

# Use of self-applied TENS device at home can relieve migraine pain

July 8 2021

---



(HealthDay)—A portable, disposable, and home self-applied

transcutaneous electrical nerve stimulation (TENS) device is effective for reducing pain among patients with migraine, according to a study published online May 20 in *PAIN Practice*.

Flávia S. Domingues, from Sao Paulo State University in Botucatu, Brazil, and colleagues conducted a double-blind randomized controlled trial over three months, with monthly assessments to examine the analgesic efficacy of a TENS device. Seventy-four [patients](#) diagnosed with migraine were randomly assigned to TENS or an active placebo (intervention and sham groups; 42 and 32 patients, respectively). During the [migraine attack](#), [pain](#) intensity and functional disability were measured before and after the 20-minute self-applied TENS intervention.

The researchers found that lower pain scores were reported by both groups of participants, but compared with the sham group, the intervention group showed a statistically significant reduction in pain scores. The median difference between functionality scores before and after the intervention was also significantly higher in the intervention group. No patient presented adverse effects or intolerance to the electrical stimuli.

"Although TENS is not currently recommended in evidence-based practice to relieve pain in patients with migraine attacks, further studies with larger cohorts, particularly in real-life settings, are necessary to evaluate the analgesic efficacy and standardize parameters for TENS stimulation in patients with migraine," the authors write.

The authors disclosed financial ties to Medecell do Brasil Importadora e Exportadora; Medecell donated the devices used in the study.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

Copyright © 2021 [HealthDay](#). All rights reserved.

Citation: Use of self-applied TENS device at home can relieve migraine pain (2021, July 8)  
retrieved 24 April 2024 from  
<https://medicalxpress.com/news/2021-07-self-applied-tens-device-home-relieve.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.