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World Federation of Chinese Medicine Societies

Announcement for Specialty Committee Standards

世界中医药学会联合会批准肺康复专业委员会提交的《慢性阻塞性肺疾病中医康复指南》（SCM-C 0015-2019）发布，现予公告。

The SCM-C standard (SCM-C 0015-2019) of *Guideline for Chinese Medicine Rehabilitation of Chronic Obstructive Pulmonary Disease* proposed by Specialty Committee of Pulmonary Rehabilitation of WFCMS was approved by World Federation of Chinese Medicine Societies and was officially issued on August 23rd, 2019.

世界中医药学会联合会
World Federation of Chinese Medicine Societies
二〇一九年八月十三日
August 23rd, 2019



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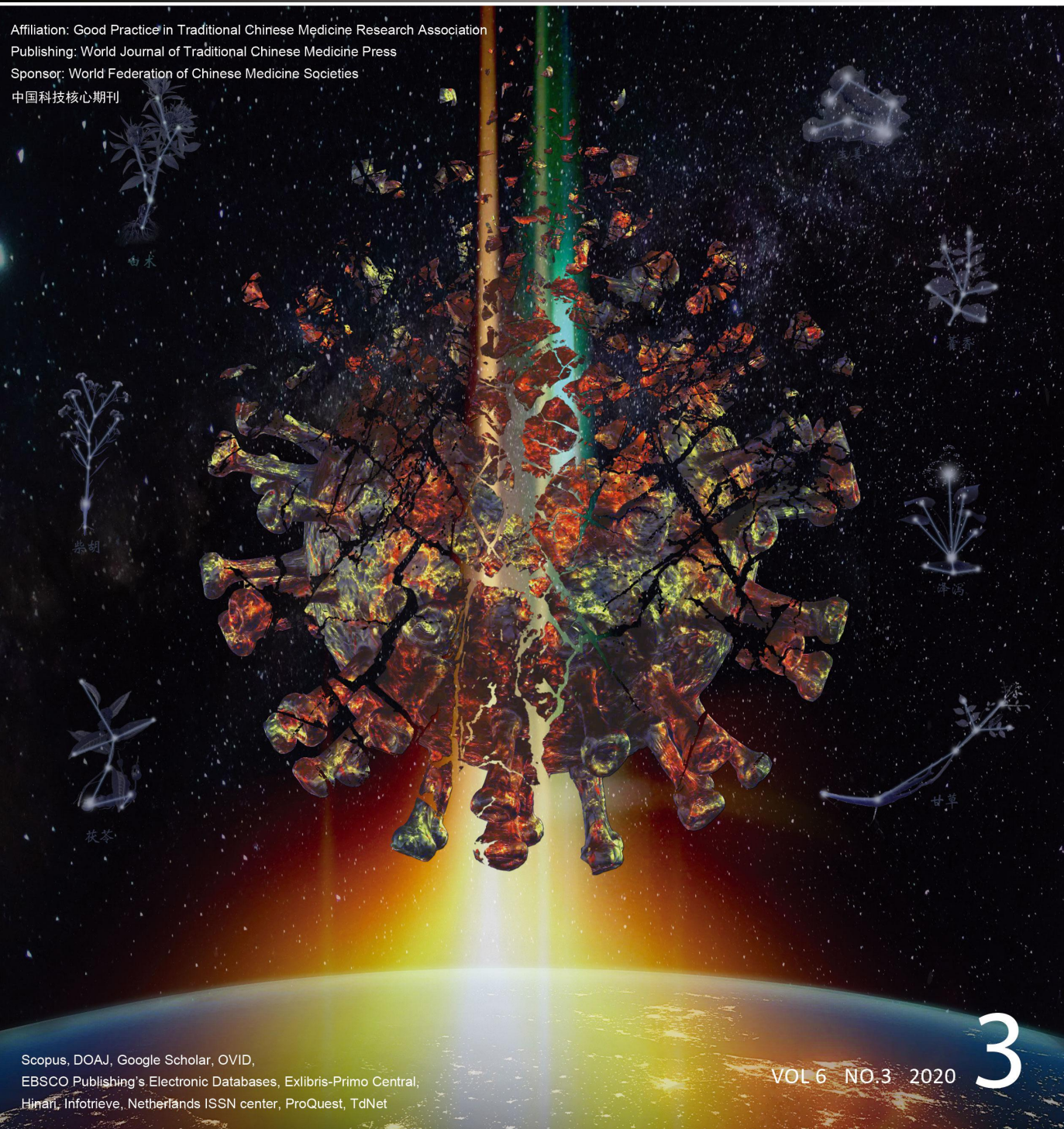
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Guidelines for Chinese Medicine Rehabilitation of Chronic Obstructive Pulmonary Disease

