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Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Botulinum Injections In Cerebral Palsy and Other Conditions with stiff (Spastic/Dystonic) Muscles

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Botulinum Injections in Cerebral Palsy and Other Conditions with Stiff (Spastic/Dystonic) Muscles

Patient Information

Child Health Service

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What is it?

Botulinum Toxin type A is an injection drug (Botox, Dysport) used to treat spasticity and dystonia in Cerebral Palsy. It prevents the transmission of signals between a nerve and its target muscle, reducing excessive stiffness of spastic muscles so that the developing muscle can grow more normally. Increasing the length of the spastic muscles reduces the risk of contractures and thus the need for surgery. It may also lead to better limb function. It is only licensed for use in spastic calf muscles but is widely used for other spastic muscles in children, sometimes in higher total doses than outlined in the Summary of Product Characteristics.

What are the benefits?

Reduces stiffness in muscles and can allow for better movement in the limb.

Are there alternatives?

Continue with physiotherapy. Surgery can be considered in selected cases where spasticity leads to development of contracture.

How does it work?

Botulinum toxin is injected from a syringe directly into a muscle, causing it to lose its spasticity (tightness/stiffness) over a few days. Only a proportion of the muscle fibres are involved, so the muscle does not go completely weak. Usually, the maximal effect lasts around 3 months and wears off completely by 6 months, but it varies from child to child. Botulinum injection relaxes the muscles and enables greater stretching during normal activity and physiotherapy. It also allows the muscle to grow better. However, the injection itself cannot relax the muscle on its own, so it is extremely important that physical management is continued as directed by your physiotherapist.

What is involved?

The nurse will give your child a sedation by mouth. This means that when the doctor gives the injection, your child is lightly relaxed and should not feel the needle going through the skin, although they will feel it a little in the muscle. Usually, one to two injections are required per muscle group. A cold spray will be used before injection to numb the skin.

Botulinum toxin stays mainly in the muscle when injected, where some bruising/tenderness may be noted. A small amount may escape into the blood circulation, but usually, there are no effects at all. Some patients have noted flu-like symptoms, lethargy, and weakness around 4 days after the injection, ear infections, rash, and urinary incontinence. We ask you to note any specific symptoms and report them to Dr Arya.

Please contact his secretary on Tel: **0300 707 1452** and leave a message, and we will contact you back. Very rarely, swallowing, speech, or respiratory problems may occur, in which case you would need to seek immediate medical care.

What happens after the injection?

When the effect of the sedation has worn off, your child can go home. You must remember to carry out his/her physical management regularly as directed by your physiotherapist. If the injection is found to be helpful, further appointments for re-injections can be arranged depending upon your child's needs.

What are the risks?

Botulinum stops muscle from working. This is a good thing for the muscles that it is intended for, but if it were to go into muscles that were not intended, then they too would stop working. Depending on the muscle, that can cause problems.

Useful Information

Medicines for Children - Botulinum toxin for muscle spasticity

https://www.medicinesforchildren.org.uk/botulinum-toxin-muscle-spasticity-0

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