INPLASY PROTOCOL

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None declared.

Tuina for diabetic peripheral neuropathy: a protocol of a systematic review and meta-analysis

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Review question / Objective: **This study is intended to evaluate the efficacy and safety of Tuina for diabetic peripheral neuropathy.**
Condition being studied: **Type 2 diabetic peripheral neuropathy (DPN) is one of the common chronic complications of diabetes mellitus.It has been reported that the incidence of DPN is as high as 60%~ 90%.Clinical manifestations are numbness, pain, chills, weakness and other symptoms, which seriously affect the quality of life of patients. Current DPN treatment Mainly include the cause of treatment, symptomatic treatment and strict control of hyperglycemia and other controllable neuropathy risk factors, nutritional nerve, antioxidant Stress, improving microcirculation, etc., the treatment effect is not good.Many studies have shown that massage can effectively relieve symptoms of diabetic peripheral neuropathy .Therefore, the use of Tuina in DPN therapy requires further research. At present, there is no systematic review of Tuina treatment in the treatment of diabetic peripheral neuropathy, so this study will evaluate the efficacy and safety of Tuina in the treatment of diabetic peripheral neuropathy, and provide evidence for clinical decision-making of Tuina.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 07 May 2021 and was last updated on 07 May 2021 (registration number INPLASY202150027).

INTRODUCTION

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METHODS

Participant or population: Patients suffering from diabetic peripheral neuropathy.

Intervention: Tuina therapies regardless of the duration or frequency of treatment will be included in the study.

Comparator: Medication, conventional therapies, no intervention will be considered in control groups.

Study designs to be included: RCTs.

Eligibility criteria: Patients suffering from diabetic peripheral neuropathy.

Information sources: PubMed, Embase, The Cochrane Library, Web of Science, China National Knowledge Infrastructure (CNKI), CBM, Wanfang database and VIP.

Main outcome(s): The outcomes will include effective rate, nerve conduction velocity, pain scale, quality of life score, adverse event and so on.

Quality assessment / Risk of bias analysis: Funnel plots will be created to assess the reporting bias. Dissymmetry funnel plot indicates high risk of reporting bias, while symmetric funnel plot indicates low risk.

Strategy of data synthesis: RevMan V.5.3.5. software will be used for all statistical analyses. We decided to use either a fixed-effects or random-effects model based on the heterogeneity levels of the included studies. If no substantial statistical heterogeneity is detected, the data synthesis will be processed using the fixed-effects model, and if substantial statistical heterogeneity is detected, the data synthesis will be performed using the random-effects model.

Subgroup analysis: To eliminate heterogeneity as much as possible, sensitivity analysis or subgroup analysis is applied to explore the source of heterogeneity. If one considers the impact of multiple covariates, a meta-regression analysis is applied to explore the source of heterogeneity.

Sensitivity analysis: To eliminate heterogeneity as much as possible, sensitivity analysis or subgroup analysis is applied to explore the source of heterogeneity. If one considers the impact of multiple covariates, a meta-regression analysis is applied to explore the source of heterogeneity.

Country(ies) involved: China.

Keywords: Tuina, protocol, diabetic peripheral neuropathy, systematic review.

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