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Systematic Review and Meta-analysis of Traditional Chinese Medicine in the Treatment of Post-infectious Cough

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Yang, L; Feng, Y; Jiang, F; Lu, Z.

Corresponding author:

Yang Lin

614408164@qq.com

Author Affiliation:

Guangxi University of Traditional Chinese Medicine.

ADMINISTRATIVE INFORMATION

Support - 25162.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 August 2024 and was last updated on 18 August 2024.

INTRODUCTION

Review question / Objective The purpose of this study is to investigate the difference between the efficacy of traditional Chinese medicine in the treatment of post-infection cough and the efficacy of western medicine alone or placebo. The selected research method is RCT test.

Condition being studied Postinfectious cough (PIC) refers to that when the acute symptoms of respiratory tract infection disappear, the cough still persists for 3 to 8 weeks, and there is no abnormality in imaging examination, which is considered to be one of the main causes of subacute cough. PIC has self-limited characteristics, but persistent cough can seriously affect the quality of life, and even develop into chronic cough or other respiratory diseases. At present, western medicine treatment is often accompanied by the occurrence of adverse reactions. Therefore, in order to treat PIC, more and more patients seek traditional Chinese medicine treatment.

METHODS

Participant or population Patients diagnosed as PIC, age \geq 18 years old.

Intervention The experimental group was treated with oral Chinese medicine (including Chinese medicine decoction, Chinese medicine granules and Chinese patent medicine) or oral Chinese medicine combined with western medicine.

Comparator Blank control group, placebo treatment group and western medicine treatment group.

Study designs to be included RCT.

Eligibility criteria Diagnostic criteria for postinfectious cough: 1.Cough lasts for 3 to 8 weeks after the acute symptoms of a respiratory infection relieve ; 2. Irritating dry cough or cough with a small amount of mucoid sputum ; 3.Normal chest X-ray ; 4.Other causes of cough have been excluded Patients who meet all the above criteria can be diagnosed as having postinfectious cough.

Information sources Chinese biomedical literature database, China knowledge network, Wanfang database, Weipu network, Cochrane Library, PubMed, Web of Science and other databases were searched by computer. The search strategy of combining subject words and free words was adopted. The Chinese search words were ' cough after infection, cough after cold, traditional Chinese medicine, traditional Chinese medicine ' ; the key words are ' Postinfectious cough, Traditional Chinese Medicine ' in English. The search formula of PubMed was : (' Postinfectious cough ' [MeSH Terms] OR ' Postinfectious cough ' [All Fields]) AND (' Traditional Chinese Medicine ' [All Fields] Fields) OR (' Traditional Chinese Medicine ' [MeSH Terms]) AND random [All Fields]).

Author 2 - Feng Yuan.
Author 3 - Jiang Feng.
Author 4 - Luzhen Lu.

Main outcome(s) The main outcome indicators included the total effective rate of clinical efficacy, cough symptom score, and TCM syndrome score. The secondary outcome indicators included LCQ score, inflammatory mediators, and number of adverse reactions.

Quality assessment / Risk of bias analysis Cochrane Risk-of-bias tool 2 (RoB2).

Strategy of data synthesis RevMan 5.4 software was used to analyze the data and make forest maps. Q test and I² value were used for heterogeneity test. I² < 25 %, 25 % 50 % represent small, medium, and high heterogeneity between studies, respectively. When the heterogeneity between studies is high, the causes of heterogeneity are analyzed and processed by sensitivity analysis. For studies that cannot eliminate statistical heterogeneity, random effect model should be used for combined analysis. On the contrary, the fixed effect model is used.

Subgroup analysis Subgroup analysis was performed according to different TCM syndromes and intervention courses.

Sensitivity analysis Sensitivity analysis was performed by Revman5.4 software, and the sensitivity of the article was reflected by eliminating the change of the effect size after one of the articles.

Country(ies) involved China.

Keywords Traditional Chinese medicine, post-infection cough, systematic review, efficacy.

Contributions of each author

Author 1 - Yang Lin.
Email: 614408164@qq.com