

INPLASY PROTOCOL

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Corresponding author:
Zhao Wenhai

zwh9899@163.com

Author Affiliation:
Affiliated Hospital of the
Changchun University of
Chinese Medicine.

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None declared.

Tuina for osteoarthritis A protocol for systematic review and meta-analysis

Cui, ZH¹; Sha, LQ²; Zhang, WD³; Zhao, WH⁴.

Review question / Objective: As a traditional Chinese medicine technique, massage can treat osteoarthritis. The aim of this systematic review protocol was to evaluate the value of the efficacy and safety of tuina in the treatment of osteoarthritis.

Condition being studied: Osteoarthritis (OA) is a particularly common chronic degenerative disease that not only severely affects patients' joint function and quality of life, but also causes serious health problems worldwide. Tuina, a traditional Chinese medicine technique, has been widely used to treat OA in Asian countries such as China and Thailand, but the evidence for its effectiveness is unclear.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 October 2022 and was last updated on 03 November 2022 (registration number INPLASY2022100122).

INTRODUCTION

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widely used to treat OA in Asian countries such as China and Thailand, but the evidence for its effectiveness is unclear.

METHODS

Participant or population: Patients should be diagnosed with osteoarthritis. There are no restrictions on country, race, age or gender.

Intervention: The intervention in the experimental group consisted only of tui na therapy, which consisted mainly of whole-body tuina, meridian tuina, muscle relaxation, point tui na, etc. There is no restriction on the mode, time, or frequency of massage.

Comparator: The interventions in the control group included any treatment other than massage (e.g., placebo, medication, acupuncture, routine care, etc.).

Study designs to be included: RCTs.

Eligibility criteria: Inclusion criteria (i) published randomized controlled trials; (ii) blinded or not; (iii) interventions, i.e., tui na in the treatment group and other treatments different from tui na in the control group; (iv) outcome indicators, i.e., any of the observed indicators such as overall efficiency, visual analog score, WOMAC score, Lysholm score, HSS score and JOA score.

Information sources: Springer, Cochrane Library, Web of Science, China National Knowledge Infrastructure (CNKI), Chinese Biomedical Literature Database (CBM), Wanfang Database, Medline, EBASE, WHO International Clinical Trials Registry Platform (ICTRP).

Main outcome(s): Visual Analogue Score (VAS), Total Effective Rate, Western Ontario and MIT Master's University (WOMAC) Osteoarthritis Index, McMaster University Osteoarthritis Index Scale.

Quality assessment / Risk of bias analysis: When more than ten RCTs are included, we

use funnel plots to assess publication bias. When the funnel plot is asymmetric, Egger's test will be used to explore the potential causes of publication bias.

Strategy of data synthesis: We will use Revman 5.3 software to analyze the collected clinical study data. For discontinuous variables, the risk ratio (RR) with 95% confidence interval (CI) will be selected. For continuous variables, the weighted mean difference (WMD) with 95% confidence interval will be selected when the measurement instruments are the same, and the standardized mean difference (SMD) with 95% confidence interval will be selected when the measurement instruments are different. If there was no significant heterogeneity ($P > .10$ or $I^2 < 50\%$), a fixed-effects model was used. If there was significant heterogeneity ($P \leq .10$ or $I^2 \geq 50\%$), we would use a random-effects model and perform subgroup or sensitivity analysis to find possible causes of between-group heterogeneity.

Subgroup analysis: Due to differences in gender, age, duration, and frequency of treatment, we will perform a subgroup analysis based on the data.

Sensitivity analysis: We will perform a sensitivity analysis by excluding studies one by one in terms of the reliability and stability of the findings.

Country(ies) involved: China.

Keywords: osteoarthritis, tuina, protocol, systematic review.

Contributions of each author:

Author 1 - Zhang Weidong - Conceptualization, Data curation, Formal analysis, Investigation, Methodology.

Email: 943209174@qq.com

Author 2 - Cui Zhenhai.

Author 3 - Sha Liqun.

Author 4 - Zhao wenhai.