INPLASY PROTOCOL

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None declared.

Comparative efficacy of different acupuncture treatment for post-stroke dysphagia： A protocol for Bayesian network meta-analysis

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Review question / Objective: This study will aim to compare the efficacy of different acupuncture with the aim of identifying which acupuncture treatment will be preferred treatment options for post-stroke dysphagia.

Information sources: Seven databases will be searched, including Pubmed, Cochrane library, Web of science, China national knowledge infrastructure (CNKI), Chinese Biomedical Literature database (CBM), Wan-fang database and the Chinese Scientific Journals Full-text Database (VIP) from inception to 31 December 2020. In addition, data from gray literature will be searched in case of omissions of potential studies.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 28 June 2021 and was last updated on 28 June 2021 (registration number INPLASY202160105).

INTRODUCTION

Review question / Objective: This study will aim to compare the efficacy of different acupuncture with the aim of identifying which acupuncture treatment will be preferred treatment options for post-stroke dysphagia.

Condition being studied: Dysphagia is a common complication following acute stroke and has a reported incidence of between 34.7%-44%. Although the prevalence of dysphagia decreases with time after stroke,50% of patients still have symptoms of dysphagia at 6 months after stroke. Dysphagia significantly increases

malnutrition, dehydration, aspiration pneumonia, days in hospital, economic burdens or even death. Moreover, post-stroke complication can delay functional recovery and reduce quality of life when patients are unable to eat or drink previously enjoyed foods and beverages. Therefore, effectively restoring the swallowing function can help to avoid the risk of complications and to increase quality of life for stroke patients. Acupuncture, a major form of traditional Chinese medicine (TCM) in China, has been used as one of adjunctive therapies to improve swallowing function. Acupuncture in the nape for post-stroke dysphagia is one of the most commonly used methods. Nape acupuncture therapy includes nape-acupuncture, electro-nape-acupuncture. In addition, traditional manual acupuncture and electro-acupuncture based on syndrome differentiation are also common methods. However, there is no specific randomized controlled trials (RCT) and systematic reviews focusing on different acupuncture in association with the treatment of dysphagia after stroke. Most of the literature only considers evidence obtained by comparing acupuncture treatment and conventional therapy, and has failed to compare results of all existing acupuncture treatment. Therefore, determining the best acupuncture treatment for post-stroke dysphagia is urgent. In this study, we will conduct a Bayesian network meta-analysis to compare the effectiveness of traditional manual acupuncture, electro-acupuncture, nape-acupuncture and electro-nape-acupuncture.

METHODS

Participant or population: This study will include RCT of acupuncture for post-stroke dysphagia. Participants with dysphagia of a definite identified cause such as motor neuron disease will be excluded from our analyses. Results will not be analyzed according to sex or nationality.

Intervention: The intervention will include acupuncture (including traditional acupuncture, electro-acupuncture, nape-acupuncture, electro-nape-acupuncture) alone or in combination with other treatments (including placebo, rehabilitation training or western medicine). Ear acupuncture, auricular acupuncture, wrist-ankle acupuncture, dry needle, laser acupuncture, abdominal acupuncture, as well as any irrelevant treatments, including acupoint patching therapy, cupping, and moxibustion will be excluded from our data set and analyses.

Comparator: Different acupuncture treatment and/or conventional-based treatment group will form the basis for the control group. Trials involving acupoint selections or acupuncture manipulations will not be included.

Study designs to be included: Our study will only consider RCT.

Eligibility criteria: Our study will only consider RCT published in English or Chinese without any regional restrictions.

Information sources: Seven databases will be searched, including Pubmed, Cochrane library, Web of science, China national knowledge infrastructure (CNKI), Chinese Biomedical Literature database (CBM), Wan-fang database and the Chinese Scientific Journals Full-text Database (VIP) from inception to 31 December 2020. In addition, data from gray literature will be searched in case of omissions of potential studies.

Main outcome(s): Main outcomes will include clinical effectiveness rate kubota's water drinking test scale score, video fluoroscopic swallowing study (VFSS) and standardized swallowing assessment (SSA).

Quality assessment / Risk of bias analysis: Two reviewers will use the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) system to assess the level of the quality of evidence per outcome.we will assess the potential publication bias using an Egger's regression test and visualization of the funnel plot asymmetry.

Strategy of data synthesis: Continuous data will be calculated as mean differences (MDs) or standardized MDs (SMDs), and binary data will be calculated as odds ratios (ORs).

Subgroup analysis: If the number of studies that meet the inclusion criteria is sufficient, we will perform an analysis of the subgroups organized according to stroke type and course of treatment.

Sensitivity analysis: A sensitivity analysis will be carried out to explore original of heterogeneity using a random effects network meta-regression model.

Country(ies) involved: China.

Keywords: acupuncture, stroke, dysphagia, network meta-analysis, protocol.

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