INPLASY PROTOCOL

Corresponding author:
Ying Jiang

164475222@qq.com

Author Affiliation:
Binzhou Medical University

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Conflicts of interest:
None declared.

Efficacy of sling exercise therapy for chronic nonspecific low back pain：a systematic review and meta-analysis

Song, HY[1]; Zhu, JH[2]; Zhang, XG[3]; Ma, H[4]; Jiang, Y[5].

Review question / Objective: Efficacy of sling exercise therapy for chronic nonspecific low back pain：a meta-analysis of RCT.

Condition being studied: Sling exercise therapy can improve the pain and function of patients with chronic nonspecific low back pain, but multi-dimensional systematic evaluation is still needed to verify the safety and efficacy of suspension training in the treatment of chronic nonspecific low back pain. The project leader and other project members have Meta analysis experience, master statistical analysis methods, and can accurately collect, process, analyze and interpret data and draw conclusions from the data.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 February 2021 and was last updated on 21 February 2021 (registration number INPLASY202120070).

INTRODUCTION

Review question / Objective: Efficacy of sling exercise therapy for chronic nonspecific low back pain : a meta-analysis of RCT.

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accurately collect, process, analyze and interpret data and draw conclusions from the data.

METHODS

Participant or population: Chronic nonspecific low back pain.

Intervention: Sling exercise therapy.

Comparator: Routine exercise therapy, physical therapy, Chinese medicine rehabilitation treatment.

Study designs to be included: RCT.

Eligibility criteria: Primary Outcome Measures Visual Analogue Scale (VAS), Oswestry Disability Index (ODI).

Information sources: Computer retrieval of Chinese databases: Wanfang, Weipu, CNKI, CBM; English databases: PubMed, Web of Science, Pedro, Cochrane Library.Two researchers independently screened literatures and extracted data, and selected and included them according to the designed full-text screening form.

Main outcome(s): Primary Outcome Measures Visual Analogue Scale (VAS), Oswestry Disability Index (ODI).

Quality assessment / Risk of bias analysis: The systematic evaluation manual of the Cochrane Collaborer was used to evaluate the bias risk of the included literature, including 7 aspects: random number generation, allocation hiding, blind method (subject and performer), blind method (outcome evaluator), data completeness, selective reporting, and others. The bias grades were: "low risk", "unclear" (the literature did not provide sufficient information for analysis), and "high risk".The modified Jadad scale was used to evaluate the quality of the literature. Score 1-3 was considered as low quality, and score 4-7 was considered as high quality.

Strategy of data synthesis: RevMan5.4 provided by the Cochrane Collaboration was used for meta-analysis. The continuity variables were represented by mean difference (MD) and 95%CI. Chi-square test and I2 value were used to test the heterogeneity of the included studies. If P > 0.10 and I2< 50%, the included studies were considered to be homogenous. A fixed-effect model was used for Meta-analysis. If P ≤ 0.10 and I2≥50%, heterogeneity was considered among the included studies, and random effects model was adopted. When the source of heterogeneity could not be determined, meta-analysis was not performed and descriptive analysis was used. Descriptive analysis is used when sources of heterogeneity cannot be determined and data cannot be combined.

Subgroup analysis: Subgroup analysis was performed according to the duration of the disease、therapy duration or intervention method.

Sensitivity analysis: Sensitivity analysis was used when sources of heterogeneity could not be determined and data could not be combined.

Country(ies) involved: China.

Keywords: Chronic nonspecific low back pain; Sling exercise; Systematic review; Meta analysis.

Contributions of each author:
Author 1 - Hongyu Song.
Email: 1729504394@qq.com
Author 2 - Jiahui Zhu.
Author 3 - Xiaogang Zhang.
Author 4 - Hong Ma.
Author 5 - Ying Jiang.
Email: 164475222@qq.com