Vivien Jorgensen Et al 2025 Abstract

Effects of Transcutaneous Spinal Cord Stimulation on Spinal Cord Spasticity

Objective

The study assessed patient-reported effects of transcutaneous spinal cord stimulation (tSCS) on spasticity after multiple treatment.

Results

Fourteen participants reported a clinical important improvement in ADL performance, sleep disturbance and/or a decrease in pain due to spasticity. The majority of the participants perceived clinically relevant improvements on at least one patient-reported outcome measure, and no adverse events were reported. This is a simple and a non-invasive treatment that may have a potential of reducing the troublesome effects of spasticity.

Participants and Researchers

Seventeen people participated with injury levels of C6-T12, AIS A-D, and a mean age of 51 years.

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Methods

Participants received 30 minutes of tSCS (continuous, asymmetrical, biphasic rectangular impulses) applied for three to six consecutive days using **NeuroTrac MultiTENS** (Verity Medical). Two electrodes were placed paravertebrally at Th11–Th12 level and two on lower abdomen.

The abstract can be found at: https://pubmed.ncbi.nlm.nih.gov/39819354/