

EXAMPLE ABSTRACT:

Background: The objective was to test whether repetitive Transcranial Magnetic Stimulation (rTMS) just prior to Cognitive Processing Therapy (CPT) would significantly improve the clinical outcome compared to sham rTMS prior to CPT in veterans with PTSD.

Methods: Veterans 18 to 60 years of age with current combat-related PTSD symptoms were randomized, using a 1:1 ratio in a parallel design, to active (rTMS+CPT) versus sham (sham+CPT) rTMS just prior to weekly CPT for 12-15 sessions. Blinded raters evaluated veterans at baseline, after the 5th and 9th treatments, and at 1, 3, and 6 months post-treatment. Clinician Administered PTSD Scale (CAPS) was the primary outcome measure with the PTSD Checklist (PCL) as a secondary outcome measure. The TMS coil (active or sham) was positioned over the right dorsolateral prefrontal cortex (110% MT, 1 Hz continuously for 30 minutes, 1800 pulses/treatment).

Results: Of the 515 individuals screened for the study, 103 participants were randomized to either active (n=54) or sham rTMS (n=49). Sixty-two participants (60%) completed treatment and 59 (57%) completed the 6-month assessment. The rTMS+CPT group showed greater symptom reductions from baseline on both CAPS and PCL across CPT sessions and follow-up assessments, $t(df \geq 327) \leq -2.01$, $p \leq 0.023$, one-tailed and $t(df \geq 303) \leq -2.61$, $p \leq 0.017$, one-tailed, respectively.

Conclusions: The addition of rTMS to CPT compared to sham with CPT produced significantly greater PTSD symptom reduction early in treatment and was sustained up to six months post-treatment.

Conflicts of Interests: None to Report

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