



Muscle Spasms

NMES used to reduce Muscle Spasms relies on the ability of the NMES current to fatigue the muscle group being treated and therefore promote relaxation. NMES is a commonly used modality for this condition as it has been found to be an effective treatment.

NMES can be used in two different ways to reduce spasticity—creating muscle fatigue and utilizing reciprocal inhibition. Since the settings for each of these are different, you may want to test the effectiveness for each method on your patients. Begin rehabilitation directly after application of NMES as the reduction of spasticity is temporary.

When using the Muscle Fatigue Method, place the electrode pads directly over the muscles or muscle group that are exhibiting spasticity.

Suggested Electrode Placements

2-pad placement of electrode pads over muscle(s) in spasm

4-pad placement of electrode pads over muscle(s) or muscle group in spasm

Suggested Settings

Pulse rate: 50-65 Hz

Pulse width/duration: 250-300 μ s

On/Off times: 1:1 ratio (start with 5 sec ON, 5 sec OFF)

Ramp time: 1 sec

Amplitude: Maximally tolerated contraction

Treatment Time: 15-30 minutes (until spasm reduction)

Sessions per day: 3-5 sessions per day (or as needed)

