

Children's Physiotherapy Therapy Service

Botulinum Toxin-A Injections

**What is Botulinum Toxin?**

Botulinum Toxin is made from the bacterium *Clostridium Botulinum*. It has been shown to decrease the muscle stiffness (spasticity) and extra movement (dystonia) in children with Cerebral Palsy



Botulinum Toxin is currently licensed to treat spastic equinus (calf tightness) in children with Cerebral Palsy over the age of two. It is often used "off-license" to control spasticity in other muscles in the legs or arms. Off-license use of medication is common in Paediatrics and is used under current Best Practice Guidance.

How does it work?

When injected into muscles, it stops the nerve endings working to muscle fibres around the injection site. This causes a weakness in the muscle. This weakness usually can be noticed within a few days. The effect lasts until new nerve endings grow back, which typically takes around 3 to 4 months.

Are there side effects?

We use our medicines to make children better, but sometimes they have side effects. The injection dose and muscles are carefully chosen for each child. The muscle, or nearby muscles, may become too weak but this does not last. Sometimes the injections do not have any benefit. Some children complain of mild flu like symptoms a few days after injections. Paracetamol can be given if necessary. There may be some slight pain, itching, rash and bruising at the site of the injection lasting for a short time. Very occasionally temporary difficulty with bladder control or swallowing or double vision is seen. Very rarely generalised muscle weakness may occur.

Injections will not be carried out if your child has hypersensitivity to Botulinum Toxin A or local infection. It is important for you to inform us of any medication your child is taking at the time of injections.

If your child has new swallowing difficulties, breathing problems or a chest infection soon after a Botulinum Toxin injection, contact your doctor straight away or take your child to hospital.

There may be, sometimes other side effects that are not listed above. If you notice anything unusual and are concerned, contact your doctor.

Will the injections be painful for my child?

The injection(s) can be uncomfortable. We realise that managing your child's discomfort throughout the procedure is very important. There are different ways to reduce any discomfort for your child.

Will they need to be asleep/have a general anaesthetic?

The decision regarding the level of sedation your child requires is based on their age, the number and location of injections they require as well as previous experiences with procedures. This will be discussed with you and your child.

What is meant by 'sedation'?

If your child is receiving the injections without a general anaesthetic, we can use sedation to help them cope with the discomfort.

Some children (over 5) can use Entonox (Gas and Air). They need to be able to breath the gas through a mouthpiece or via a face mask throughout the procedure.

Other children can use Buccal Midazolam. This is given into the child's mouth between the cheek and gum line. It is very fast acting and will make your child sleep/more relaxed in about 10-20 min of receiving it. This drowsiness will last for approximately 30 minutes and then wears off quickly. Midazolam also has a slight amnesia effect so your child may not remember the actual injections at all.

Having the injections:

Most injections happen in the Children's Clinic at Calderdale Royal Hospital. You will be informed of the date and time for your child's appointment. We will also tell you when your child should last eat or drink. They will be reviewed before the injections. You will be asked to sign a consent form.

The team use an ultrasound machine to identify the correct target muscles and ensure correct placement of the needle. This machine is mainly used for small or deep muscles that are more difficult to identify from the surface of the skin.

Your child should be able to go home within 20-30 minutes after injections if the injection(s) are done with topical anaesthetic (cold spray/nothing). Your child will need to stay for an hour or so if they have sedation (Buccal Midazolam/Entonox). If they have had a general anaesthetic it will be 2-3 hours after they wake up. Once home we do not advise any special restrictions and your child can return to school when ready.

Assessment and Follow Up:

Your child will be assessed first to see if injections may be useful. We will ask you/your child about what things are difficult to do. We will examine your child's joint movement and muscle stiffness. We may take a video recording of their standing or walking. It is also helpful if your child's physiotherapist can give us their opinion if the injections would be helpful and we would agree reasons (goals) to do the injections and how we will measure these goals.

We would like to see them at 6 and 12 weeks after injection. We will examine your child again and review their progress. Your child's physiotherapy programme and / or splints may or may not change. Serial casting may be an option if injected into the muscles of the lower leg. This will be discussed and agreed with you and the child's physiotherapist at the clinic.

Depending on your child's response to Botulinum toxin injections, repeat treatments can be performed.

If you have any queries regarding your clinic appointments or injections please contact:

Emma Bamforth 01484 343518 (Tuesday - Friday).

If you are concerned after the injections please contact your Paediatrician or the Children's Ward 3, via Calderdale Royal Hospital Switchboard 01422 357171.

If you have any comments about this leaflet or the service you have received you can contact :

NHS at Broad Street Plaza,
Telephone No: 01422 261340

Princess Royal Health Centre,
Telephone No: 01484 344299

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce,
obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych
informacji w innym formacie lub wersji językowej,
prosimy skontaktować się z nami, korzystając z ww.
danych kontaktowych

ਬ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਚੂਰ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,
ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم
المذكور أعلاه"