INPLASY PROTOCOL

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None declared.

Efficacy and safety of acupuncture in the treatment of low back myofasciitis A protocol for systematic review and meta-analysis

Yu, QR[1]; Bi, XY[2]; Sheng, YW[3]; Zheng, XJ[4]; Yang, JG[5].

Review question / Objective: **The purpose of this study is to evaluate the clinical efficacy and safety of acupuncture in the treatment of low back myofasciitis, and to provide more clinical plans for the treatment of low back myofasciitis.**
Eligibility criteria: **RCTs were included if they used at least one of the following two outcome measures considered salient in the field of LBP:1. Pain intensity (e.g., Visual Analog Scale [VAS]);2. Back-specific functional status (e.g Roland–Morris Disability Questionnaire [RMDQ]).The primary outcome was pain intensity. The secondary outcome measure was back-specific functional status.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 03 March 2022 and was last updated on 24 April 2022 (registration number INPLASY202230013).

INTRODUCTION

Review question / Objective: **The purpose of this study is to evaluate the clinical efficacy and safety of acupuncture in the treatment of low back myofasciitis, and to provide more clinical plans for the treatment of low back myofasciitis.**

Condition being studied: **All relevant of randomized controlled trials (RCTs) in acupuncture was utilized as the treatment for the myofascial pain syndrome in chronic back pain. No restrictions are on country but language will be limited on English and Chinese.**

METHODS

Participant or population: We included studies which recruited adults (>18 years) with LBP or myofascial pain syndrome in the lower back. RCTs that included subjects with LBP caused by specific pathological entities such as infection, metastatic disease, neoplasm, osteoarthritis, rheumatoid arthritis, inflammatory processes, radicular syndrome, or fractures were excluded. Patients with LBP associated with sciatica as the major symptom, pregnancy, post-partum status, and post-operative LBP were also excluded. Patients with acute, sub-acute (≤12 weeks),or chronic LBP (>12 weeks) were included.

Intervention: The treatment group took acupuncture as intervention or acupuncture combined with other treatment methods.

Comparator: The control group took oral painkillers as control.

Study designs to be included: RCTs - 2.3. Search strategy,2.4. Studies selection,2.5. Data extraction and Data analysis,2.6. Data analysis.

Eligibility criteria: RCTs were included if they used at least one of the following two outcome measures considered salient in the field of LBP:1. Pain intensity (e.g., Visual Analog Scale [VAS]);2. Back-specific functional status (e.g Roland–Morris Disability Questionnaire [RMDQ]).The primary outcome was pain intensity. The secondary outcome measure was back-specific functional status.

Information sources: Two investigators will retrieve the relevant myofascial pain syndrome in the lower back in the following databases: PubMed, Embase, the Cochrane Library, CNKI, Chinese VIP information, Wanfang Database, and CBM, from inception until February 2022. The language will be restricted to Chinese and English.

Main outcome(s): The purpose of this study is to evaluate the clinical efficacy and safety of acupuncture in the treatment of low back myofasciitis, and to provide more clinical plans for the treatment of low back myofasciitis.

Quality assessment / Risk of bias analysis: Two author evaluated the quality and risk of bias of the study independently using the Risk of Bias in Systematic reviews tool and PRISMA.[15] A consensus is reached by 2 reviewers through discussion, and independent decisions are made by experts if necessary.

Strategy of data synthesis: Identified studies of potential relevance will initially be imported into Endnote X9, after which 2 investigators will independently screen the eligibility of these studies for inclusion in the final meta-analysis. Discords will be figured out by negotiation with a third researcher. Two researchers will then independently extract the following information from included investigations: author names, publication year, title, country, average age, gender, study design, participants, total case number, intervention measures, comparisons, outcomes other relevant details. When necessary information is unavailable, efforts will be made to contact the original authors.

Subgroup analysis: If there was high heterogeneity in the studies, we performed subgroup analyses to explore the differences in age, sex, interventions, and course of disease/treatment. We used funnel plots to identify whether there was a small study bias if 10 or more studies were included. The asymmetry of funnel plots suggests the possibility of small-study effects, and the results of the analysis were explained cautiously.

Sensitivity analysis: To evaluate the potential for publication bias, the plots of the funnel will be drawn when sufficient studies were available (n≥10). In addition, the risk of publication bias will be appraised by utilizing Egger assessment.

Country(ies) involved: China.

Keywords: Myofascial Low Back Pain, Chronic low back pain, Acupuncture, meta-analysis, protocol.

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