INPLASY PROTOCOL

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Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:
None declared.

Acupuncture therapies for Knee Osteoarthritis: A protocol for systematic review and network meta-analysis

Izumoji, G[1].

Review question / Objective: The purpose of this study is to compare the efficacy and safety of different acupuncture therapies in the treatment of Knee Osteoarthritis (KOA) using systematic review and network meta-analysis (NMA).
Condition being studied: KOA is a common chronic clinical condition worldwide. Patients with KOA typically present pain and stiffness, and these symptoms could greatly affect patients' life. Acupuncture therapies are wildly used in the management of KOA, and many different types of acupuncture therapies have been reported in trials, either singly or in combination. However, the relative treatment effects of these therapies are poorly understood.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 September 2022 and was last updated on 06 October 2022 (registration number INPLASY202290130).

INTRODUCTION

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combination. However, the relative treatment effects of these therapies are poorly understood.

METHODS

Participant or population: Patients diagnosed with KOA will be included. There's no limitation on ages, sex or race. However KOA patients combined with other painful condition on their knees or who have been treated with surgery will be excluded.

Intervention: Acupuncture therapy, defined as acupoint-stimulated technique guided by TCM theory, either singly used or using different acupuncture therapies in combination.

Comparator: Non-steroidal anti-inflammatory drugs, or different acupuncture therapies from intervention group will be included.

Study designs to be included: Randomized controlled trials (RCTs) with parallel-group design will be included.

Eligibility criteria: Studies meet the "PICOS", which reported in English or Chinese will be included.

Information sources: MEDLINE (via PubMed), EMBASE, Cochrane Library, Web of Science, China National Knowledge Infrastructure, Chinese Biomedical Database, VIP Database, Wanfang Database, WHO International Clinical Trials Registry Platform, ClinicalTrials.gov, and Chinese Clinical Trial Register will be searched from their inceptions to August 2022.

Main outcome(s): Pain intensity.

Quality assessment / Risk of bias analysis: The risk of bias of included studies will be assessed using the Cochrane tool risk of bias 2. The quality of the NMA result will be assessed using the Confidence in Network Meta-Analysis (CINeMA).

Strategy of data synthesis: Data synthesis will be performed in Stata software. Mean difference (MD) or standardized mean difference (SMD) on the change score (pre-post difference) with 95% confidence interval (CI) will be used for continuous outcome. And random-effects model will be fitted. For each outcome, when two or more studies comparing the same interventions exist, the standard pairwise meta-analysis will be conducted. Network plot of included interventions for each outcome will be generated. Direct and indirect comparisons will be combined to obtain the pooled treatment effect. The ranking probabilities of all included interventions will be obtained using the surface under the cumulative ranking curve analysis.

Subgroup analysis: Not planed.

Sensitivity analysis: If necessary, we will perform sensitivity analysis by excluding trials contributing significant inconsistency.

Country(ies) involved: Japan.

Keywords: Knee Osteoarthritis; Acupuncture.

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