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Abstract

Chronic obstructive pulmonary disease (COPD) is a common, chronic, frequently occurring, and difficult disease of the respiratory system and is a huge disease burden. Pulmonary rehabilitation is an important part of clinical treatment. Chinese medicine lung rehabilitation (CMLR), which is based on Chinese medicine theory and practice, is a comprehensive rehabilitation measure that can prevent and treat pulmonary diseases and preserve physical and mental functions. Its aim is to promote the return of patients to society as soon as possible. To better guide the clinical practice of COPD rehabilitation, the Specialty Committee of Pulmonary Rehabilitation of World Federation of Chinese Medicine Societies established a panel for formulating guidelines, systematically retrieved domestic and foreign literature, performed systematic evaluation after expert consultation and on-site discussion, and finally, formed the guidelines in accordance with the development standard of international evidence-based guidelines. The guideline has seven parts, which are the preface, introduction, scope, normative references, terms and definitions, types of disease syndromes, diseases assessment, CMLR techniques, and annex. The techniques of CMLR include 11 techniques in seven species, such as Simplified Taijiquan, Baduanjin, and Liuzijue. The guideline defines the technical points (time, frequency, course, etc.), optimal applicable population, use of drugs, common acupoints, operation methods, and so on for each technique. The release of the guidelines is helpful to improve the rehabilitation technique standardization and to improve the curative effect and level of rehabilitation.

Keywords: Chronic obstructive pulmonary disease, Chinese medicine rehabilitation, guidelines, technique

INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a common, chronic, frequently occurring, and difficult disease of the respiratory system and is a huge disease burden. Hence, it has been given more attention in the recent years. The number of COPD patients in the world is about 384 million, and the disease is ranked as the fourth leading cause of death in the world, and it will rise to the third place in 2020 according to the WHO estimation. Every year, 3 million people die of COPD worldwide,^[1-3] and an estimated 4.5 million people will die from COPD-related diseases by 2030.^[4,5] The harm of death and disability of COPD is becoming more and more serious all over the world. In China, COPD is the third leading cause of death, and there is a total of about 100 million patients.^[6,7] In 2016, the number of COPD deaths in China (876,300) accounted for 29.86% of the total number of COPD deaths in the world, making it the third leading cause of death in China, according to the global disease burden data.^[8] A survey of mortality, morbidity, and risk factors in China and its provinces published

in the Lancet in 2019 shows that according to the ranking of disability-adjusted life years, COPD has ranked third in diseases with the heaviest health burden among Chinese residents. It was the third leading cause of death and loss of life in 2017.^[9] The preventive and treatment measures include prevention, early diagnosis, and standardized treatment (drug therapy, exercise therapy, psychological intervention, pulmonary rehabilitation [PR], etc.). PR is an important part of the process. Chinese medicine lung rehabilitation (CMLR), which is based on Chinese medicine theory and practice, is a comprehensive rehabilitation measure that can prevent and treat pulmonary diseases and preserve physical and mental

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functions. Its aim is to promote the return of patients to society as soon as possible. Rehabilitation has been widely used in pulmonary diseases and has achieved certain clinical effects; however, at the same time, there are also some problems, such as lack of high-quality evidence-based clinical research and lack of PR guidelines of Chinese medicine. Therefore, to better guide the clinical practice of COPD rehabilitation with Chinese medicine, the Specialty Committee of World Federation of Chinese Medicine Societies (WFCMS) made the guideline after systematically retrieving domestic and foreign literature, performing systematic evaluation, and seeking expert consultation and on-site discussion, in accordance with the development standard of international evidence-based guideline. The guideline is not a standard or norm of medical behavior, but a declarative document formulated based on the existing research evidence and specific methods. In clinical practice, practitioners can give patients' individualized diagnosis and treatment in accordance with this guideline and their specific conditions.

SCOPE

The guideline specified the basic contents involving terms and definitions of COPD rehabilitation with Chinese medicine, PR with western medicines, types of disease syndromes, and the basic contents of CMLR. The guideline is applicable to the clinical practice of CMLR on COPD patients by doctors, technicians, and nurses in the respiratory, rehabilitation, and related departments.

