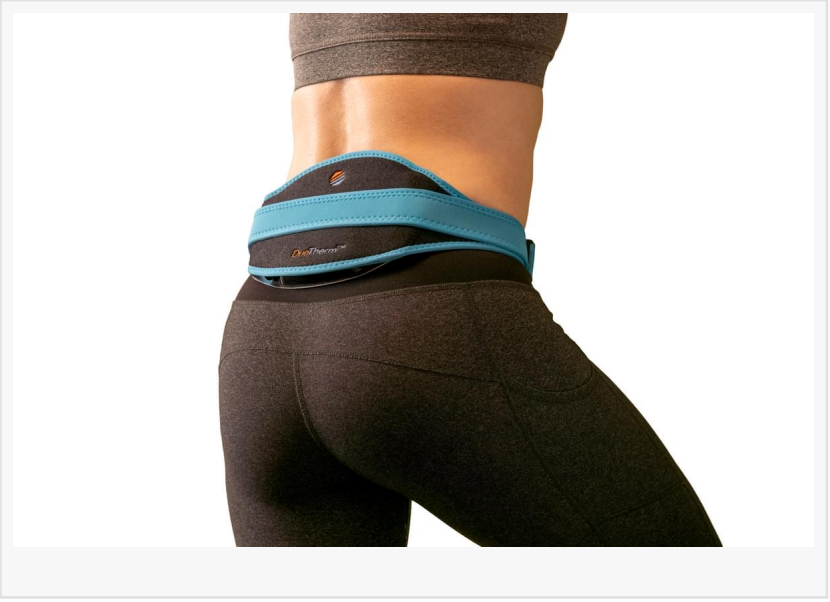
New Study Finds Wearable Pain Relief Device Promising Treatment for Lower Back Pain Without Use of Opioids

Spinal cord stimulation was recently found no better than placebo. A new study finds promising treatment options for low back pain relief.



ATLANTA, GA, USA, April 26, 2023 /EINPresswire.com/ -- Low back pain impacts 80% of adults and is the most common cause of missed workdays and disability globally in 2016. The most invasive and expensive intervention, spinal cord stimulation, was dealt a blow in March. A Cochrane review, the most rigorous type of scientific analysis, found the procedure no better than placebo. A new study published on April 26, 2023, offers a potential direction for non-surgical relief.

Twenty patients used a mechanical stimulation backplate with hot or cold therapy for 20 minutes, using repeating therapy cycle patterns with different frequencies. This neuromodulation wearable relieved pain 57% on average, suggesting the multi-modal device could be promising for drug-free pain relief.

> We hear repeatedly from the patients using DuoTherm that their 'backs are loose' after use."
>
> *Amy Baxter MD*

"We hear repeatedly from the patients using DuoTherm that their 'backs are loose' after use. The frequencies, the multiple options to personalize the wearable, and the reduction of stiffness are possible reasons for the pain relief," stated CEO Amy Baxter MD, PI of the NIH-funded trial. "M-Stim combined with heat may improve fascial movement, or the cold may reduce inflammation. The most compelling finding is the consistency of relief."

While initial low back pain causes differ, fascial stiffness may contribute for all. Fascia is a

connective tissue that covers and connects muscles, bones, and organs in the body. Because fascial restrictions reduce flexibility, contributing to pain, increasing micro-motion may give relief.

The implications of the study are significant for the field of pain management. The Cochrane review challenges the assumption that spinal cord stimulation is an effective treatment for chronic pain and raises questions about the use of this treatment in clinical practice.

“There are over 80 independent trials demonstrating that cold and our single vibration frequency give sharp pain relief,” stated Baxter. “This is the first study we’ve done with harmonic interactions, and we’re hopeful a non-invasive option can provide relief should surgeries no longer be reimbursed.”

Neuromodulation drug-free pain relief may not need to be invasive. The study suggests that using mechanical stimulation may be effective in reducing pain, independent of thermal modality, patient age, or pain chronicity. While DuoTherm’s prospective trial is currently enrolling in the DC area, Pain Care Labs expects by 2024 it will be available for patients unable to tolerate surgery or unwilling to use opioid medications.

Grant #: R044DA049631

Jennifer Tipping
Pain Care Labs
+1 877-805-2899
email us here
