



Information for  
patients and  
carers

## Botulinum Toxin Injections

This leaflet provides information regarding botulinum toxin injections and how they can help you. If you have any further questions, please speak to a member of the clinic/ward team. Contact details are listed at the end of the leaflet.

## **What are Botulinum Toxin Injections?**

Botulinum toxin is a substance produced by a type of bacterium and it has been developed into a treatment for spasticity. The toxin is diluted in order to inject it into a muscle, where it blocks the communication between the nerves and the muscle. This leads to a temporary weakness and relaxation of the muscle. The injection of the spastic muscles with botulinum toxin is only done when the muscle overactivity is actually causing a significant problem or risk to the individual.

## **What is focal spasticity?**

After damage to the brain or spinal cord, muscles can become overactive and stiff (this is known as spasticity). When this happens to a single muscle or a small group of muscles, rather than throughout the body, it is called focal (localised) spasticity. Sometimes this stiffness in a muscle can help a person to do something, such as standing when leg muscles are very weak. However, it can sometimes lead to problems, such as difficulties with daily tasks or pain. Prolonged spasticity can lead to a loss of range of movement in a muscle.

## **What are the aims of botulinum toxin injections?**

Botulinum toxin injections are used for several different reasons:

- To work alongside other treatments to maintain or increase a range of movement
- To improve/enable tasks (such as being able to open your hand for washing)
- To improve or enable active functional ability (such as relaxing the calf muscles to enable the foot to be flat on the ground when standing and walking)
- To decrease pain
- To improve posture and balance

## **What are the alternatives to botulinum toxin injections?**

Botulinum toxin injections are used to help you achieve the aims listed above. These interventions can be undertaken/achieved without the injection but may not be as effective. Alternatively, or additionally, tablet medications for spasticity can be tried on certain patients.

## **What other treatments may be used alongside the botulinum toxin injections?**

Other treatments that can be used alongside botulinum toxin include:

- Splinting/orthotics
- Therapy i.e. physiotherapy or occupational therapy
- Pain medication

If these are appropriate your clinician will be able to complete referrals to appropriate services.

## How long do the effects last?

The effects of botulinum toxin injections come on gradually over 7 – 10 days. They usually last for approximately 3 – 4 months, gradually wearing off.

## Are there any side effects from botulinum toxin injections?

Serious complications following botulinum toxin injections are rare, however the following have been known to occur:

- Pain where the injection is given
- Bruising where the injection is given
- Flu-like symptoms
- Excessive muscle weakness of the injected and neighbouring muscles
- Temporary swallowing problems (related to injections around the neck and salivary glands)
- Rarely, there is potential for anaphylaxis, which is a severe allergic reaction to the medication and requires urgent medical attention.

If you believe you have had a serious reaction to an injection, please seek urgent medical attention either on the ward (if you are an in-

patient) or at the nearest Accident and Emergency Department. For less serious possible side effects please consult your GP.

If you are pregnant or wishing to become pregnant, please inform the clinical team.

## **Preparation for injections**

Prior to the injections a clinician will assess you for suitability and determine specific goals with you. The treatment may involve a number of injections as the botulinum toxin needs to be injected into each individual muscle.

If you are currently taking anticoagulant medication (medication to help prevent blood clots), then you may be asked to omit this medication prior to injections. Once the injections have been completed you can recommence your anticoagulant medication as before.

## **Will I need further botulinum toxin injections?**

You will be reviewed by a clinician between 3 and 4 months (this can vary with individual cases and can sometimes be up to 6 months), to determine the effect of the injections, whether goals have been achieved and whether further injections are indicated.

## Concerns/questions?

If you have concerns about the injections or associated treatments, or you would like to discuss the issues raised in this leaflet, please speak to the clinic/ward team.

Contact details for advice during working hours:

Department for Neurorehabilitation, Royal Preston Hospital

Telephone number **01772 524771**

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

[www.patient.co.uk](http://www.patient.co.uk)

All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

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