

Ophthalmology department

# Botulinum toxin treatment for squint

Information for patients, relatives and carers

## Introduction

This leaflet has been designed to give you information about **botulinum treatment** and answer some of the questions that you or those who care for you may have. It is not meant to replace the discussion between you and your medical team but aims to help you understand more about what is discussed. If you have any questions about the information below, please contact us.

## What is a Botulinum toxin injection?

Botulinum toxin injections can be used to treat various types of squint and eye movement problems. Botulinum toxin type A is a chemical which stops a muscle from contracting when it is injected into a muscle. When the muscles contract the eye can be pulled away from the straight ahead direction so botulinum toxin can help to realign the eyes and relieve double vision. Sometimes the toxin has a lasting beneficial effect and sometimes other treatment such as surgery might be better at realigning the eyes. Sometimes none of these treatments are successful.

## Why do I need a botulinum toxin injection?

Patients with squints need treatment because the squint can cause double vision or look unsightly. These injections will realign the eye that is injected to help them both look in the same direction and to relieve double vision if it is present before treatment.

Squint surgery has often already been carried out in the past and further operations cannot be done because of scarring of the ocular tissues and the risk of permanent double. Injection of botulinum toxin into one of the eye movement muscles simulates the effects of surgery allowing us to determine whether further squint surgery could be successful and whether double vision will be relieved or whether double vision could become a problem.

Before we decide to give you the injection, both an orthoptist and an ophthalmologist (eye surgeon) will assess you. We will explain the procedure and ask you to sign a consent form.

## The procedure

We start by numbing the surface of your eye by putting anaesthetic drops in your eye every five minutes for 20 minutes. The site of the injection is carefully monitored by recording the electrical activity of the muscle when you move your eye. This can be heard through a loudspeaker

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during the injection. The noise is made when your eye muscles generate a signal when they move (this is called an EMG).

Before the injection, you will sit on a reclining chair or couch in a treatment room near the clinic. The injection takes a few minutes to give. After the injection you do not need any eye dressing or drops but you can wear your glasses as usual, if you normally wear them.

## What are the risks of having botulinum toxin injection?

The treatment is safe and there is no risk to your general health. All the side effects are temporary and get better by themselves within four months.

## What are the side effects of having botulinum toxin injection?

**Double vision:** You may have temporary **double vision** or **different double vision** to what you had to start with (if you had double vision). If you have double vision at any time, before or after the injection, you should not drive unless you avoid the double vision by covering one eye or covering one side of your glasses. There is a 30 per cent risk of double vision occurring and it can take up to four months to resolve, but may get better within 6 weeks.

**Ptosis (closed or drooping upper eyelid):** You may notice some temporary drooping of your upper eyelid on the side of the injection. This can take eight weeks to get better. There is 10 per cent risk of this occurring.

**Pain and bruising:** You may notice slight bruising (redness of the white part of the eye). This happens in 40 per cent treatments and disappears within one to two weeks. If your eye is painful you can take paracetamol. The pain should not continue after the first 48 hours but if it does, or if you are troubled by double vision, contact the orthoptic department or your ophthalmologist for advice.

## What happens after the injection?

The botulinum toxin takes two to three days to have an effect on the muscle, so you will not notice a change in the position of your eye immediately. The effect may increase over three to five days. Initially the position might be too far in the opposite direction (causing double vision) but this will wear off and the eye will gradually come to the straight ahead position. Towards the end of 4 months the effect of the botulinum toxin wears off and the eye returns to its original position. Sometimes the eye stays aligned because the brain maintains it in the new position.

The orthoptist will examine you two weeks after the injection to see how you have responded. You will have an appointment to see the ophthalmologist again three to four months after the injection. Further injections might be needed.

## Will I need more injections?

Toxin can be used repeatedly over many years without any build-up of side effects or loss in effectiveness.

## What I need an operation?

Some people who have not had previous squint surgery will benefit from proceeding to surgery, the toxin treatment is like a rehearsal for the effect of surgery. Most people who have had

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previous squint operations will be offered further injections or advised if no more treatment will be helpful.

Please ask the doctor who sees you to explain further if you are not clear about anything, before signing the consent form. Please keep this information sheet for future reference.

## Who can I contact for more information?

Emergency Department at the Western Eye Hospital – 020 3312 3245

Outpatients at Western Eye Hospital – 020 3312 3236

Outpatients at Charing Cross Hospital - 020 3311 1955

Orthoptist appointments - [ICHC-tr.Orthoptics@nhs.net](mailto:ICHC-tr.Orthoptics@nhs.net)

## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:  
[imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

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