The effectiveness and safety of cupping therapy for stroke survivors: A systematic review and meta-analysis of randomized controlled trials

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Objectives: Cupping therapy (CT) has been widely used in traditional medicine worldwide for various indications, including stroke. The aim of this study was to systematically review the clinical evidence of CT for stroke.

Methods: To identify randomized controlled trials (RCTs) reporting the effectiveness and/or safety of CT, seven databases including PubMed, EMBASE, and Cochrane Library were searched for articles published from January 2000 to February 2021 without language restrictions. Meta-analysis was performed using Review Manager 5.4 software and the results were presented as mean difference (MD) or standard mean difference (SMD) for continuous variables and odds ratio (OR) for diverse variables with 95% confidence intervals (CIs). Assessment of the methodological quality of the eligible trials was conducted using the Cochrane Collaboration tool for risk of bias in RCTs.

Results: Twenty-two RCTs with 1653 participants were included in the final analysis. CT provided additional benefit in improving upper limb motor function (Fugl-Meyer assessment for upper limb motor function, MD 6.91, 95% CI 4.64 to 1.67, P<0.00001) and spasticity (response rate, OR 3.28, 95% CI 1.31 to 8.22, P=0.08) in stroke survivors receiving conventional medical treatment. These findings were supported with a moderate level of evidence. CT did not significantly increase the occurrence of adverse events.

Conclusions: This study demonstrated the potential of CT to be beneficial in managing a variety of complications in stroke survivors. However, to compensate for the shortcomings of the existing evidence, rigorously designed large-scale RCTs are warranted in the future.

Key Words: Cerebrovascular diseases; Cupping; Meta-Analysis, Stroke; Systematic review

An error was found in the abstract of the article cited above. The corrections are as follows.

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