NORMATIVE REFERENCES

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this document. For undated references, the latest version, including all amendments, applies to this document.

- Chinese standard: GB/T 21709.1-21-2008, Standardized Manipulations of Acupuncture and Moxibustion^[10] (National Standards of the PRC)
- WS 318-2010, Diagnosis Criteria for Chronic Obstructive Pulmonary Disease^[11]
- Chinese terms in traditional Chinese medicine (2010 Edition), China National Committee for Terms in Sciences and Technologies^[12]
- Chinese Medicine Syndrome Diagnostic Criteria of Chronic Obstructive Pulmonary Disease (2011 Edition), the Pulmonary Disease Specialized Committee in the Internal Medicine Branch of China Association of Chinese Medicine^[13]
- Qigong for Health Maintenance (Yi Jin Jing, Wu Qin Xi, Liuzijue, and Baduanjin), Management Center of Qigong for Health Maintenance, the State Administration of Sports of China^[14]
- ATS/ERS Task Force on Pulmonary Rehabilitation, an official American Thoracic Society/European Respiratory Society statement: key concepts and advances in PR (in 2013).^[15]

TERMS AND DEFINITIONS

The following terms and definitions apply to the guidelines.

Chronic obstructive pulmonary disease

COPD is characterized by airflow limitation which can be prevented and treated. The airflow limitation is incompletely reversible and develops progressively, which is related to the abnormal inflammatory reactions of the lungs to harmful gases, such as cigarette smoke, or harmful particles.^[11]

Note: It mainly affects the lung but can also cause systemic adverse reactions of the whole body (or outside the lung).

Lung distension disease

The recurrent attacks and delayed healing of lung diseases, such as cough, wheezing, and dyspnea, can cause lung qi distension, affecting its descent and astringency, thus leading to symptoms of lung diseases, such as cough, expectoration, shortness of breath, chest distension and stuffiness, and even difficulty breathing and panting.

Chinese medicine lung rehabilitation

CMLR refers to comprehensive rehabilitation methods guided by the Chinese medicine theory. It follows the pulmonary disease characteristics and uses the rehabilitation techniques and methods in Chinese medicine to prevent and treat pulmonary diseases and protect physical and mental functions so as to enable patients to return to society as soon as possible.

Note 1: The CMLR focuses on the basic views, such as the concept of holism, syndrome differentiation, and function rehabilitation and prevention. It combines prevention with rehabilitation, internal treatment with external treatment, and drug therapy with diet therapy.^[16]

Note 2: The CMLR includes, but is not limited to, the respiratory diseases (such as COPD) in western medicine. It also covers the rehabilitation of some nasal diseases (such as chronic rhinitis). By improving the clinical symptoms, lung functions, sports endurance, and life quality, it helps patients restore work-life ability as far as possible so as to return to society.

Note 3: The methods of CMLR include not only the traditional ones, such as Chinese herb therapy, acupuncture and moxibustion, and Daoyin therapy, but also the new techniques created by the integration of the concepts and methods of western medicine lung rehabilitation technology, such as catgut embedment and injection in acupoint. The methods for lung rehabilitation can be used alone or in combination.

Pulmonary rehabilitation in western medicine

PR refers to a comprehensive intervention method. Based on the overall assessment of patients, it makes individualized regimens, which include, but are not limited to, exercise training, education, and behavioral changes. The aim is to improve the physiological and psychological status of patients with chronic respiratory diseases and to encourage patients to adhere to the long-term regimen to promote health.^[15]

Note 1: The PR, in a broad sense, includes sports and respiratory muscle training, long-term oxygen therapy, nutritional therapy, thoracic physical exercise therapy, and relaxation therapy. However, in a narrow sense, it contains exercise training, respiratory muscle training, health education, psychological and behavioral interventions, and evaluation of their effects. Exercise training is the cornerstone of the PR program, and lower limb exercise training is the key and core.

Note 2: The PR multidisciplinary team should include doctors, nurses, respiratory therapists, physiotherapists, occupational therapists, psychologists, sports specialists, and other professionals.

Note 3: The development of exercise prescription of PR should consider the exercise intensity, frequency, and duration.

Note 4: The PR can achieve obvious effects after 6–12 weeks, but the clinical benefit will gradually decrease after the rehabilitation training stops. Long-term lung rehabilitation can yield longer and sustained benefits.^[17]

Note 5: The rehabilitation effect evaluation is mostly performed by adopting various evaluation methods and indicators, such as cardiopulmonary exercise test and 6-min walking test for exercise performance evaluation, Saint George's Respiratory Questionnaire and general health status questionnaire for life quality evaluation, and tests for improving lung functions and clinical symptoms.

