



Phantom Limb Pain

Phantom nerve pain arises from an area of the body that has been removed either surgically or traumatically. It is thought to be due to the persistence of sensory maps for the amputated limb in the sensory cortex of the brain. It is most commonly seen following amputation of the upper and lower limb, but may arise following surgery to remove breasts or even internal organs. Pain can also be present because of “stump pain”—pain due to the growth of a neuroma within the amputated region. TENS application can be used in either condition to decrease pain and increase functional mobility.

Suggested Electrode Placements

2-pad placement of electrode pads just above amputation site along the nerve pathway

4-pad placement of electrode pads just above amputation site with 2 pads placed anteriorly (or medially) and 2 pads placed posteriorly (or laterally); pads can be in parallel or criss-crossed

Suggested Treatment Parameters

Mode: Modulated

Pulse rate: 100-120 Hz

Pulse width/duration: 50-150 μ s

Amplitude: Low to moderate level stimulation

Treatment Time: Throughout the day as needed

Mode: Burst

Pulse rate: 2 Hz

Pulse width/duration: 100-200 μ s

Amplitude: Low to moderate level stimulation

Treatment Time: Throughout the day as needed

