

Botulinum toxin for Strabismus

Orthoptics

This leaflet explains more about the use of Botulinum toxin for Strabismus. If you have any further questions or concerns, please do not hesitate to contact 01902 695830 and leave a message on our answer phone.

This information leaflet is for patients wishing to have treatment with Botulinum toxin (BTXA) for management of strabismus. The purpose of this leaflet is to inform those who wish to undergo treatment of the process, benefits and possible side effects, in order to make an informed decision. Or to remind those undergoing treatment of the possible side effects and important information we need to know prior to injecting you.

Management of Strabismus is not stated on BTXA's license, if you have any concerns please discuss with the consultant. A leaflet titled 'Unlicensed Medicines' is available.

What is Botulinum toxin?

Botulinum toxin (BTXA) is a chemical produced from bacteria (Clostridium Botulinum).

Muscles contract when they receive signal from a nerve. Botulinum toxin stops the nerve-endings from transmitting these signals. When botulinum toxin is injected, it spreads throughout the tissue into the nerve endings. This means the muscle receives fewer signals from the nerve causing the muscle to relax. When injected to the extraocular muscles (muscles around the eye), it results in the position of the eye changing. BTXA has been used for squints since 1979.

There are a number of uses and your need for BTXA will be explained to you. Some possibilities are listed below:

- To reduce the size of strabismus to aid binocular single vision
 - This may be temporary with further treatment or surgical intervention required later
- It can help plan the surgical procedure that would give the best possible outcome for your eyes
- As an alternative to strabismus surgery. It is used in patients who cannot undergo a general anaesthetic but would still like their strabismus to be corrected
- When the strabismus is very small and surgery is too risky
- When the strabismus is still changing and measurements are not stable enough for surgery.

BTXA wears off, it is most commonly used as a temporary treatment, but in some cases it can be used repeatedly instead of squint surgery.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- **Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available**
- **If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111**
- **Keep the environment clean and tidy**
- **Let's work together to keep infections out of our hospitals and care homes.**

What are the risks to my general health?

- There is no known risk of developing Botulism poisoning. There are no adequate data to suggest reproductive toxicity whilst pregnant or whether BTXA is excreted in human milk
- There is a small risk of an allergic reaction
- Over 10,000 patients throughout the UK have been treated with no long-term side effects
- **People with muscular disorders such as myasthenia gravis should not receive treatment as they are at high risk of suffering more dangerous side effects.**

If you have any concerns please discuss with the consultant.

Are there any side effects?

Like any treatment, BTXA can have side effects. One of the great advantages with BTXA is that it wears off, and side effects are almost always temporary and improve gradually with time.

- The most common side effect after an injection of BTXA is a droopy eyelid
 - This occurs in about one in twenty injections. If this happens the lid usually lifts within two weeks
- Being unable to close the eyelids fully. This can cause a dry eye, discomfort or blurred vision
- Double vision
- Occasionally there may be bruising to the white of the eye.

There is an extremely rare possibility of the needle piercing the eye. The risk of this is no greater than one in 10,000 injections.

Although rare, you should seek medical advice urgently if you notice any problems with swallowing, speaking or breathing after treatment.

How do I prepare for the procedure?

Please read this information leaflet. Share the information it contains with your partner and family (if you wish) so that they can be of help and support. There may be information they need to know, especially if they are taking care of you following this procedure.

Points to note:

- The procedure is carried out in the eye outpatient department. The BTXA injection does not usually produce any immediate effect and therefore you should be able to drive home following the procedure as normal. In rare cases patients can experience double vision immediately and you should not drive if you experience this. Please inform the Consultant or Orthoptist if this happens. It is therefore recommended that you do not drive for this procedure if you cannot go home by another means should you experience any double vision. You can commence all other normal activities following the procedure
- You should take all your regular medications.

What happens during the procedure?

You will be asked to sit up on a couch for the procedure. The surface of the eye is gradually numbed with a series of drops instilled by the doctor.

Electrical leads will be connected to the forehead with sticky electrodes attached to an EMG machine (a machine that picks up the electrical signals from the muscles around the eye. This is similar to when you have an ECG of your heart. The electrodes enable the Ophthalmologist (a doctor trained in the diagnosis, treatment and prevention of diseases of the eye and visual system) to locate the correct position for the needle in the muscle where the injection is given.

The EMG machine makes a hissing sound rather like a radio out of tune during the procedure. When you receive the injection, your eyelids will be held open gently by the Ophthalmologist, and you will be asked to look in certain directions.

Once the Botox has been injected which only takes a few seconds, the needle is held still and kept in position for a further thirty seconds as this decreases leakage into the surrounding muscles.

During the procedure you will be asked to look at a target, this is to ensure the eye is kept in the correct position. It is important that you remain still throughout the procedure.

- You should remain upright (do not lie down) for one hour after the procedure as this reduces the chance of the BTXA spreading to other muscles
- You may feel an ache in your eye after the procedure. If this does not improve after 1 hour, take whatever medication you would usually take for a headache.

Will I feel any pain?

Some patients are aware of a slight ache or pulling sensation during the procedure.

What happens after the procedure?

You will usually notice no change for the first day or two. Between 3-5 days the eye should start to move into a different position. The optimum effect takes about 10 days to develop. As the BTXA wears off, the eye may return to its original position. It is useful if you can take photos of your eye position and write down your symptoms during this time. We normally arrange to see you two weeks after the first injection.

My eye has gone the other way and now I get double vision, is this normal?

Yes, this is possible, but it is not permanent. You will notice a gradual straightening of the eye as the BTXA wears off. If this affects your work and normal activity, we can offer you some glasses with prisms or a film covering one lens. **You should not drive if you have double vision** (www.gov.uk/diplopia-and-driving).

How long does it take to wear off?

In most cases the direct effect of the Botox on the muscle will have worn off completely by 8-12 weeks. In some patients there may be a residual effect. Please discuss this with your doctor if you would like more information as every case is different. It may be six months before further treatment / surgery if appropriate.

Are there any alternatives to Botulinum Toxin to treat Strabismus and what would happen if I decided not to have this treatment?

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances. The doctor will have explained the different treatment options to you and what will happen if you decide not to have any treatment at all.

Consent process

We must seek your consent for any procedure or treatment beforehand. The risks, benefits and alternatives to treatment (where relevant) will be explained to you. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information. You will be required to give your consent for this treatment. If this is your first visit to the clinic you may not be injected today, but may be asked to sign a consent form.

Please inform us of the following:

- If you are feeling unwell
- If you are pregnant, trying to become pregnant or breastfeeding
- If you have a swallowing problem
- If you are taking / have recently been prescribed antibiotics.

Contact Information

For general enquiries or concerns following treatment:-

The Orthoptic Department
Wolverhampton Eye Infirmary
01902 695830

Ask to speak to the Clinic Manager

(Available Monday – Friday, 8:00am – 5:00pm)

If you have specific concerns that occur 'out of hours' then please address these with your GP or contact 111. In cases of emergency then please attend the Emergency Department or call 999.

Further Information

If you have any personal access needs or require wheelchair access and wish to talk to a member of staff please call 01902695830

If you require this document in an alternative format, for example, larger print, different language etc. please inform one of the healthcare staff.

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。