

INPLASY PROTOCOL

To cite: Huang et al.
Electroacupuncture for mixed urinary incontinence in women: protocol for systematic review and meta-analysis. Inplasy protocol 202170053. doi: 10.37766/inplasy2021.7.0053

Electroacupuncture for mixed urinary incontinence in women: protocol for systematic review and meta-analysis

Huang, S¹; Xiong, J²; Xiang, J³; Hua, F⁴; Zhang, Z⁵; Liao, K⁶; Zhou, X⁷; Xu, L⁸.

Received: 17 July 2021

Published: 17 July 2021

Corresponding author:
Jun Xiong

xiongjun196071@163.com

Author Affiliation:
Jiangxi University of Chinese Medicine.

Support: Not receive specific grant.

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

Conflicts of interest:
None declared.

Review question / Objective: To evaluate the efficacy and safety of electroacupuncture for mixed urinary incontinence in women.

Condition being studied: Mixed urinary incontinence (MUI) is characterized by involuntary loss of urine associated with urgency and also with exertion, effort, sneezing, or coughing. Of all women with urinary incontinence, 20% to 36% have MUI. Compared with pure stress urinary incontinence (SUI) and urgency urinary incontinence, MUI is characterized by more severe symptoms and has a greater negative effect on quality of life. As a complicated disorder of the bladder and intrinsic urethral dysfunction, the management of MUI can be challenging.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 July 2021 and was last updated on 17 July 2021 (registration number INPLASY202170053).

INTRODUCTION

Review question / Objective: To evaluate the efficacy and safety of electroacupuncture for mixed urinary incontinence in women.

Condition being studied: Mixed urinary incontinence (MUI) is characterized by involuntary loss of urine associated with urgency and also with exertion, effort, sneezing, or coughing. Of all women with urinary incontinence, 20% to 36% have

MUI. Compared with pure stress urinary incontinence (SUI) and urgency urinary incontinence, MUI is characterized by more severe symptoms and has a greater negative effect on quality of life. As a complicated disorder of the bladder and intrinsic urethral dysfunction, the management of MUI can be challenging.

METHODS

Participant or population: Female patients with mixed urinary incontinence.

Intervention: Electroacupuncture alone.

Comparator: Western medicine, Pelvic floor muscle Training, placebo, sham electroacupuncture.

Study designs to be included: We will include Randomized controlled trials (RCTs) involved female patients with mixed urinary incontinence regardless of nation, race, age, and setting.

Eligibility criteria: Subjects: Female patients with mixed urinary incontinence, nation, race, age, and setting were not restricted. Intervention measures: The treatment group only used electroacupuncture as intervention measure, while the intervention measures in the control group included Western medicine, Pelvic floor muscle Training, placebo, sham electroacupuncture. Outcome measures: The primary outcomes are the proportion of participants with at least 50% reduction in mean 24-hour stress IEFs and the weight of urine leakage measured by the 1-hour pad test; The secondary outcomes include the result of 72-hour Bladder Diary, Incontinence Impact Questionnaire (IIQ), Urinary Incontinence Quality of Life (I-QoL).

Information sources: We will perform a comprehensive literature search from the following electronic databases: Pubmed, Embase, Cochrane Library, Web of Science, Chinese Biomedical Literatures Database (CBM), China National Knowledge Infrastructure (CNKI), WangFang Database (WF), Chinese Scientific Journal

Database (VIP). In addition, we will search for eligible ongoing or unpublished trials through the WHO international clinical trials registry platform and the Chinese clinical registry.

Main outcome(s): The primary outcomes are the proportion of participants with at least 50% reduction in mean 24-hour stress IEFs and the weight of urine leakage measured by the 1-hour pad test.

Additional outcome(s): The secondary outcomes include the result of 72-hour Bladder Diary, Incontinence Impact Questionnaire (IIQ), Urinary Incontinence Quality of Life (I-QoL).

Quality assessment / Risk of bias analysis: The risk of bias in each study was assessed as per the Cochrane Handbook for systematic reviews using risk of bias tables on RevMan 5.4. The tables addressed the following seven sources of bias: 1. Random sequence generation; 2. Allocation concealment; 3. Blinding of participants and personnel; 4. Blinding of outcome assessment; 5. Incomplete outcome data; 6. Selective reporting; 7. Other biases.

Strategy of data synthesis: RevMan 5.4 software (Cochrane Collaboration) was used for the meta-analysis. Dichotomous data were reported as risk ratio (RR) with 95% confidence intervals (CI), while continuous data were reported as standardized mean difference (SMD) with 95% CIs. The Higgins I² test was used to test heterogeneity with a significance level set at 50%. If the I² value is less than 50%, that indicates slight or no statistical heterogeneity in these studies. Once the I² value surpasses 50%, it means studies with high heterogeneity, and we will carry out sensitivity analysis or subgroup analysis for finding the possible reasons.

Subgroup analysis: We will perform subgroup analysis based on various study characteristics and sample size, such as study type, study quality, adjustment (or not) for confounders.

Sensitivity analysis: To assess the influence of each individual study, leave-one-out sensitivity analysis was performed iteratively by removing one study at a time to confirm that the findings were not influenced by any single study.

Country(ies) involved: China.

Keywords: Mixed urinary incontinence, electroacupuncture, protocol, systematic review, Meta-analysis.

Contributions of each author:

Author 1 - Shouqiang Huang - The author drafted and improved the manuscript.

Email: 3196952683@qq.com

Author 2 - Jun Xiong - Revise this protocol.

Email: xiongjun196071@163.com

Author 3 - Jie Xiang - search strategy;

Data collection; analysis of results.

Email: xiangjie_96@163.com

Author 4 - Fanghui Hua.

Author 5 - Zheng Zhang.

Author 6 - Kai Liao.

Author 7 - Xiaohong Zhou.

Author 8 - Lingling Xu.