

# Resource Summary Report

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## Effect of different types of non-invasive central nervous system stimulation on pain perception, cortical and spinal cord excitability in healthy individuals.

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### Proper Citation

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### Protocol Information

**URL:** <https://dx.doi.org/10.17504/protocols.io.nkidcue>

**Authors:** Plínio Luna de Albuquerque

**Summary:** It is a crossover, double-blind, sham-controlled, pseudorandomized, and counterbalanced study at the Laboratory of Applied Neuroscience (LANA) of the Federal University of Pernambuco (UFPE). We performed a double-blind, randomized, sham-controlled crossover study with 12 healthy volunteers who underwent single sessions of rTMS (1Hz, 20Hz and Sham) and tsDCS (anodal, cathodal and Sham) associated with 20 minutes of treadmill walking. Cortical excitability was assessed by motor evoked potential (MEP) and spinal cord excitability by the Hoffmann reflex (Hr), nociceptive flexion reflex (NFR) and homosynaptic depression (HD). All measures were assessed before, immediately, 30 and 60 minutes after the experimental procedures.

**Associated Publications:** Albuquerque PL, Campêlo M, Mendonça T, Fontes LAM, Brito RdM, Monte-Silva K (2018) Effects of repetitive transcranial magnetic stimulation and trans-spinal direct current stimulation associated with treadmill exercise in spinal cord and cortical excitability of healthy subjects: A triple-blind, randomized and sham-controlled study. PLoS ONE 13(3): e0195276. doi: [10.1371/journal.pone.0195276](https://doi.org/10.1371/journal.pone.0195276)

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