

## Paediatric Ophthalmology Service

# Botulinum Toxin (Botox®) Treatment for Squint

### What is Botulinum Toxin?

Most people will have heard of the use of Botulinum toxin, of which Botox® is a well-known brand. Botulinum toxin has been used by surgeons since 1979 to treat various medical conditions including certain types of squint.

### How does Botulinum toxin work?

It causes a temporary paralysis (weakness) of the muscle it is injected into. This may be partial or complete and can last months.

### Is it safe?

There is no risk to general health from the injection of Botulinum toxin in to eye muscles. Used in this way there is no risk of developing botulism or food poisoning. Allergic, including severe (anaphylactic) reactions can occur to any medicines, however, the anaesthetist can administer treatment to recover from such occurrences. The risk to general health from sedation/anaesthesia is low in otherwise healthy children.

### Who does my child see when we come to have the treatment?

Your child will initially be examined by an Orthoptist before seeing one of the surgeons who can give the treatment. The surgeon will discuss details of the treatment and recommend sedation (sleep/drowsiness) or general (full) anaesthesia. A one-off injection or a course of injections may be advised by your surgeon. If the treatment is suitable for your child, you and/or your child will be asked to sign a consent form and their name will



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be placed on a waiting list to have the treatment. There may be a further pre-surgery assessment to attend.

### **How is the treatment given?**

Your child will be admitted to a ward on the day of the procedure and have the procedure in a theatre. A designated team including your surgeon and anaesthetic doctor will look after your child and meet you on the day of the treatment. The procedure is usually done under sedation so that your child is comfortable during the procedure. Electromyography (a device to measure electrical activity in the muscle) may be used to help locate muscle by detecting a 'signal' through wires on sticky pads attached to the forehead. This is painless and does not carry any specific risks.

### **How quickly will the treatment work and how long does it last?**

It can take 2-3 days for the effects of treatment to become obvious. The effect of botulinum toxin may last weeks to months and eventually wears off. When used for a squint (misalignment of the eyes), the effect may result in an over correct or under correction of the squint. This could mean that the squint may even reverse direction. For instance an in-turning eye can initially become an out-turning eye and vice versa. In most cases, there is gradual straightening of the eyes as the paralysis wears off. Rarely, the change in alignment may remain after the Botox® wears off.

### **What are the possible side effects?**

- The squint may reverse initially for a while.
- Sometimes children will get double vision after the injection. This may cause some temporary problems with sports and school. Your child will be reviewed after the procedure by the orthoptist and/or surgeon. If double vision is a concern, we may advise covering one eye until symptoms improve.
- Temporary drooping of the eyelid may occur on the side that an injection was given. If this happens it usually resolves within a few weeks. There may be a bruise/bleed on the surface of the eye which resolves over weeks.
- There is a low risk of the needle piercing the eye and of significant bleeding around the eye. The likelihood of loss of vision or eye from this is lower than squint surgery, which can be estimated as 1 in 20,000.

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For babies we ask you to bring in their car seat as this helps to keep them more upright. This minimises the risk of Botox® leaking into the lid muscle and causing a droopy eyelid.

We dispose of the needles after one use so there is no risk of cross contamination or infection.

### **When does my child need to come back to clinic?**

We usually like to see patients 10 days or so after their injection to see what effect it has had. Sometimes we may decide to recommend a further injection if the first one has had less of an effect than we hoped for.

### **Unlicensed use**

Botulinum toxin has been used for decades for the treatment of squint but the companies who manufacture it have never applied for a license for its use in the treatment of squints. It is therefore used on a 'named patient' basis.

### **Further Information**

We hope this leaflet will help you to understand the treatment offered to your child. If you feel you need more information or have any concerns please contact the Eye Department on 024 7696 6521.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6521 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)

#### **Document History**

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