

INPLASY PROTOCOL

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Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:

None declared.

INTRODUCTION

Review question / Objective: Can acupuncture therapy contribute to pain relief and functional recovery in patients with acute low back pain?

Acupuncture for Acute Low Back Pain: A Systematic Review and Bayesian Network Meta-Analysis

Wu, B¹; Yang, L²; Fu, C³; Jian, G⁴; Zhuo, Y⁵; Yao, M⁶; Xiong, H⁷.

Review question / Objective: Can acupuncture therapy contribute to pain relief and functional recovery in patients with acute low back pain?

Condition being studied: Acute lower back pain is the most common disease in the modern society. Acupuncture is a worldwide-use method complementary and alternative method, and many studies have demonstrated the effect of acupuncture on musculoskeletal pain. At present, although there are many acupuncture treatments, the effect of acupuncture is still unclear. Thus, we decide to make a network meta-analysis to solve it.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 December 2020 and was last updated on 06 March 2021 (registration number INPLASY2020120025).

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there are many acupuncture treatments, the effect of acupuncture is still unclear. Thus, we decide to make a network meta-analysis to solve it.

METHODS

Participant or population: Patient with acute low back pain.

Intervention: Any acupuncture therapy will be included.

Comparator: Placebo or western medicine.

Study designs to be included: Randomized control trials.

Eligibility criteria: Peer-reviewed randomized control trails will be eligible for inclusion. And language will be restricted to English and Chinese.

Information sources: PubMed, Cochrane library, Web of Science, Embase, China National Knowledge Infrastructure, Wanfang Database, VIP Database, and China Biology Medicine disc.

Main outcome(s): (1) pain (2) adverse events.

Quality assessment / Risk of bias analysis: Cochrane risk-of-bias tool will be used to evaluate the quality.

Strategy of data synthesis: First of all, the pairwise meta-analysis was performed using RevMan 5.3. Then, the NMA was performed in a Bayesian framework using Markov Chain Monte Carlo (MCMC) methods by WinBUGS 1.4. Furthermore, the surface under the cumulative ranking curve (SUCRA) was applied to rank the size effect of treatments.

Subgroup analysis: Subgroup analysis and regression analysis will be conducted if reasonable such as clinic type, publication year.

Sensibility analysis: Before selecting model, sensitivity analysis will be accomplished if sufficient studies are available and necessary.

Country(ies) involved: China.

Keywords: acupuncture; acute low back pain; systematic review; network meta-analysis.

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