

# INPLASY PROTOCOL

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**Conflicts of interest:**  
None declared.

## Effect of auricular point pressing therapy on rehabilitation in patients with COPD: A protocol for systematic review and meta-analysis

Chen, L<sup>1</sup>; Su, J<sup>2</sup>.

**Review question / Objective:** To systematically evaluate and analyse the effect of auricular point pressing therapy on rehabilitation in patients with COPD.

**Condition being studied:** Auricular point therapy of Traditional Chinese Medicine (TCM) is one of the external therapies with the characteristics of TCM, including pressing, acupuncture, bloodletting, needle imbedding, and other operations. According to TCM, auricular points are specific acupoints distributed on the auricle of human body, and they are the reaction points of pathological changes of Zang-fu Organs and meridians and collaterals on body surface. According to bioelectricity theory, the abnormal bioelectricity in pathological changes of the human body can cause the decrease of the resistance of corresponding auricular points. Related studies proved that after, 1 to 2 weeks of applying voltage to the auricle skin of peritonitis rats, the low resistance state of the skin around auricle improved. Clinically, auricular point pressing is the most commonly applied auricular point stimulation method at present, with advantages of long-lasting effect, simple operation, and less side effects. Clinical reports proved that this therapy plays a positive role in the intervention of headache, insomnia, and neurasthenia. At present, the effect of auricular point pressing therapy on patients with COPD lacks metaanalysis, thus hindering the spread of evidence.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 April 2021 and was last updated on 17 April 2021 (registration number INPLASY202140051).

### INTRODUCTION

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effect of auricular point pressing therapy on rehabilitation in patients with COPD.

**Condition being studied:** Auricular point therapy of Traditional Chinese Medicine

(TCM) is one of the external therapies with the characteristics of TCM, including pressing, acupuncture, bloodletting, needle imbedding, and other operations. According to TCM, auricular points are specific acupoints distributed on the auricle of human body, and they are the reaction points of pathological changes of Zang-fu Organs and meridians and collaterals on body surface. According to bioelectricity theory, the abnormal bioelectricity in pathological changes of the human body can cause the decrease of the resistance of corresponding auricular points. Related studies proved that after, 1 to 2 weeks of applying voltage to the auricle skin of peritonitis rats, the low resistance state of the skin around auricle improved. Clinically, auricular point pressing is the most commonly applied auricular point stimulation method at present, with advantages of long-lasting effect, simple operation, and less side effects. Clinical reports proved that this therapy plays a positive role in the intervention of headache, insomnia, and neurasthenia. At present, the effect of auricular point pressing therapy on patients with COPD lacks metaanalysis, thus hindering the spread of evidence.

## METHODS

**Participant or population:** Participants met the clinical diagnostic criteria for COPD were included.

**Intervention:** The experimental group was treated with auricular point pressing therapy. The control group was treated with placebo, drugs, or other alternative therapy.

**Comparator:** There is no exclusion based on comparator method for this review, and the patients could be treated with any forms of control group.

**Study designs to be included:** RCT.

**Eligibility criteria:** We will only include randomized controlled trial (RCTs), non-RCTs, quasi-RCTs, reviews, and other types of studies will be excluded.

**Information sources:** PubMed, Web of Science, Cochrane Library, EMBASE, Wanfang Database, Chinese Scientific Journal Database, CNKI, VIP, and Chinese Biomedical Literature Database were systematically searched by computer.

**Main outcome(s):** Improvement of lung function; Improvement of sleep quality; Changes in quality of life; Change of activity ability.

**Quality assessment / Risk of bias analysis:** The quality evaluation of literatures is based on Cochrane handbook system evaluation manual. The items of quality including random sequence generation method, allocation concealment, blinding of subjects, and intervention providers, blinding of outcome evaluators, completeness of result data, selective result reporting, and other sources of bias. According to the criteria, the included studies were divided into 3 levels: low, medium, and high.

**Strategy of data synthesis:** The Revman 5.3 software will be used to perform all statistical analyses and the heterogeneity was detected by Q test and I<sup>2</sup> test. If  $P > .1$ ,  $I^2 < 50\%$ , there is no significant heterogeneity between the included studies, fixed effect model will be used; If  $P < .1$  and  $I^2 \geq 50\%$ , it indicates that there is obvious heterogeneity among the included studies. We will use random effect model and subgroup analysis, sensitivity analysis to analyze the sources of heterogeneity to eliminate its impact.

**Subgroup analysis:** When heterogeneity is discovered (such as different types of treatment, different types of fractures, patient age, and publication year), subgroup analysis would be applied to find out the source of heterogeneity.

**Sensitivity analysis:** For the quality analysis, we will conduct a sensitivity analysis of main outcomes to test the stability of the results of meta-analysis.

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

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**Keywords:** COPD; auricular point pressing;  
Meta analysis; TCM.

**Contributions of each author:**

Author 1 - Chen Li.

Author 2 - Su Jing.