

INPLASY PROTOCOL

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**Review Stage at time of this
submission:** Preliminary
searches.

Conflicts of interest:
None.

Percutaneous tibial nerve stimulation for overactive bladder syndrome: a systematic review and meta-analysis

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Review question / Objective: PICOS: (1) participants: patients suffered from OAB symptom; (2) interventions: PTNS; (3) comparisons: comparison with the baseline information before treatment or other treatment; (4) outcome: 3-day voiding diary (voiding frequency per day, day time micturition frequency per day, nocturia per day, number of urgency episodes per day, number of incontinence episodes per day, mean voiding volume), urodynamic results (Qmax, Pdetmax, PdetQmax, maximum cystometric capacity), response rate or side effects; (5) study: all study designs are accepted.

Condition being studied: Evaluate the efficacy and safety of percutaneous tibial nerve stimulation (PTNS) for the treatment of overactive bladder syndrome.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 May 2020 and was last updated on 25 May 2020 (registration number INPLASY202050091).

INTRODUCTION

Review question / Objective: PICOS: (1) participants: patients suffered from OAB symptom; (2) interventions: PTNS; (3) comparisons: comparison with the baseline information before treatment or other

treatment; (4) outcome: 3-day voiding diary (voiding frequency per day, day time micturition frequency per day, nocturia per day, number of urgency episodes per day, number of incontinence episodes per day, mean voiding volume), urodynamic results (Qmax, Pdetmax, PdetQmax, maximum

cystometric capacity), response rate or side effects; (5) study: all study designs are accepted.

Condition being studied: Evaluate the efficacy and safety of percutaneous tibial nerve stimulation (PTNS) for the treatment of overactive bladder syndrome.

METHODS

Participant or population: Patients suffered from OAB symptom.

Intervention: Percutaneous tibial nerve stimulation.

Comparator: Baseline information.

Study designs to be included: All study designs are acceptable.

Eligibility criteria: Studies meeting the PICOS mentioned above will be considered as eligible studies.

Information sources: Pubmed, Embase, Web of Science and Cochrane Library will be searched. We will also search the reference list of relevant reviews and included studies manually to look for potentially eligible studies.

Main outcome(s): 3-day voiding diary (voiding frequency per day, day time micturition frequency per day, nocturia per day, number of urgency episodes per day, number of incontinence episodes per day, mean voiding volume), urodynamic results (Qmax, Pdetmax, PdetQmax, maximum cystometric capacity), response rate and side effects.

Quality assessment / Risk of bias analysis: We will use the Cochrane Collaboration's tool for the quality assessment of randomized control trials and Risk of Bias In Non-randomized Studies - of Interventions (ROBINS-I) for the observational studies.

Strategy of data synthesis: Two authors will collect the data independently and Stata (Version 14; Stata Corporation; College

Station, TX, USA) will be used for the data synthesis.

Subgroup analysis: We will conduct the subgroup analysis according to the publication year, sample size, study design, geographic area, gender, mean age, number of treatment sessions, and duration of treatment.

Sensibility analysis: Sensitivity analysis will be conducted through omitting included studies one by one to reflect the impact of individual data on the overall results.

Country(ies) involved: People's Republic of China.

Keywords: Meta-Analysis; Overactive bladder; Percutaneous tibial nerve stimulation; PTNS.

Contributions of each author:

Author 1 - Menghua Wang - Project development, Data Collection, Manuscript writing.

Author 2 - Zhongyu Jian - Project development, Data Collection, Manuscript writing.

Author 3 - Yucheng Ma - Data Collection, Manuscript writing.

Author 4 - Xi Jin - Data Collection, Manuscript writing.

Author 5 - Hong Li - Project development, Manuscript revision.

Author 6 - Kunjie Wang - Project development, Manuscript revision.