INPLASY PROTOCOL

To cite: Huang et al. The efficacy of kinesio taping in the treatment of external humeral epicondylitis: A Systematic review and meta-analysis. Inplasy protocol 202120074. doi: 10.37766/inplasy2021.2.0074

Received: 22 February 2021

Published: 22 February 2021

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Support: Natural Science Foundation.

Review Stage at time of this submission: Data analysis.

Conflicts of interest: None declared.

The efficacy of kinesio taping in the treatment of external humeral epicondylitis: A Systematic review and meta-analysis

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Review question / Objective: The efficacy of kinesio taping in the treatment of external humeral epicondylitis. Through systematic review and Meta analysis, the efficacy of kinesio taping in the treatment of external humeral epicondylitis was objectively and comprehensively evaluated, so as to provide a reference for clinical treatment.

Condition being studied: External humeral epicondylitis. The project leader and other project members have the background of systematic review and the experience of clinical experiments. At the same time, they have mastered the statistical analysis method and can accurately collect, process, analyze and interpret the 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 22 February 2021 and was last updated on 22 February 2021 (registration number INPLASY202120074).

INTRODUCTION

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METHODS

Participant or population: Patients with external epicondylitis of the humerus have no limitation of age, course of disease, gender and source of cases.

Intervention: The treatment group was given kinesio taping treatment (no limitation on the way, duration and course of treatment) or kinesio taping combined with other treatments.

Comparator: The control group did not receive kinesio taping therapy (no stimulation) or receive other treatment.

Study designs to be included: RCT.

Eligibility criteria: Randomized controlled trial in Chinese and English language only.

Information sources: Cochrane Library, PubMed, Web of Science, Pedro, China Academic Journals (CNKI), China Biomedical Literature Database (CBM), VIP Information Resource System and Wanfang Database were searched by computer.

Main outcome(s): The primary outcome was Visual Analogue Scale (VAS), and the secondary outcome was patient-rated Tennis Elbow Evaluation (PRTEE).

Quality assessment / Risk of bias analysis: RCT bias risk assessment was performed using the Cochrane system recommended criteria, including 7 aspects. ① Generation of random schemes; ② Distribution hiding; ③ Blind method (subject and treatment practitioner); (4) blind method (outcome evaluator); ⑤ Incomplete data; ⑥ Selective reporting; 7) other. The degree of risk of bias was classified as "low risk", "high risk", and "unclear" (the literature did not provide sufficient information for analysis). At the same time, the modified Jadad scale was used to evaluate the quality of the literatures. 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 Metaanalysis. If $P \leq 0.10$ and $I2 \geq 50\%$, heterogeneity was considered among the included studies, and random effects model was adopted. When the source of heterogeneity could not be determined and the data could not be combined, the metaanalysis was not performed and descriptive analysis was adopted.

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: Kinesio taping; External humerus epicondylitis; Tennis elbow; Systematic review ; Meta-analysis.

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