INPLASY PROTOCOL

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None declared.

Effectiveness of conservative therapies in the treatment of mild to moderate female stress urinary incontinence：systematic review and network meta-analysis

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Review question / Objective: **Is electroacupuncture effective in the treatment for female mild to moderate stress urinary incontinence? More specifically: (1) Does electroacupuncture have a better curative effect over medicines and pelvic muscle training in treating SUI? (2) Does electroacupuncture have less side effect? (3) Will electroacupuncture treatment keep a long-term therapeutic effect?**
Information sources: **We will electronically search the following international and domestic databases from 2002 to 2022: EMBASE, PubMed, Cochrane, Web of science, Clinical Trials.gov, CNKI, Wanfang, Chinese Biomedical Literature Database(CBM).**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 February 2023 and was last updated on 22 February 2023 (registration number INPLASY202320098).

INTRODUCTION

Review question / Objective: **Is electroacupuncture effective in the treatment for female mild to moderate stress urinary incontinence? More specifically: (1) Does electroacupuncture have a better curative effect over medicines and pelvic muscle training in treating SUI? (2) Does electroacupuncture have less side effect? (3) Will electroacupuncture treatment keep a long-term therapeutic effect?**

Condition being studied: **Mild to moderate stress urinary incontinence(SUI). SUI is the**

most common type of urinary incontinence and has a great impact on patients' quality of life. Female mild to moderate stress urinary incontinence.

METHODS

Search strategy: EMBASE, PubMed, Cochrane, Web of Science, Clinical Trials.gov, CNKI, Wanfang and Chinese Biomedical Literature Database will be searched using a combination of terms of Medical Subject Headings (MeSH) and keywords, including "stress urinary incontinence" and "electroacupuncture" or "pelvic floor muscle training" or "adrenergic agonists" or "oestrogen" or “duloxetine". Publication period is from 2002 to 2022.

Participant or population: Inclusion criteria: (1) Female patients with a clinical diagnosis of mild or moderate stress urinary incontinence. (2) Postpartum female patients will be included. Exclusion criteria: (1) Male participants with SUI. (2) Patients had undergone surgery will be excluded. (3) Patients diagnosed with severe SUI and other types of urinary incontinence like urgent incontinence and mixed urinary incontinence will be excluded. (4) Patients had undergone other previous treatments will be excluded.

Intervention: We will collect the data from clinical trials that electroacupuncture (including TENS) is applied to treat SUI as an independent therapy.

Comparator: The studies will be included if they used medicine exclusively (for example, selective adrenoceptor agonists, midodorine hydrochloride, duloxetine hydrochloride and topical estrogen therapy in vaginal, etc.) or any type of pelvic floor muscle training exclusively. Exclusions: (1) Studies that do not incorporate a comparison group or condition. (2) Studies that use electroacupuncture (including TENS) as an adjuvant therapy.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: Protocols and conference reports will be excluded. There was no restriction on language.

Information sources: We will electronically search the following international and domestic databases from 2002 to 2022: EMBASE, PubMed, Cochrane, Web of science, Clinical Trials.gov, CNKI, Wanfang, Chinese Biomedical Literature Database(CBM).

Main outcome(s): The change from baseline to the end of the follow-up in the amount of urine leakage measured by in 1-hour pad test will be regarded as an objective measurement. And the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF) score will be a subjective measurement.

Additional outcome(s): This includes 72-hour incontinence episodes, residual bladder volume, effective rate and other reported measurements that are possible to synthesize.

Quality assessment / Risk of bias analysis: We will use Version 2 of the Cochrane tool for assessing risk of bias in randomized trials (RoB2). The following information will be evaluated: randomisation process, deviation from the intended intervention, missing outcome data, measurement of the outcome, and the selection of the reported result. We will grade the above contents as “low risk”, “high risk” or “sone concerns”. In addition, according to Grading of Recommendations Assessment Development and Evaluation (GRADE), we will assess the quality of evidence as 4 levels: high quality, moderate quality, low quality, and very low quality. And the Guideline Development Tool (GRADEpro GDT) will be used to conduct this process. Assessment and evaluation will be conducted independently by two reviewers and all the obtained results will be cross-checked. Any conflicts or discrepancies will be solved by discussion, or a third researcher will be consulted to achieve agreements.

Strategy of data synthesis: Standard pairwise meta-analysis and Network meta-analysis.

Subgroup analysis: When sufficient data is available, we will conduct subgroup analyses on the following aspects to investigate the source of heterogeneity: age, course of disease, severity of SUI, acupoints, waveform and frequency of EA parameters, treatment duration, etc.

Sensitivity analysis: Sensitivity analysis will be conducted to determine the impact of studies with higher risk of bias on the overall estimate of effect of the intervention.

Language restriction: There was no restriction on language.

Country(ies) involved: China.

Keywords: Stress Urinary Incontinence; Electroacupuncture; Transcutaneous Electrical Nerve Stimulation; Drug Therapy; Pelvic Floor Muscle Training; Systematic Review; Network Meta-analysis.

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