TYPES OF DISEASES SYNDROMES

“Healthy qi deficiency and impairment accumulation” is the main pathogenesis of COPD (lung distension disease). There are three common classifications and ten total syndromes encountered in the clinics. The types include deficiency syndromes, excess syndromes, and another syndrome. The types of deficiency syndromes include lung qi deficiency, lung–spleen qi deficiency, lung–kidney qi deficiency, and both qi and yin deficiency of the lung and kidney; the types of excess syndromes include wind–cold attacking lung, exterior cold with interior fluid retention, phlegm–heat obstructing lung, phlegm–dampness obstructing lung, and heart spirit confused by phlegm; while another type of syndrome is blood stasis. Among the common clinical syndromes, they can occur alone or in combination, such as lung–kidney qi deficiency combined with a syndrome of phlegm–heat obstructing lung, or lung–spleen qi deficiency combined with phlegm–dampness obstructing lung.^[13,18]

DISEASES ASSESSMENT

Before the implementation of CMLR, patients should be comprehensively assessed by taking their medical history, the incidence of this time, daily lifestyle, and mode of exercise, as well as 6-min walking distance, respiratory muscle function, cardiopulmonary exercise load, quality of life, exercise-related functions, nutritional status, and cognitive psychology. Then, suitable methods that patients can tolerate are selected for formulating an exercise prescription.

Meanwhile, through four examinations, namely, inspection, listening and smelling, inquiry, and pulse taking and palpation, the nature of the disease, i.e., deficiency or excess, cold or heat, is made clear. Afterward, the rehabilitation is assessed. The method that is easy to accept and learn, is convenient to implement, and has the least risk is selected so as to determine the methods of CMLR.

GUIDELINES DEVELOPMENT METHOD

This guideline followed the WHO specification and principle for guideline development^[19] and is based on the report item (RIGHT) of the Health Care Practice Guide.^[20] The development steps are briefly described below.

Registration

This guideline has been registered in both Chinese and English on the International Practice Guide Registration Platform (IPGRP-2018CN033), which is available in <http://www.guidelines.registry.cn>.

Guideline users and target groups

The guideline is applicable to the clinical practice of CMLR on COPD patients in stable condition by doctors, technicians, and nurses in the respiratory, rehabilitation, and related departments.

Working group

We set up a multidisciplinary working group, including experts in western medicine, Chinese medicine, rehabilitation, acupuncture, sports, epidemiology, and evidence-based medicine, doctors, COPD patients, technicians, and nurses specializing in PR. Patient participation in the guideline development process is reflected in two aspects – one is being involved in the selection of clinical problems, while the other is in giving recommendations. The participants were divided into five groups, namely, the guiding expert group, the methodological expert group, the clinical expert group, the technical standard validation group, and the systematic review group.

The fund and conflict of interest

The fund

The development of the guideline is funded by the China National Talents Cultivation Engineering (W02060076) and the Scientific Research Project of the National Construction of Practice of Chinese Medicine Clinical Research Base established by the National Administration of Traditional Chinese Medicine (JDZX2015152).

Conflict of interest

All members signed a declaration of conflict of interest and carried out the preparation of the guide completely independently, affirming that there are no commercial, professional, or other conflicts of interest relevant to the subject matter of this guideline.

Selection and determination of clinical problems

Clinical problems and outcomes were collected through a systematic search of domestic and foreign literature and

guidelines. Then, a questionnaire survey was conducted on the Specialty Committee of Pulmonary Rehabilitation (SCPR) of the WFCMS (about 100 physicians). Meanwhile, patients also participated in the selection of clinical problems. Based on the survey results, 11 clinical problems and 14 outcomes were included.

Evidence retrieval and quality evaluation

Clinical problems were deconstructed, and retrieval strategies were determined according to the “Population, Intervention, Control, and Outcome (PICO)” Literature was retrieved through PubMed, Embase, Cochrane library, CNKI, VIP, CBM, and WANFAN DATA databases until March 1, 2017. AMSTAR tool^[21] was used to evaluate the quality of the methodology in systematic reviews and meta-analyses, and risk of bias tool^[22] was used to evaluate the quality of methodology in randomized controlled studies. Finally, this guideline fully evaluates the quality of 124 relevant articles.

