

INPLASY PROTOCOL

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None declared.

INTRODUCTION

Review question / Objective: This study aimed to evaluate the effectiveness and safety of acupuncture combined with

Acupuncture combined with hyperbaric oxygen for post-stroke dysphagia A protocol for systematic review and meta-analysis

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Review question / Objective: This study aimed to evaluate the effectiveness and safety of acupuncture combined with hyperbaric oxygen for the treatment of post-stroke dysphagia. **Condition being studied:** Stroke is a global health concern and ischemic stroke is the most common form. Every 40 s there will be a new stroke case. Post-stroke dysphagia is a common complication after stroke, with a prevalence of 45.06%. The economic burden on patients has increased significantly due to malnutrition and respiratory infections caused by dysphagia. Although acupuncture combined with hyperbaric oxygen has received widespread use and attention in the treatment of post-stroke dysphagia. However, the discussion on its effectiveness continues. There is still a lack of evidence of evidence-based medicine in clinical practice. To evaluate the efficacy and safety of acupuncture combined with hyperbaric oxygen for post-stroke dysphagia, we conducted a systematic review and meta-analysis of published relevant RCTs.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 August 2021 and was last updated on 24 August 2021 (registration number INPLASY202180089).

hyperbaric oxygen for the treatment of post-stroke dysphagia.

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most common form. Every 40 s there will be a new stroke case. Post-stroke dysphagia is a common complication after stroke, with a prevalence of 45.06%. The economic burden on patients has increased significantly due to malnutrition and respiratory infections caused by dysphagia. Although acupuncture combined with hyperbaric oxygen has received widespread use and attention in the treatment of post-stroke dysphagia. However, the discussion on its effectiveness continues. There is still a lack of evidence of evidence-based medicine in clinical practice. To evaluate the efficacy and safety of acupuncture combined with hyperbaric oxygen for post-stroke dysphagia, we conducted a systematic review and meta-analysis of published relevant RCTs.

METHODS

Participant or population: Patients with stroke disease diagnosed by CT or MRI scan and stroke scale score, with dysphagia confirmed by video fluorescent swallowing study (VFSS) assessment, regardless of ischemic or hemorrhagic stroke. Other causes of dysphagia will be excluded. There is no restriction on the patient's ethnicity, nationality, education level, age, gender, or duration of illness.

Intervention: Patients with post-stroke dysphagia in the experimental group must take acupuncture combined with hyperbaric oxygen as the main program (can be combined with routine drug treatment for stroke or used alone).

Comparator: The treatment methods of control group may include acupuncture, hyperbaric oxygen therapy, swallowing rehabilitation, speech therapy, repetitive transcranial magnetic stimulation, etc.

Study designs to be included: We will search all RCTs on acupuncture combined with hyperbaric oxygen for the treatment of post-stroke dysphagia.

Eligibility criteria: 1. Non-Chinese and English researches. 2. Animal experiments

and mechanism studies. 3. Review and literature studies. 4. Descriptive studies without statistical analysis. 5. Studies with missing data and no access to full text.

Information sources: We will searched the following electronic databases: PubMed, EMBASE, Cochrane Library, Web of Science, MEDLINE, CNKI, Chinese VIP Information, Wanfang Database and CBM, to retrieve all RCTs on acupuncture combined with hyperbaric oxygen for post-stroke dysphagia from inception to August 2021. The search language is limited to English and Chinese.

Main outcome(s): To evaluate the efficacy of acupuncture combined with hyperbaric oxygen in the treatment of post-stroke dysphagia, we used total efficiency as the primary outcome.

Quality assessment / Risk of bias analysis: Cochrane Handbook 5.1.0 will be used by two investigators to evaluate the randomization method, allocation hiding, blinding method, completeness of the result data, selective result reporting, and other sources of bias in the included studies. A third investigator will make a determination, if the two investigators do not agree in their assessment.

Strategy of data synthesis: We will use RevMan 5.4 and STATA 16.0 software for statistical analysis. Dichotomous outcomes will be analyzed using relative risks (RRs) with 95% confidence intervals (CIs). Continuous data, will be performed using weighted mean difference (WMD) or standardized mean difference (SMD) and its 95% CIs. when the included studies have homogeneity ($P > 0.10$ and $I^2 < 50\%$), the fixed-effects model is employed. If there is a heterogeneity ($P \leq 0.10$ or $I^2 \geq 50\%$), the random-effects model is used.

Subgroup analysis: If there is some potential heterogeneity and the necessary data are available, we will perform subgroup analysis according to the genders, ages, type of stroke (ischemic stroke, hemorrhagic stroke), or control

group interventions of the included participants.

Sensitivity analysis: STATA 16.0 software will be used by us to perform sensitivity analysis to explore the reliability and stability of the present results of the study.

Country(ies) involved: China.

Keywords: acupuncture, hyperbaric oxygen, stroke, dysphagia, meta-analysis.

Contributions of each author:

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