

[P05.271] Comparison of Effect Size between Active and Placebo for Single Pulse Transcranial Magnetic Stimulation (sTMS) Versus Triptans for the Acute Treatment of Migraine

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OBJECTIVE: To determine the clinical relevance and treatment effect sizes for multiple robust outcome measures for sTMS compared to triptans. **BACKGROUND:** sTMS has been demonstrated to be effective and well tolerated for the acute treatment of migraine with aura. Triptans are the gold-standard for the acute treatment of migraine, but as yet, no head-to-head studies have been conducted comparing the efficacy and tolerability of sTMS to triptans. Sustained pain-free with no adverse events (SNAE) has been proposed as a robust composite endpoint which captures the attributes most important to patients -- efficacy and tolerability. **DESIGN/METHODS:** The clinical literature was systematically reviewed to determine the treatment effect sizes for pain-free after treatment during mild, and moderate/severe pain, and SNAE rates from the sham-controlled sTMS trial compared to randomized placebo-controlled triptan trials that employed an early treatment paradigm and reported outcomes according to baseline pain intensity. **RESULTS:** Two triptan studies reported outcomes for treatment during mild pain intensity. Comparing sTMS, eletriptan 20mg, eletriptan 40mg, and almotriptan 12.5mg; respectively, 2HPF rates after treatment during mild pain were 39.4%, 36.4%, 67.4%, and 53.4%; 2HPF rates after treatment during moderate/severe pain were 35%, 35%, 38.9%, and 37.5%; therapeutic gains were 27.6, 14.1, 18, 20. SNAE rates were 30%, 21%, 28%, 19%. 2HPF rates for sumatriptan 100mg and rizatriptan 10mg from a meta-analysis were 30.4% and 40.8% and therapeutic gains were 22.6 and 32.3. **CONCLUSIONS:** sTMS demonstrates efficacy comparable to triptans for the most robust treatment outcome measures. As sTMS is considered a non-significant risk treatment with no known adverse events, endpoints which combine both efficacy and tolerability appear superior for sTMS when compared to triptans.
Category - Headache: Therapeutics

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