxin injection for overactive muscles

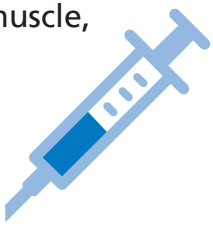
Information for patients

The Leeds Teaching Hospitals NHS Trust
Leeds Community Healthcare NHS Trust

This leaflet has been given to you to help answer some of the questions you may have about having botulinum toxin injections to treat overactive muscles. It explains what the injections involve, what the benefits and risks are, what will happen after your injection and what the alternatives are.

What is botulinum toxin?

Botulinum toxin is a drug which can be injected into muscles which are overactive. This overactivity is called spasticity, and can cause muscles to be too tight or to spasm. Botulinum toxin works by blocking nerve signals to the injected muscle, and this weakens the muscle and reduces its overactivity for up to six months.



How is botulinum toxin injected?

A needle is used to inject the botulinum toxin into the overactive muscle. Extra equipment might be used to confirm the correct muscle is being injected, but injections can be given safely without this. Extra equipment might be:

- **An EMG machine -** An electrical wire is connected from the needle to the EMG machine, and the signals received from the muscle are converted into sounds which indicate whether muscle is overactive or not.
- **An ultrasound machine -** A small probe is used near the needle to show an image of where the needle is.

What are the benefits?

The aim of the injections is to reduce overactivity in the muscles injected as part of an overall package with other strategies such as stretching, exercising, positioning and use of orthotics or splints. Your doctor or therapist will discuss with you what goals reduced muscle overactivity might help you achieve.

What are the risks?

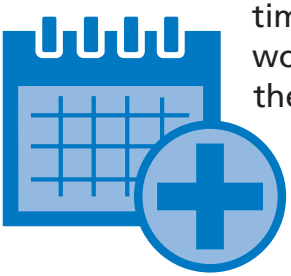
Botulinum toxin injections are usually well tolerated, and it is very rare for them to be the cause of serious problems.

- **'Flu-like symptoms -** You may feel unwell a few days after the injection, with mild 'flu-like symptoms.
- **Infection -** With any injection there is a risk of introducing infection, but the injection will be done in a clean manner to keep this risk as low as possible.
- **Bleeding -** With any injection there is a risk of bleeding, especially if you are already on medication to thin the blood. You may have bruising around the site of the injection, but more serious bleeding problems are very rare. If you are on warfarin, your INR level will need to be 3 or below. Please let your doctor or therapist know if you are on medication to thin the blood.
- **Muscle weakness -** The botulinum toxin will weaken the muscle it is injected into. It may also spread into other muscles nearby and cause weakness of these muscles as well, but it is very rare for the toxin to spread to muscles which are far away from the injection site.

- **Swallowing difficulties -** If you are receiving injections near your neck, there is a risk that botulinum toxin could spread to the muscles which control your swallow and you may experience swallowing difficulties.
- **Allergic reaction -** Like most medication there is potential for allergic reaction, such as a skin rash, although this is rare. Life threatening allergy (anaphylaxis) is possible but very rare.

What will happen after my injection?

The effects of botulinum toxin can take up to two weeks to appear, so you will not notice a difference immediately after the injections. Most people find the injections last between four and six months, although they can last a longer or shorter time. The injections may be timed so you can work with a physiotherapist or occupational therapist to stretch the muscles once they are less overactive. You will be reviewed in 4-6 months' time, and the injections can be repeated if they helped your symptoms.



What are the alternatives to botulinum toxin?

Muscle overactivity can also be managed using tablets, which you may already have tried. Stretching, exercising, positioning and use of orthotics or splints can be used either alone or in combination with tablets or injections to manage muscle overactivity. It is also important to work on any triggers to muscle overactivity, such as constipation, urine infections and skin problems.

If there are still significant problems despite trying these strategies, there may be other options for some patients, including using injections to block individual nerves, or surgical procedures, but these will not be suitable for all patients. You can discuss with your doctor whether there are other options suitable for you at your appointment.

Help us get it right

If you have a complaint, concern, comment or compliment please let us know by speaking to a member of our staff. We learn from your feedback and use the information to improve and develop our services.

If you would like to talk to someone outside the service contact:

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We can make this information available in Braille, large print, audio or other languages on request.

What did you think of your care?

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Your views matter

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