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Efficacy of repetitive transcranial magnetic stimulation in facilitating lower extremity recovery and gait among stroke patients: A meta-analysis**Diana-Lynn Que, Alexandria Matic and Jeryl Yu**
St. Luke's Medical Center, Philippines**Background:** Repetitive Transcranial Magnetic Stimulation (rTMS) has been shown to facilitate neuroplasticity and recovery post-stroke.**Objective:** This meta-analysis aims to determine the efficacy of supplementing rTMS to conventional rehabilitation in facilitating improvement of Lower Extremity (LE) function and gait recovery among post-stroke patients.**Methods:** Literature search was done using PubMed, Cochrane Library and GoogleScholar with keywords repetitive transcranial magnetic stimulation and lower extremity function and gait and stroke. Three randomized placebo-controlled trials were included in the meta-analysis and appraised by three independent reviewers. Review Manager was used to construct Forest plots.**Results:** The change in Fugl Meyer-LE score in rTMS groups was significant at 6.35 (3.12 to 9.58) points higher. The change in walking cadence in rTMS groups was significant at 8.72 (8.10 to 9.33) steps more per minute. The change in walking speed of 24.35 (-0.61 to 49.30) cm/sec was not significant in the pooled analysis due to heterogeneity.**Conclusion:** Overall, among post-stroke patients, rTMS is beneficial as a supplement to conventional rehabilitation in facilitating motor recovery of lower extremities. However, this may not translate to improvement in gait.

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