

INPLASY PROTOCOL

To cite: Zhu et al. Little needle-scalpel for Piriformis syndrome: a protocol for systematic review and meta-analysis. Inplasy protocol 2020110092. doi: 10.37766/inplasy2020.11.0092

Received: 21 November 2020

Published: 21 November 2020

Corresponding author:
Siyuan Zhu

1163142628@qq.com

Author Affiliation:
Jiangxi University of
Traditional Chinese Medicine

Support: 1050Project
5141900101.

Review Stage at time of this submission: The review has not yet started.

Conflicts of interest:
The authors declare no conflicts of interest.

Little needle-scalpel for Piriformis syndrome: a protocol for systematic review and meta-analysis

Zhu, S¹; Xiong, J².

Review question / Objective: This study comprehensively searched the literature to further systematically evaluate the efficacy of Little needle-scalpel in the treatment of Piriformis syndrome, with a view to clinically treating Piriformis syndrome, alleviating its related clinical symptoms and preventing its further development, and providing the latest evidence-based medical evidence.

Condition being studied: Piriformis syndrome is a common clinical disease, frequently-occurring disease, and difficult to treat. In severe cases, patients may experience severe buttock and lower limb pain, discomfort, difficulty walking, and claudication. At present, non-surgical treatments such as Little needle-scalpel are used in clinical treatment to relieve symptoms, and relatively satisfactory clinical effects have been achieved. This study aims to evaluate the efficacy of Little needle-scalpel in delaying the progression of Piriformis syndrome through systematic evaluation.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 November 2020 and was last updated on 21 November 2020 (registration number INPLASY2020110092).

INTRODUCTION

Review question / Objective: This study comprehensively searched the literature to further systematically evaluate the efficacy of Little needle-scalpel in the treatment of

Piriformis syndrome, with a view to clinically treating Piriformis syndrome, alleviating its related clinical symptoms and preventing its further development, and providing the latest evidence-based medical evidence.

Condition being studied: Piriformis syndrome is a common clinical disease, frequently-occurring disease, and difficult to treat. In severe cases, patients may experience severe buttock and lower limb pain, discomfort, difficulty walking, and claudication. At present, non-surgical treatments such as Little needle-scalpel are used in clinical treatment to relieve symptoms, and relatively satisfactory clinical effects have been achieved. This study aims to evaluate the efficacy of Little needle-scalpel in delaying the progression of Piriformis syndrome through systematic evaluation.

METHODS

Participant or population: All cases included in the trial were patients with Piriformis syndrome and met the clinical diagnostic criteria.

Intervention: The treatment group was mainly Little needle-scalpel therapy.

Comparator: The comparison group consisted of any intervention other than Little needle-scalpel therapy.

Study designs to be included: A randomized controlled trial (RCT) study on Little needle-scalpel therapy treatment of Piriformis syndrome, published in any language.

Eligibility criteria: Types of study: All randomized controlled trials (RCTs) study on Little needle-scalpel therapy treatment of Piriformis syndrome. Others such as case reports, animal experiments, non-RCTs, or RCT protocol will be excluded.

Information sources: 8 electronic databases including PubMed, Web of Science, the Cochrane Database, EMBASE, China Knowledge Network (CNKI), Wanfang Data Knowledge Service Platform, VIP Chinese Science and Technology Periodical Database (VIP) and China Biomedical Literature (CBM) Database.

Main outcome(s): 1-Clinical symptoms and signs 2-Physical activity.

Quality assessment / Risk of bias analysis: Two reviewers performed rigorous methodological quality evaluation of the included studies with reference to the Cochrane Collaboration Bias Risk Assessment Tool for the extracted methodological features.

Strategy of data synthesis: Meta analysis was performed using RevMan5.4 provided by the Cochrane collaboration network. Relative risk (RR) was used for the two categorical variables, and mean difference (MD) was used for the continuous variables. Both were expressed with 95% confidence intervals (CI). The heterogeneity test between the results of the included studies was performed using the I^2 test. The I^2 value reflects the proportion of the total variation in the effect size due to the existence of heterogeneity. ($I^2 > 50%$, indicating that heterogeneity is more obvious. If there is no obvious heterogeneity between the research results ($I^2 \leq 50%$), the source of the heterogeneity is analyzed first, which may lead to heterogeneity. Factors for subgroup analysis. If statistical heterogeneity exists in each subgroup without clinical heterogeneity, a random effects model is used for analysis. If the heterogeneity is too large and the results cannot be combined, a descriptive analysis is used and a sensitivity analysis is performed if necessary.

Subgroup analysis: Subgroup analysis will be handled according to the differences in patient conditions, control and so on.

Sensitivity analysis: Sensitivity analyses will be performed to verify the robustness of the review conclusions. The impacts of study design, methodological quality, and missing data will be evaluated. Sensitivity analyses were planned by studies considered being at low risk of bias.

Country(ies) involved: China.

Keywords: Little needle-scalpel; Piriformis syndrome; systematic review; protocol.

Contributions of each author:

Author 1 - Siyuan Zhu.

Email: 1163142628@qq.com

Author 2 - Jun Xiong.

Email: xiongjun196071@163.com