

NON-INVASIVE CORTICAL STIMULATION FOR THE TREATMENT OF PAIN

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Abstract

Non-invasive cortical stimulation techniques are promising tools in the arsenal against refractory chronic pain. Repetitive transcranial magnetic stimulation can produce analgesic effects, leading to consideration of this technique as a therapeutic tool per se or as a prognostic tool to select candidates for subsequent implanted epidural motor cortex stimulation. This review focuses on the optimal parameters of stimulation, including the cortical target, coil orientation, stimulation intensity and frequency. The long-lasting effects of consecutive daily sessions and the possibility for ameliorating specific components of pain are also discussed.

Keywords: transcranial magnetic stimulation, TMS trials, analgesic effects, motor cortex stimulation