

INPLASY PROTOCOL

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None declared.

Effects of transcranial direct current stimulation on post-stroke dysphagia: An updated systematic review and meta-analysis

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Review question / Objective: Dysphagia often occur after stroke episode, which has a serious impact on the quality of life of patients. Therefore, we conducted an updated systematically review and meta-analysis to further perfect these shortcomings.

Condition being studied: Transcranial direct current stimulation(tDCS) as a non-invasive brain stimulation is widely used to improve deglutition function in clinical. Recently, some meta-analysis confirmed that tDCS is beneficial to improve swallowing dysfunction after stroke. However, the scale of outcome index used in those meta-analysis is different, and the sample size of those meta-analysis is relatively small. In addition, the optimal stimulation protocol still uncertainties.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 September 2021 and was last updated on 30 September 2021 (registration number INPLASY202190110).

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METHODS

Participant or population: Studies will be included in which adult participants were diagnosed with post-stroke dysphagia and in whom the type of stroke was either ischemic or hemorrhagic.

Intervention: Transcranial direct current stimulation.

Comparator: Conventional therapy.

Study designs to be included: Published randomized controlled trials.

Eligibility criteria: This study will included all published randomized controlled trials (RCTs). Any other studies, such as review, animal studies, case reports, case series, letters, comments, non-clinical trials, non-RCTs, and quasi-RCTs studies were all excluded.

Information sources: 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)

Main outcome(s): Dysphagia Outcome and Severity Scale (DOSS), modified Mann assessment of swallowing ability (MMASA), Functional Oral Intake Scale (FOIS), Functional Dysphagia Scale (FDS), and Kubota 's water drinking test.

Quality assessment / Risk of bias analysis: Cochrane risk of bias assessment tool.

Strategy of data synthesis: Continuous data was calculated as mean differences (MD) and 95% confidence interval (CI).

Subgroup analysis: Subgroup analysis will be carried out according to tDCS stimulation protocol.

Sensitivity analysis: Sensitivity analyses will be carried out to dissect the heterogeneity.

Country(ies) involved: China.

Keywords: transcranial direct current stimulation, stroke, dysphagia, meta-analysis, systematic review.

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