Botulinum Toxin Treatment for Spasticity

What is botulinum toxin?
Botulinum toxin is a medicine that is injected into a muscle to weaken and relax it. (CPT 64614) It was developed from studying the toxin that causes botulism. It has been used safely for many years in children, and there are several types available for use including Botox®, Myobloc®, Dysport® and Xeomin®. Spasticity and dystonia are the most common problems it is used for. These injections are different than the use of phenol which is a nerve block.

How is it used?
Botulinum medicine is used to treat such problems as torticollis, toe-walking, tight arms and legs from a stroke, cerebral palsy or brain injury, or spinal cord injury. Its effect lasts for about 3 months, so it is often repeated during growth spurts, or until strengthening or stretching of specific muscles can occur.

What can it do?
- Allows tight muscles to be more easily stretched. Sometimes a series of casts are placed to help the muscle stretch more quickly.
- Helps a tight muscle to relax so that other muscles can get stronger.
- Helps to gain better control over the muscle so a new skill can be learned
- Helps braces fit better.
- Helps to more easily dress, move or help a child.
- Surgeries may be delayed or in some cases deferred.
- Helps to see if a muscle transfer might work.

How is it done?
The shots are usually done in clinic, just as a childhood immunization might be. The medicine goes in the muscle, and sometimes a numbing cream is used on the skin so the needle poke is not felt. Sometimes for a deep or small muscle a small stimulator is needed to help locate it accurately. The stimulator makes the muscle move so we know we are in the right place. Sometimes if any injections are given or being very still is important, the child is anesthetized for a few minutes to make things easier.

What happens after the shot?
The effect is NOT immediate - it takes about 3-5 days for muscles to relax. The effect lasts about 3 months. Shots can be repeated at that point and the dose adjusted depending on the effect. The dose of botulism used in each muscle, is based on the muscle size, amount of spasticity and the difficulty it is causing the child. Sometimes all muscles can’t be injected just with the botulinums, so phenol is used as well. The medicines are expensive, but they are usually approved by most insurances and Medicaid.
Who to call
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