INPLASY PROTOCOL

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None declared.

Effectiveness and safety of Moxibustion for Parkinson's disease：a protocol for systematic review and meta-analysis

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Review question / Objective: **To evaluate the effectiveness and safety of Moxibustion in the treatment of Parkinson's disease.**
Condition being studied: **Parkinson's disease (PD) is the second most common progressive neurodegenerative disorder influencing both motor and non motor symptoms. At least 6 million people worldwide are suffering from PD. Dopaminergic medications are the most effective symptomatic therapy for motor symptoms. Besides, levodopa (L-dopa) is the fundamental choice proved to extend life expectancy. However, long-term L-dopa treatment can lead to motor complications such as dyskinesias. Thus, there exists a demand for many PD patients to seek complementary and alternative therapies for better therapeutic effects. Moxibustion has a relatively good effect on the treatment of PD. Many clinical studies on the treatment of PD with Moxibustion have been reported, but there is no relevant systematic review. So this research aims to systematically and comprehensively evaluate the effectiveness and safety of Moxibustion in the treatment of PD.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 19 April 2021 and was last updated on 19 April 2021 (registration number INPLASY202140097).

INTRODUCTION

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METHODS

Search strategy: The key search terms are " moxibustion OR moxa" AND "Parkinson OR Parkinson's disease OR parkinsonism".

Participant or population: Patients diagnosed with PD will be participants without restrictions of age, gender, race, or duration of disease.

Intervention: Moxibustion therapy includes all combination therapies using any type of Moxibustion therapy or based on moxibustion therapy in combination with other therapies.

Comparator: In the control group, the intervention means may include medicine(Traditional Chinese. Medicine, western medicine), routine symptomatic treatment, etc.

Study designs to be included: Only randomized controlled trials(RCTs) will be included in this study.

Eligibility criteria: Published or unpublished randomized controlled trials with Chinese or English.

Information sources: PubMed, Cochrane Library, Embase, China National Knowledge Infrastructure(CNKI),Wanfang Database, China Bioloy Medicine(CBM)and VIP Data base will be searched from inception to July 2021.

Main outcome(s): The total effective rate and the total symptom score were the primary outcomes. The total symptom score will be based on the scale of Unififfiffified PD Rating Scales (including the score of spirit, behavior, emotion, daily activities, motor function, motor complications) and the Webster scale.

Quality assessment / Risk of bias analysis: The Cochrane Handbook for systematic reviews of interventions Version 6 will be performed to assess a broad category of biases in the included studies. We will evaluate biases from the following seven aspects: random sequence generation, allocation concealment, blinding of the participants and personnel, blinding of the outcome assessments, incomplete outcome data, selective reporting, and other sources of bias. These studies will be assigned as low Risk, high Risk or unclear Risk. Inconsistencies will be resolved by discussion with other reviewers.

Strategy of data synthesis: If studies are adequately homogeneous in design and comparison, we will conduct data synthesis using Review Manager Software 5.3. The fixed-effects or random-effects model will be chosen depending on the I2 value. A 95% confidence interval will be the effective size for data synthesis. We will perform qualitative analysis if the data is not fit for quantitative analysis.

Subgroup analysis: In the case of high heterogeneity, subgroup analysis will be done to identify the sources of heterogeneity. We will conduct subgroup analysis according to different combinations of moxibustion and other combined therapies, different course time, or different outcome indicators.

Sensitivity analysis: When there are adequate studies, sensitivity analysis will be adopted for primary outcomes to explore the robustness of conclusions if feasible and assess the impact of method quality, sample size, and missing data. The meta-analysis will be conducted again after excluding the lower quality research. The

results will be compared and discussed according to the results.

Country(ies) involved: China.

Keywords: Moxibustion; Parkinson's disease; meta-analysis; systematic review.

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