



Phenol Treatment for Spasticity

What is Phenol?

Phenol is a medicine that is used in a “**nerve block**” to reduce spasticity. (CPT 64640) Phenol reversibly reduces the insulation (myelin) that coats the nerve, resulting in a slowing of its message to the muscle it innervates. This allows the muscle to be less tight or stiff. The muscle is able to be more relaxed immediately, and stays looser for about 6 months. After that the nerve successfully “recoats” itself, and the effect of the medicine wears off. (This is different than botulinum toxins, which are a muscle block.) Use of phenol and botulinums together is common, and helps reduce the need for botulinum toxin.

How is it used and what can it do?

Phenol works best for big muscles such as the biceps, hip adductors, the knee flexors (hamstrings). These are the muscles that most often cause scissoring and crouching of the legs, and cause orthopedic problems of the hip

Phenol:

- Allows tight muscles to be more easily stretched, especially during growth spurts.
- May help a tight muscle to relax so other muscles can get stronger.
- May help to gain better control over the muscle so a new skill can be learned.
- May help braces/orthotics fit more easily.
- May help to more easily allow dressing, movement or positioning of a child.

How is it given?

Phenol has to be injected close to the nerve, so the patient needs to be somewhat still for accuracy. (This makes it more difficult to give than Botox®, which is injected anywhere in the muscle.) A small stimulator is used to find the right place for the phenol, so many children benefit from being anesthetized for a brief time (@15-20 minutes) for comfort. Teens and adults can be injected in clinic sometimes, depending on their ability to tolerate a bit of discomfort.

The phenol may cause a slight irritation and inflammation in the area after it is given, so some patients take Motrin or like cold packs. Phenol works quickly, so the muscles should not be firmly stretched right away, as they are not used to being so loose, and the muscle may get pulled. Therapy can start right away but passive stretching should not be aggressive for the first week or so. Phenol is inexpensive and has been used for many years. It is approved by all insurance and Medicaid.

Who should I call?

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