# INPLASY PROTOCOL

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

Conflicts of interest: None declared. Effect of traditional Chinese medicine nursing technology on patients with cervical spondylotic radiculopathy: A protocol for systematic review and meta-analysis

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Review question / Objective: Cervical radiculopathy(CR) is one of the common chronic degenerative diseases with a high incidence, and as the patient's condition progresses, the activity function may be limited, which seriously affects the quality of life of the patient. Traditional Chinese medicine(TCM) nursing techniques are guided by TCM theory and apply a holistic concept, combining traditional nursing with TCM treatment methods, which can improve the physiological condition of patients in a synergistic manner from several aspects. This systematic review aims to observe the effect of TCM nursing techniques on the improvement of joint pain in CRpatients.

Eligibility criteria: Exclusion criteria: (1)Cervical spondylosis with other types or without a clear distinction between the types.(2)Studies with incomplete, unextractable or duplicate published data.(3)Conference papers, graduation papers, reviews, case reports, animal experiments, and theoretical research documents.(4)Documents that do not meet the outcome indicators; (5)No RCT.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 May 2023 and was last updated on 15 May 2023 (registration number INPLASY202350062).

# INTRODUCTION

**Review question / Objective:** Cervical radiculopathy(CR) is one of the common chronic degenerative diseases with a high incidence, and as the patient's condition progresses, the activity function may be limited, which seriously affects the quality of life of the patient. Traditional Chinese

medicine(TCM) nursing techniques are guided by TCM theory and apply a holistic concept, combining traditional nursing with TCM treatment methods, which can improve the physiological condition of patients in a synergistic manner from several aspects. This systematic review aims to observe the effect of TCM nursing techniques on the improvement of joint pain in CRpatients.

**Condition being studied: Cervical** spondylosis, also known as cervical spine syndrome or neck and shoulder syndrome. is a syndrome in which a series of symptoms and signs occur due to irritation or compression of the adjacent spinal cord, nerve roots, vertebral arteries, and sympathetic nerves by degenerative degeneration of the cervical disc and its secondary intervertebral joints.Cervical radiculopathy (CR) is the most common type of cervical spondylosis, accounting for about 60%-70%.The main clinical manifestations of CR are neck and shoulder pain, stiffness, limited mobility. and numbness in the upper limbs. The prolonged duration of the disease can also have a negative impact on the patient's psychology, such as causing sleeplessness, anxiety, and depression.In recent years, the incidence of cervical spondylosis has been increasing year by year and is becoming younger, which has brought significant mental and economic burdens to individuals and society.

#### **METHODS**

Participant or population: Patients diagnosed with CR and treated non-surgically.

Intervention: The treatment group uses acupoint application, Chinese herbal fumigation, ear acupressure, Chinese medicine ion introduction, acupuncture injection, moxibustion, and cupping therapy.

**Comparator:** The control group used routine nursing (health education, life nursing, diet nursing, functional exercise, and routine Western medicine).

Study designs to be included: RCTs on TCM nursing techniques for patients with CR.

**Eligibility criteria:** Exclusion criteria: (1)Cervical spondylosis with other types or

without a clear distinction between the types.(2)Studies with incomplete, unextractable or duplicate published data. (3)Conference papers, graduation papers, reviews, case reports, animal experiments, and theoretical research documents. (4)Documents that do not meet the outcome indicators; (5)No RCT.

Information sources: The literature search was performed in PubMed, Web of Science, Embase, the Cochrane Library, China National Knowledge Infrastructure, Wanfang Database, the Chongqing VIP Chinese Science and Technology Periodical Database, and China Biomedical Database from their inception to May 2023.

Main outcome(s): The primary outcome indicators included visual analogue scale (VAS) or clinical efficiency.

Additional outcome(s): Secondary outcome indicators were pain rating index (PRI) score and present pain intensity (PPI) score.

Quality assessment / Risk of bias analysis: Two researchers used Cochrane Handbook to evaluate the quality of the included literature. The evaluation items involved specific random methods, hidden allocation schemes, blind methods for subjects and researchers, blind methods for results evaluation, data integrity, selective reporting of results and other bias sources. Each content is evaluated according to three levels: high risk, low risk and unknown risk. If there are differences, they will be discussed or judged by a third researcher.

Strategy of data synthesis: A meta-analysis of the included data was carried out by RevMan 5.4.1.The heterogeneity of the clinical trial results was evaluated using the chi-square test and I2, and the analysis model was determined. If P>0.1 and  $I2 \le 50\%$ , it indicates no statistical heterogeneity among the studies, and a fixed effects model is used; if P $\le$ 0.1 and I2 > 50%, it indicates statistical heterogeneity and a random-effects model is used; if there is apparent clinical heterogeneity, only descriptive analysis will be performed.

Subgroup analysis: Subgroup analysis was used to account for the possible heterogeneity of the different treatments.

Sensitivity analysis: Sensitivity analysis is used to verify the robustness of the results of Meta-analysis, and the potential sources of heterogeneity are explored after missing each study in the initial analysis.

Country(ies) involved: China.

Keywords: cervical radiculopathy, traditional Chinese medicine nursing technology, protocol, systematic review.

#### **Contributions of each author:**

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