INPLASY PROTOCOL

To cite: Qian et al. Assessment of the efficacy of Tuina on treating cervicogenic headache：a protocol for systematic review and meta-analysis. Inplasy protocol 202150053. doi: 10.37766/inplasy2021.5.0053

Received: 14 May 2021

Published: 15 May 2021

Corresponding author:
Wei Qi

248618201@qq.com

Author Affiliation:
Changchun University of Chinese Medicine

Support: **NSCF(Grant No. 82074575).**

Review Stage at time of this submission: **The review has not yet started.**

Conflicts of interest:
None declared.

Assessment of the efficacy of Tuina on treating cervicogenic headache：a protocol for systematic review and meta-analysis

Qian, X[1]; Ma, D[2]; Liu, J[3]; Pan, T[4]; Wang, H[5]; Hu, Z[6]; Wang, Z[7]; Wei, Q[8].

Review question / Objective: **To evaluate the efficacy of Tuina on treating cervicogenic headache. Patients: patients with cervicogenic headache; Intervention: tuina; Results: curative effect.**
Condition being studied: **Cervicogenic headache. Only include randomized controlled trials (RCTs) published or registered before April 1, 2021. Quasi-randomized controlled trials, review articles, case reports and other studies that do not meet the requirements will be excluded.**
Information sources: **English and Chinese search strategies will be conducted on eight databases: the China National Knowledge Infrastructure, Chinese Scientific Journal Database, Wanfang Database, China Doctoral Dissertations Full-Text Database and China Master's Theses Full-Text Database, Cochrane Central Register of Controlled Trials, PubMed and Embase. In addition, we will conduct manual retrieval of conference papers, ongoing experiments and internal reports, among others, to supplement electronic retrieval. We will select all eligible studies published on or before April 1, 2021.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 May 2021 and was last updated on 15 May 2021 (registration number INPLASY202150053).

INTRODUCTION

Review question / Objective: **To evaluate the efficacy of Tuina on treating cervicogenic headache. Patients: patients with cervicogenic headache; Intervention: tuina; Results: curative effect.**

Condition being studied: **Cervicogenic headache. Only include randomized controlled trials (RCTs) published or**

registered before April 1, 2021. Quasi-randomized controlled trials, review articles, case reports and other studies that do not meet the requirements will be excluded.

METHODS

Participant or population: Patients with cervicogenic headache.

Intervention: Tuina.

Comparator: Medicine; acupuncture; electrical stimulation.

Study designs to be included: RCT.

Eligibility criteria: Only include randomized controlled trials (RCTs) published or registered before April 1, 2021. Quasi-randomized controlled trials, review articles, case reports and other studies that do not meet the requirements will be excluded.

Information sources: English and Chinese search strategies will be conducted on eight databases: the China National Knowledge Infrastructure, Chinese Scientific Journal Database, Wanfang Database, China Doctoral Dissertations Full-Text Database and China Master's Theses Full-Text Database, Cochrane Central Register of Controlled Trials, PubMed and Embase. In addition, we will conduct manual retrieval of conference papers, ongoing experiments and internal reports, among others, to supplement electronic retrieval. We will select all eligible studies published on or before April 1, 2021.

Main outcome(s): The primary outcome measure will be the VAS pain score.

Additional outcome(s): Secondary outcomes will include ROM score and headache duration.

Data management: Two reviewers will independently apply inclusion and exclusion criteria to assess the eligibility of each retrieved study. Then, the following data will be extracted from the selected studies using the data collection table and recorded in an Excel file: first author and publication year, study design, sample, intervention measures, type of measures, bias risk assessment, and research results . The results will be cross-checked by the two reviewers, the differences will be resolved by consensus, and any ongoing differences of opinion will be arbitrated by the third reviewer. If necessary, we can also contact the original author to provide more relevant information.

Quality assessment / Risk of bias analysis: Two reviewers will independently apply the bias tool from the Cochrane Handbook for Systematic Reviews of Interventions to evaluate the risk of bias in each selected study. Six dimensions will be evaluated: random sequence generation; allocation hiding; blinding of patients, researchers, and outcome evaluators; incomplete outcome data; selective reporting and other issues. These studies will be divided into three quality levels: low risk of deviation, high risk of deviation, and risk of unclear deviation. Any discrepancies will be resolved through discussion with the third author. When a consensus cannot be reached through discussion, a third-party reviewer will make a decision.

Strategy of data synthesis: Statistical heterogeneity will be assessed using I2 statistics. I2 statistic less than 50% indicates that the level of statistical heterogeneity is low; 50% or higher will be considered as significant statistical heterogeneity. If substantial heterogeneity is found, we will report it and use sensitivity analysis and subgroup analysis to explore possible causes.

Subgroup analysis: If possible, we plan to carry out the following group analysis: study regional differences, differences in conventional rehabilitation methods, differences in average course of disease, and differences in treatment time. We will use Review Manager V.5.4 in the formal test of subgroup interaction.

Sensitivity analysis: When possible, we will conduct a sensitivity analysis to explore the impact of the trial's risk of bias on the preliminary results. These analyses will exclude lower-quality trials and repeat meta-analysis based on sample size and insufficient data to assess quality and robustness when significant statistical heterogeneity occurs.

Country(ies) involved: China.

Keywords: tuina; cervicogenic headache; protocol; systematic review.

Contributions of each author:

Author 1 - Xin Qian.
Email: 137288854@qq.com
Author 2 - Dongyang Ma.
Author 3 - Jiayi Liu.
Author 4 - Ting Pan.
Author 5 - Haili Wang.
Author 6 - Zhe Hu.
Author 7 - Zhaohui Wang.
Author 8 - Wei Qi.
Email: 248618201@qq.com