INPLASY PROTOCOL

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Corresponding author:
Yu Lai

yulai06@cdutcm.edu.cn

Author Affiliation:
Chengdu University of Traditional Chinese Medicine.

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None declared.

Effectiveness of Acupuncture in the Treatment of lumbar muscle strain: A Systematic Review and Meta-Analysis

Yang, L[1]; Li, XY[2]; Rao, X[3]; Li, JL[4]; Lai, Y[5].

Review question / Objective: **Effectiveness of Acupuncture in the Treatment of lumbar muscle strain: A Systematic Review and Meta-Analysis.**
Condition being studied: **Lumbar muscle strain, also known as functional low back pain, refers to the chronic injury of soft tissues such as lumbar muscles, fascia and ligaments. At present, Western medicine treatment includes drugs, physiotherapy and functional exercise. Western medicine treatment has a certain effect in relieving the symptoms of low back pain, but if the treatment is stopped, the disease will recur, and long-term drug treatment will significantly increase the incidence of adverse events. Acupuncture treatment has good curative effect, is not easy to relapse, and has few adverse reactions.**
Eligibility criteria: **Inclusion Criteria: (1) Participants: Subjects were clinically diagnosed with lumbar muscle strain. There were no restrictions on the patients' age, sex, country, or ethnicity. (2) Research type: randomized clinical trials (RCTs). (3) The control group was treated with conventional drugs or Conventional treatment. (5) Results: Lower back pain symptoms lessen or disappear. Exclusion Criteria: (1) Other Traditional Chinese Medicine Methods. (2) Exclude duplicate publications and incomplete data. (3) Exclude acupuncture plus other drugs.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 August 2022 and was last updated on 11 August 2022 (registration number INPLASY202280036).

INTRODUCTION

Review question / Objective: **Effectiveness of Acupuncture in the Treatment of lumbar muscle strain: A Systematic Review and Meta-Analysis.**

Condition being studied: Lumbar muscle strain, also known as functional low back pain, refers to the chronic injury of soft tissues such as lumbar muscles, fascia and ligaments. At present, Western medicine treatment includes drugs, physiotherapy and functional exercise. Western medicine treatment has a certain effect in relieving the symptoms of low back pain, but if the treatment is stopped, the disease will recur, and long-term drug treatment will significantly increase the incidence of adverse events. Acupuncture treatment has good curative effect, is not easy to relapse, and has few adverse reactions.

METHODS

Search strategy: The search strategy used a combination of subject terms and free words. Based on the characteristics of each database, the search strategy was as follows: ("acupuncture" [MeSH] OR "electro acupuncture" [Title/Abstract] OR "fire needle" [Title/Abstract] OR "moxibustion" [Title/Abstract] OR "cutaneous acupuncture" [Title/Abstract] OR "warm needle acupuncture" [Title/Abstract] OR "needle" [Title/Abstract]).

Participant or population: Lumbar muscle strain patients.

Intervention: acupuncture, moxibustion, electro acupuncture, warm needle acupuncture, needle, fire needle, cutaneous acupuncture.

Comparator: The interventions in the control group included conventional treatments such as drug therapy, physiotherapy, and functional exercise.

Study designs to be included: Randomized clinical trials (RCTs).

Eligibility criteria: Inclusion Criteria: (1) Participants: Subjects were clinically diagnosed with lumbar muscle strain. There were no restrictions on the patients' age, sex, country, or ethnicity. (2) Research type: randomized clinical trials (RCTs). (3) The control group was treated with conventional drugs or Conventional treatment. (5) Results: Lower back pain symptoms lessen or disappear. Exclusion Criteria: (1) Other Traditional Chinese Medicine Methods. (2) Exclude duplicate publications and incomplete data. (3) Exclude acupuncture plus other drugs.

Information sources: A total of 9 databases, including PubMed, Cochrane Library, EMBASE, Web of Science, Scopus, China National Knowledge Infrastructure (CNKI), Wanfang Database, China Science and Technology Journal Database (VIP) and China Biomedicine (CBM).

Main outcome(s): Efficient, visual analog scale (VAS), Oswestry Disability Index (ODI), Sign score,Biochemical detection indicators.

Quality assessment / Risk of bias analysis: Two authors independently included and excluded studies. Literature quality was reviewed, refined and assessed using Review Manager 5.4 software.

Strategy of data synthesis: RevMan Software (V5.4) will conduct all data analysis. We will select a random effects model or fixed effects model to merge the primary and secondary outcome indicators in accordance with the results of heterogeneity test.

Subgroup analysis: When necessary, the acupuncture group and the drug group were used for subgroup analysis.

Sensitivity analysis: Sensitivity analysis is performed when necessary.

Country(ies) involved: China.

Keywords: lumbar muscle strain; Acupuncture; Systematic Review; Meta-Analysis.

Contributions of each author:

Author 1 - Lin Yang.
Email: 781387628@qq.com
Author 2 - Xinyun Li.
Email: 1043541625@qq.com

Author 3 - Xiangshu Rao.
Email: 2065239824@qq.com
Author 4 - Jialiang Li.
Email: 303738554@qq.com
Author 5 - Yu Lai.
Email: yulai06@cdutcm.edu.cn