INPLASY PROTOCOL

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Corresponding author:
Jia Li

zylj529@outlook.com

Author Affiliation:
Chengdu University of Traditional Chinese Medicine

Support: **None.**

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Conflicts of interest:
None declared.

Neuroimaging studies of acupuncture on knee osteoarthritis: a systematic review

Li, J[1]; Liu, Y[2]; Zhang, J[3]; Yuan, M[4].

Review question / Objective: **This study was conducted in order to investigate the study design and main outcomes of acupuncture neuroimaging studies on knee osteoarthritis (KOA),and reveal the potential mechanism of the pain-relieving effect of acupuncture on knee osteoarthritis.**
Condition being studied: **Knee osteoarthritis is a very common disease that seriously affects people's quality of life. Acupuncture, as an effective treatment option, can achieve pain relief and treat the disease, but the mechanism of acupuncture analgesia is still unclear to us. Therefore, we set certain criteria to include eligible clinical trials to reveal its principles.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 April 2022 and was last updated on 18 April 2022 (registration number INPLASY202240110).

INTRODUCTION

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acupuncture analgesia is still unclear to us. Therefore, we set certain criteria to include eligible clinical trials to reveal its principles.

METHODS

Participant or population: Patients with knee osteoarthritis.

Intervention: Acupuncture.

Comparator: Controlled interventions included control groups with no treatment, sham /placebo groups, or other conventional treatments.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: (1) randomized controlled trial; (2) patients with KOA ; (3) using Acupuncture Therapy; (4) outcomes should include neuroimaging studies.

Information sources: We searched PubMed, Cochrane Central Register of Controlled Trials, Embase, and China National Knowledge Infrastructure.

Main outcome(s): Outcomes should include neuroimaging studies.

Quality assessment / Risk of bias analysis: In this systematic review, we used the Cochrane risk bias tool to assess the risk of bias in randomized controlled trials using the following evaluation indicators: sequence generation, allocation concealment, blinding, incomplete outcome data addressed, selective outcome reporting, and other biases. The judgment of the bias risk of this item was presented as "low," "high," and "unclear." Study selection, data extraction, and risk of bias assessment were performed independently by two investigators.

Strategy of data synthesis: In this systematic review, we used the Cochrane risk bias tool to assess the risk of bias in randomized controlled trials using the following evaluation indicators: sequence generation, allocation concealment, blinding, incomplete outcome data addressed, selective outcome reporting, and other biases. The judgment of the bias risk of this item was presented as "low," "high," and "unclear." Study selection, data extraction, and risk of bias assessment were performed independently by two investigators.

Subgroup analysis: We will do subgroup analysis if necessary.

Sensitivity analysis: We will do it if necessary.

Country(ies) involved: China.

Keywords: acupuncture, neuroimaging, fMRI, knee osteoarthritis, pain, systematic review.

Contributions of each author:

Author 1 - Jia Li.
Email: zylj529@outlook.com
Author 2 - Yuan Liu.
Author 3 - Jing Zhang.
Author 4 - Mingxing Yuan.