

Acupuncture for Spasticity after Stroke : A Systematic Review and Meta-Analysis

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Background

- ◆ Spasticity is the common complaint among patients with stroke.
- ◆ Acupuncture has increasingly been used for spasticity management after stroke.
- ◆ However, the effectiveness of acupuncture in treating spasticity after stroke has not been fully determined.

Objective

- ◆ The aim of the present study was to summarize and evaluate evidence on the effectiveness of acupuncture in improving the spasticity after stroke.

Methods

- ◆ Six electronic databases, PubMed, EMBASE, the Cochrane Central Register of Controlled Trials, and three Korean medical databases, were searched from inception until December 2023.
- ◆ Randomized controlled trials (RCTs) were included if acupuncture was compared to placebo or other conventional therapy for treatment of spasticity after stroke.
- ◆ Assessments were performed primarily with Modified Ashworth Scale (MAS).

Results

- ◆ A total of 398 possibly relevant articles were identified, of which 8 RCTs met the inclusion criteria.
- ◆ Meta-analysis showed that acupuncture is effective in reducing the spasticity after stroke, as assessed by MAS (weighted mean difference, 0.79; 95% confidence interval [CI], 0.38–1.20; $P < 0.001$).
- ◆ A subgroup analysis showed that acupuncture significantly decreased wrist, knee, and elbow spasticity in post-stroke patients.
- ◆ It was difficult to determine any pattern indicative of publication bias based on the funnel plot's symmetry owing to the small sample size.
- ◆ Heterogeneity could be explained by the differences in control, acupoints, and the duration after stroke occurrence.

Conclusions

- ◆ The results suggest that acupuncture could be effective for treating spasticity after stroke.
- ◆ However, larger scale and more rigorous clinical trials are needed to confirm the role of acupuncture in the treatment of this disorder.