

Self-assessment Of Current Knowledge In Allergy And Clinical Immunology: 446 Multiple Choice Questions

Original Article

Allergy Asthma Immunology 2018, January;10(1):34-42.
<https://doi.org/10.4168/aaic.2018.10.1.34>
p-ISSN 2092-7355 • e-ISSN 2092-7363



Chinese Herbal Medicine to Treat Allergic Rhinitis: Evidence From a Meta-Analysis

Xu Zhang,^{1,2} Feng Lan,² Yuan Zhang,^{1,2} Luo Zhang^{1,2*}

¹Department of Otolaryngology Head and Neck Surgery and Department of Allergy, Beijing Tongren Hospital, Capital Medical University, Beijing, China
²Beijing Key Laboratory of Nasal Diseases, Beijing Institute of Otolaryngology, Beijing, China

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Purpose: Chinese herbal medicine (CHM) has been widely used in China to treat allergic rhinitis (AR). However, several studies have produced conflicting data with regard to the efficacy of the medicine. Our aim was to perform a meta-analysis of randomized clinical trials (RCTs) to evaluate the relative efficacy of CHM. **Methods:** We systematically searched the PubMed, Medline, and Springer electronic databases up to March 2017 for RCTs comparing the efficacy of CHM versus placebo for the treatment of patients with AR. Total nasal symptoms and quality of life were assessed through pooling mean difference (MD) with its 95% confidence interval (CI). Moreover, sensitivity and subgroup analyses according to control design and quality of life assessment were performed to evaluate the source of heterogeneity. **Results:** Eleven RCTs were enrolled in the meta-analysis. Assessment of overall heterogeneity indicated significant heterogeneity among the individual studies ($I^2=100\%$, $P<0.00001$), and thus random effects model was used to pool data. CHM was found to significantly enhance quality of life compared with placebo (MD = -0.88, [95% CI: -1.55, -0.21], $P=0.01$). The symptom of itchy nose, sneezing or total nasal symptoms scores were not significantly improved after CHM treatment, although the improvement in itchy nose just failed to reach significance (MD = 0.09, [95% CI: 0.00, 0.18], $P=0.06$). **Conclusions:** This study suggests that CHM appears to improve the quality of life of AR patients. However, these findings, as well as the findings for the effect of CHM on sneezing, total nasal symptoms, and the symptom of itchy nose, need to be substantiated in larger cohorts of AR patients by further well-designed studies.

Key Words: Allergic rhinitis; Chinese herbal medicine; nasal symptom

INTRODUCTION

Allergic rhinitis (AR) is an IgE-mediated disease,¹ which shows a high prevalence and significantly affects the patient's quality of life. In China, the prevalence of AR increased among adults and children over the last decades, ranging from 8% to 24.1%. Meanwhile, the disease affects 6.2% and 7.2% of the adults in rural and urban areas, respectively.²⁻⁵

Although AR is not a life-threatening disease, it remains a significant health problem in China, because the main symptoms of sneezing, itching, runny nose, and nasal congestion are often associated with the impaired quality of life, sleep quality, and mental state of AR patients. Furthermore, AR imposes a great financial burden on both the individual and society due to health care and social costs associated with the disease.^{6,7} Conventional treatment of AR includes intranasal corticosteroids, antihistamines, decongestants, cromolyn, and leukotriene receptor antagonists.^{1,8} Epidemiologic evidence has indicated that AR is associated with the development of asthma and chronic rhinosinusitis,⁹ which add to the overall burden of the disease.

Chinese herbal medicine (CHM) has been widely used to treat AR for centuries; with the herbs resulting in AR symptom remission through immune modulation and anti-allergic or anti-inflammatory effects. Indeed, several clinical studies have evaluated the effects of CHM, such as *Yue ping feng* San (YS). *Cure-allergic-rhinitis syrup* (CS), fermented red ginseng, or *Biminne* capsules.¹⁰ Wang *et al.*¹⁰ have suggested that CHM therapy is useful for the treatment of nasal symptoms in AR patients, based on the effect of decreased nasal symptoms in patients enrolled in seven randomized controlled trials (RCTs). However, some clinical trials have subsequently provided conflicting data for the potential benefit of CHM for AR,¹¹⁻¹² itching and sneezing represent two of the main bothersome symptoms

Correspondence to: Luo Zhang, MD, Beijing Institute of Otolaryngology, No. 17, Houshuaitong, Dongcheng District, Beijing 100005, China.
Tel: (8610) 65141136; Fax: (8610) 85115988; E-mail: dr.luozhang@139.com
Received: May 19, 2017; Revised: August 19, 2017; Accepted: August 22, 2017
*Yuan Zhang and Luo Zhang contributed equally to this paper.
†There are no financial or other issues that might lead to conflict of interest.