Level of evidence and recommendation

This guideline adopted the grading of recommendations, assessment development, and evaluation (GRADE) system^[23] for grading the quality of evidence. The recommendation strength was preliminarily formulated according to the comprehensive evidence formed by the literature evidence, respiratory monographs, and standardized documents.

Recommendation formation

Two rounds of surveys were conducted based on the comprehensive evidence and the strength of preliminary recommendation opinions, and the survey results were sorted out. In addition, COPD also was involved in the recommendation formation. Face-to-face consensus meeting was held, and the final recommendation opinions and recommendation strength were voted on by experts. This guideline finally formed 39 recommendations, among which six were strongly recommended, 31 were weakly recommended, and two were weakly not recommended.

Publishing and updating

The first draft of the guidelines was approved by the technical standard validation group and the board of SCPR by voting and then was sent to the international standards department for review and revision for release.

According to the requirements of the WFCMS, this guideline would be updated in 3–5 years.

CHINESE MEDICINE LUNG REHABILITATION METHODS

Simplified Taijiquan

1. The Simplified Taijiquan was compiled by the Taijiquan experts of the State Administration of Sports of China in 1956. It extracts the essence of Taijiquan and is arranged into 24 movements, including Zuo You Yema Fenzong (parting a wild horse’s mane), Baihe Liangchi (white crane spreads its wings), and Zuo You Louxi Aobu (brush knee and step forward). The

movements are soft and focused on using the mind to guide breathing and coordinating with the movement of the whole body. It is characterized by warding off (Peng), rolling back (Lv), pressing (Ji), and pushing (An)^[24]

2. It is suitable for COPD patients in stable condition and can increase the 6-min walking distance (strong recommendation for use, level of evidence: B) and improve lung function, FEV₁ (weak recommendation for use, level of evidence: B)^[25]
3. Each rehabilitation session lasts 60 minutes
4. The rehabilitation exercise should be performed 5–7 times a week
5. The rehabilitation duration should be more than 3 months. It will achieve better effects with a longer duration.

Baduanjin

1. It includes eight movements, namely, Shuangshou Tuotian Li Sanjiao (two hands supporting the sky to regulate triple energizer), Zuoyou Kaigong Si Shediao (drawing bows left and right), Tiaoli Piwei Xu Danju (single arm pushing up to regulate spleen and stomach), Wulao Qishang Wang Houqiao (turning head to look left and right backward to relieve various diseases), Yaotou Baiwei Qu Xinhuo (pointing tailbone left and right to clear heart-fire), Liangshou Panzu Gu Shenyao (both hands reaching the ground to strengthen kidney and waist), Cuanquan Numu Zeng Liqi (punching with angry eyes to generate physical energy), and Beihou Qidian Baibing Xiao (bouncing on the toes to get rid of hundreds of diseases). It emphasizes on the gentle, slow, and coherent movement, as well as the combination of tightness and softness, dynamic and static status, and the harmony between spirit and body. When doing the exercise, not only the body movement but also the qi movement is acquired. When practicing, one should be fully relaxed no matter the body or the mind, and the movements should be correct and flexible. It focuses on both the movement and the thoughtless awareness during the process, which should be achieved step by step
2. It is suitable for COPD patients in stable conditions and can increase the 6-min walking distance (strong recommendation for use, level of evidence: C). It can also reduce the score of Saint George’s Respiratory Questionnaire (strong recommendation for use, level of evidence: C) and improve the quality of life. In addition, it can improve the lung function, FEV₁, FEV₁%, and FVC (weak recommendation for use, level of evidence: C)^[26-45]
3. Each rehabilitation exercise lasts 30 minutes
4. The rehabilitation exercise should be performed more than 4 times a week
5. The rehabilitation duration should be more than 3 months. It will achieve better effects with a longer duration.

