Effectiveness and safety of acupuncture and moxibustion for peripheral facial paralysis: a protocol for an overview of systematic reviews and meta-analysis

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Review question / Objective: This overview in an effort to summarize the available evidence from current systematic reviews for the efficacy of acupuncture therapy for peripheral facial paralysis.

Condition being studied: Peripheral facial paralysis (PFP) is a common disease with an annual incidence of 15–30 per 100,000 of population. PFP may result in complete or partial paralysis of the facial muscles and may be associated with tasting, salivation, tearing disorders, etc. Most patients recover completely, but about 15–30% are reported to be left with different degrees of sequelae. Acupuncture and moxibustion is reported to be efficacious and widely used for the treatment of PFP in China. This overview aims to summarize the available evidence from current systematic reviews for the efficacy of acupuncture and moxibustion therapy for peripheral facial paralysis.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 August 2020 and was last updated on 05 August 2020 (registration number INPLASY202080016).

INTRODUCTION

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METHODS

Participant or population: Patients with peripheral facial paralysis.

Intervention: Needle acupuncture, electro-acupuncture, auricular acupuncture, moxibustion, acupressure, point injection, or any combination of the above.

Comparator: Western medicine, placebo, sham acupuncture, no treatment, or any combination of these.

Study designs to be included: All systematic reviews and meta-analysis on the use of acupuncture and moxibustion for peripheral facial paralysis.

Eligibility criteria: Published systematic reviews which were reported in Chinese or English, and meet the "PICOS", will be considered for inclusion in this overview.


Main outcome(s): The effective rate, The House-Brackmann (H-B) score, cure rate.

Data management: (1) We will use NoteExpress and Excel software to extract data. The content will be saved in electronic form. (2) Different review authors will independently screen the titles and abstracts of records obtained by searching the electronic databases to determine potential eligibility. Full texts screening and data extraction will be conducted afterwards independently. Any disagreement regarding study selection will be resolved through discussion or arbitrated by the third author if necessary. In this step, we will use NoteExpress. (3) The research team designed structured data extraction tables, including: the first author, nationality, publication year, patients' basic information, sample size, intervention measures of test group, intervention measures of controlled group, qualitative evaluation method, target outcome (including primary outcome measures and secondary outcome measures), etc. Different review authors will independently extract data. Any disagreement regarding data extraction will be resolved through discussion or arbitrated by the third author if necessary. In this step, we will use Excel.

Quality assessment / Risk of bias analysis: Assessment of Multiple Systematic Reviews 2 (AMSTAR-2) measurement tool, Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Strategy of data synthesis: We will provide a narrative description of the findings of the included systematic reviews (SRs). Tables will be produced to detail the included studies and their outcomes. In addition, we will synthesis these reviews and provide pooled treatment effects for all SRs which include the following outcomes: The effective rate, the House-Brackmann (H-B) score, cure rate. If necessary, this study will use RevMan5.4 software for data integration and analysis. The measurement data will use the mean difference (MD) as the effect indicator, and the count data will use the odds ratio (OR) as the effect index. Each effect indicator will be given as a point estimate with 95% confidence interval. The heterogeneity and size of each study result will be judged using statistical methods. For studies with no statistical heterogeneity, the analysis will be performed using a fixed-effect model, whereas a randomized effects model will be applied if for studies with significant statistical heterogeneity.
**Subgroup analysis:** If the necessary data are available, subgroup analysis will be carried out according to different factors as follows: 1. Control interventions (eg, sham/placebo moxibustion, no treatment, other TCM treatment or non-TCM treatment). 2. Type of acupuncture and moxibustion (eg, needle acupuncture, electro-acupuncture, auricular acupuncture, heat-sensitive moxibustion, thunder fire miraculous moxa roll, warm needling moxibustion, suspended moxibustion or mild moxibustion).

**Sensibility 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.

**Language:** No restriction.

**Country(ies) involved:** China.

**Other relevant information:** None.

**Keywords:** peripheral facial paralysis; acupuncture; moxibustion; AMSTAR-2; PRISMA; GRADEE; overview.

**Contributions of each author:**
Author 1 - Xing-chen Zhou - The author drafted and improved the manuscript.
Author 2 - Jun Xiong - Revise this protocol; search strategy.
Author 3 - Zhen-hai Chi - Data collection; analysis of results.