

Information for parents

Botulinum toxin injection for squint in children

What is Botulinum toxin (BT) and how does it work?

BT is widely used in the management of eye muscle problems. It comes as a commercially available product known as Botox, Dysport, or Xeomin. These are a purified active compound Botulinum toxin A. When injected into an eye muscle BT causes a temporary paralysis of that muscle. The effect starts after 1-2 days, reaches its maximum by one week and lasts approximately three months.

What is the role of BT for squints in children?

- To improve the position or alignment of the eyes.
- To assess the risk of causing permanent or troublesome double vision prior to squint surgery.
- To correct double vision or a problem with the vision.
- May be used in conjunction with squint surgery to enhance its effect.
- To improve an abnormal head position.

Who may not be suitable for BT?

Your child may not be suitable for BT if:

- They suffer from any blood borne infections for example Hepatitis or Human Immunodeficiency Virus (HIV).
- They have an allergy to eggs.
- They have had a previous allergic reaction to BT.

What does the procedure involve?

The procedure is usually performed under general anaesthetic as a day case. One or both eyes may be treated. Your child will be admitted to a ward in the Royal Manchester Children's Hospital on the day of the procedure and will need to be starved for 6 hours before the procedure time. They should not eat, drink or chew gum. Details will be sent with your child's admission letter.

The procedure takes between 30-40 minutes, however, you can expect to be in the hospital for 3-4 hours on the day. Once your child has recovered from the anaesthetic and has started eating and drinking, they will be able to go home.

What should I expect after my child's injection?

- Your child may wake up with a sore eye and there will be redness and bruising in the eye at the site of the injection.
- There may be some dissolvable stitches used which can cause irritation for 48 hours.
- Your child's pupils may be dilated due to use of eye drops during the procedure.
- Paracetamol (Calpol) can be given to relieve discomfort.
- Eye drops will be given after the operation to reduce the inflammation and prevent any infection.
- Generally children feel well enough to go back to school after one or two days.
- The injection will start to work after 2-3 days and a change in the position of your child's eye may be noticed. Your child may also notice a change in the double vision or appearance of double vision.
- Your child may bathe and shower as normal, but make sure they do not get soapy water in the operated eye for two weeks.
- If stitches are present, your child should avoid swimming for four weeks to reduce the potential risk of infection.
- The effects of the BT injection usually takes 3 months to wear off. Very rarely it can take longer.

What are the risks and side effects of BT injection?

- A general anaesthetic is required, which carries a small risk. The anaesthetist will discuss these risks with you before the operation.
- Redness and irritation at the operation site.
- Under correction of the squint which may require a further injection.
- The injection may not fully correct the squint which may result in a delay in further assessment.
- Sometimes the toxin may leak out and affect other eye muscles. This may result in the eye moving up or down (vertical misalignment of the eyes), which is usually temporary.
- Drooping of the eyelid, this is usually temporary. If the child is very young then patching of the other eye may be required to prevent the development of a 'lazy eye'.
- Permanent, unwanted change in the position of the eye after the injection has worn off. This is very rare and may require further treatment.
- Perforation of the eye by the needle is a very rare complication. It can result in the loss of eyesight from bleeding, infection, and retinal detachment.

When will my child be seen again?

Your child will be seen again in the out-patient department between 1-6 weeks after the procedure, depending on their underlying condition. An appointment may be given to you on the day or it will be sent in the post.

If you have any further questions, please discuss these with the paediatric secretaries on 0161 701 4838 or 0161 276 5565 or contact the Orthoptic department on (0161) 2714882, Monday – Thursday 8.00 am - 5.00 pm or Friday 8.00 am – 4.00 pm.