

TREATMENT INTERVENTIONS FOR

PHANTOM LIMB PAIN

Neuromodulation Therapy

One of the most well documented neuromodulation therapies is the use of transcutaneous electrical nerve stimulation (TENS). TENS uses the Gate Control Theory of Pain and it works by closing the “gate” to keep pain signals from reaching the somatosensory cortex (Culp & Abdi, 2022; Di Leo & Evans, 2013; Smurr et al., 2008).

Mirror Therapy

Mirror therapy is also known as mirror visual feedback. This therapy uses a mirror’s reflection to trick the brain into thinking it is moving the phantom limb when, in actuality, the patient is viewing a mirror image of the non-affected limb. The mirror provides visual feedback that the phantom limb is moving and has been shown to be extremely beneficial in reducing phantom limb pain. Often, the patient can practice this exercise at home when phantom limb pain arises.

(Di Leo & Evans, 2013; Herrador Colmenero et al., 2017; Knotkova et al., 2012)

“Frozen” Phantom Limb

A phantom limb is considered “frozen” when the patient deems it unmovable. If a patient is struggling with phantom limb pain, it is good practice to ask if the phantom limb is in an awkward position or if it is frozen in a position. Mirror therapy can help visualize the phantom limb in a different position or “unfreeze” it (Guenther, 2016).

Motor Imagery

Motor imagery is a treatment technique where the patient visualizes moving the phantom limb without actually moving the body or the residual limb. Motor imagery is a great activity to include in a home program. Research suggests that motor imagery is less effective than mirror therapy, however, overall it is still an effective option for some individuals (Herrador Colmenero et al. 2017; Knotkova et al. 2012; Di Leo & Evans, 2013).

References

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