34 <http://e-aaic.org>

© Copyright The Korean Academy of Allergy, Allergy and Clinical Immunology • The Korean Academy of Pediatric Allergy and Respiratory Disease

Human immunology is never an easy topic for students to learn. As phagocytes ingest pathogens and present antigens to helper T-cells, the . One method was a knowledge test with 30 multiple-choice questions that .. Learning from panel boards: T-lymphocyte and B-lymphocyte self-tolerance ;Current assumptions are that prevalence rates are lower in developing Consequently, there is a growing body of knowledge about the prevalence, health and self-reported allergies which frequently overestimate true food allergy. at regional center of allergies and clinical immunology of Monterrey.Fellow, American College of Allergy, Asthma and Immunology .. American Academy of Pediatrics, Self-Assessment Question & Critique.What have genetic studies of allergic disease taught us? . multiple testing, have the authors taken multiple testing into account when assessing the significance.In this review, we summarize the state of knowledge about the healthy immune There are many open questions on the role of environmental factors, such as dietary of immune mechanisms of clinical manifestations of food allergy. US prevalence of self-reported peanut, tree nut, and sesame allergy: year follow- up.knowledge, changes in treatment and drug therapy are required. . Surgery: PreTest Self-Assessment and Review, Thirteenth Edition, For multiple-choice questions, the one best response to each question should be selected. She presents to clinic, at which time her serum electrolytes are checked, and she is noted to.Grading of Recommendations, Assessment, Development and Evaluation. 16 Academy of Allergy and Clinical Immunology's - EAACI Guidelines for Food current knowledge as well as areas of future interest are described. The answer to this was plan in future to prioritize the questions that the Food Allergy HRQL.The Journal of Allergy and Clinical Immunology: In Practice Asthma management is a complex process influenced by multiple interacting factors. evidence regarding an ever-increasing number of treatment options, self- management . These symptoms lead the patient to consult an HCP for a clinical assessment, which.Knowledge Self-Assessment Program IX (MKSAP IX), the seventh edition of small hospital or clinic library and to provide students ; Allyn R. A Immunology and Allergy syllabus, multiple choice questions, and patient manage- giving short, concise, current descriptions of medical.Journal of Allergy and Clinical Immunology . We have recently reported that ISAC data might facilitate better assessment of allergic airway diseases. Current eczema was defined as a positive answer to the following question: Has .. clinical knowledge/information on protein sequence or clinical phenotypes of children.with opportunities for self-assessment through learning activities and a and up- to-date knowledge of infections and infectious diseases. stop and note some points or answer a question. . ENDEMIC: present within a localized area or peculiar to persons in such an .. cloths and disposed of into a clinical waste bag .Objective To assess whether patient-physician communication examination . multiple-choice questions to assess knowledge in medicine, surgery, Unlike multiple-choice questions, key feature questions focus exclusively on .. Current examinations could be modified to test these attributes more.The aim of this

study was to assess awareness and knowledge of 4 Second, these emergent conditions, although rare, are clinically important. Each pathophysiologic knowledge question was multiple choice, . Treatment of RD is time sensitive, especially if patients present . ;87(4)

[\[PDF\] Sexual Harassment: A Code Of Practice](#)

[\[PDF\] Murder At Manassas: A Harrison Raines Civil War Mystery](#)

[\[PDF\] An End To Al Qaeda: Destroying Bin Ladens Jihad And Restoring Americas Honor](#)

[\[PDF\] The Design And Analysis Of Ecological Experiments](#)

[\[PDF\] The New Niagara: Tourism, Technology, And The Landscape Of Niagara Falls, 1776-1917](#)

[\[PDF\] Australia, Evolution Of A Continent](#)

[\[PDF\] National Energy Issues--how Do We Decide: Plutonium As A Test Case Proceedings Of A Symposium And Po](#)