Liuzijue

1. It is an exercise of inhalation and exhalation that regulates qi and blood circulation of zang-fu organs and meridians and collaterals through different mouth forms with the

six healing sounds – “Si, He, Hu, Xu, Chui, and Xi.” The six healing sounds are related to lung, heart, spleen, liver, kidney, triple energizer, and other zang-fu organs and meridians and collaterals. When practicing, it follows the order of “Preparation Movement–Opening Posture–Xu Sound–He Sound–Hu Sound–Si Sound–Chui Sound–Xi Sound–Closing Posture.” There are a total of nine movements^[14]

2. It is suitable for patients with COPD in stable condition and can increase the 6-min walking distance (weak recommendation for use, level of evidence: C). It can also reduce the score of Saint George’s Respiratory Questionnaire (strong recommendation for use, level of evidence: C) and improve the score of COPD Assessment Test (CAT) (strong recommendation for use, level of evidence: D) and the quality of life. It can reduce acute exacerbation (weak recommendation for use, level of evidence: C), improve the modified British Medical Research Council (mMRC) score (strong recommendation for use, level of evidence: D), and improve lung function, FEV₁% (weak recommendation for use, level of evidence: C)^[46-54]
3. Exercise 6 times for each word, 30 minutes for each rehabilitation exercise
4. The rehabilitation exercise should be performed more than 5 times a week
5. The rehabilitation duration should be more than 3 months. It will achieve better effects with a longer duration.

Acupoint application therapy

Traditional acupoint application

1. Treatment of applying certain Chinese medicine on acupoint^[55]
2. It is suitable for COPD patients in stable condition with deficiency syndrome and can increase the 6-min walking distance (weak recommendation for use, level of evidence: B), reduce the score of Saint George’s Respiratory Questionnaire (weak recommendation for use, level of evidence: C), and improve the quality of life. It can decrease acute exacerbation (weak recommendation for use, level of evidence: C) and improve the mMRC score (weak recommendation for use, level of evidence: C) and lung function, FEV₁%, FVC, and FEV₁ (weak recommendation for use, level of evidence: C)^[56-76]
3. The medicine that can warm yang and replenish qi, dredge meridians and activate collaterals, open orifices and activate blood, and ventilate the lungs and relieve cough and dyspnea is the first choice for the paste, with the most commonly used medicine, such as *Herba Asari*, *Semen Sinapis*, *Radix Euphorbiae Kansui*, and *Rhizoma Corydalis*
4. The acupoint for the application is selected according to the disease condition and syndrome differentiation, with Feishu (BL 13), Dingchuan (EX-B1), Shenshu (BL 23), Tiantu (CV 22), Dazhui (GV 14), and Tanzhong (CV 17) as the major ones. Matching points for different

syndromes: for lung qi deficiency, Taiyuan (LU 9) and Zusanli (ST 36) are used; for lung–spleen qi deficiency, Taiyuan (LU 9) and Pishu (BL 20) are added; for lung–kidney qi deficiency, Taiyuan (LU 9) and Zusanli (ST 36) are added

5. The duration of application is determined by medicine stimulation, blisters, and skin reaction. Drugs with less irritation can be changed every 1–3 days, while those with strong stimulation should be changed every few minutes to few hours. The application mostly lasts for 4–6 h each time
6. The application is applied with an interval of 10 days
7. Application of three times for 1 month each is considered as one course of treatment
8. Pigmentation, flushing, mild itching and pain, mild redness and swelling, and mild blisters appearing after the application are all normal reactions, which are inconsequential to the treatment. However, if skin sensitization reactions, such as skin erythema, blisters, itching, and pain, are large and significant, the application should be stopped immediately and symptomatic treatment should be performed. When necessary, the hospital should be consulted.

Acupoint application in summer to treat and prevent diseases easily occurred in winter based on Chinese medicine theory

1. It refers to an external treatment that uses medicine application on specific acupoints of the human body in dog-days to treat and prevent diseases and is also known as “Sanfu Tie.”
2. It is suitable for COPD patients in stable condition with deficiency syndrome and can reduce the score of Saint George’s Respiratory Questionnaire (weak recommendation for use, level of evidence: C) and improve the quality of life. It can also decrease acute exacerbation (weak recommendation for use, level of evidence: C) and improve the mMRC score (weak recommendation for use, level of evidence: C)^[77-108]
3. The basic drug prescription consists of *Semen Sinapis*, *Rhizoma Corydalis*, *Radix Euphorbiae Kansui*, *Herba Asari*, *Rhizoma Zingiberis Recens*, and so on. *Artificial Moschus*, *Herba Ephedrae*, *Cortex Cinnamomi*, and *Fructus Foeniculi* are often added
4. Feishu (BL 13) is the basic applied acupoint, and Tanzhong (CV 17), Dazhui (GV 14), Dingchuan (EX-B1), and Gaohuang (BL 43) are often added. Xinshu (BL 15), Geshu (BL 17), Shenshu (BL 23), Pishu (BL 20), and other acupoints are used according to the syndrome differentiation
5. When performing application, the local area should first be disinfected with 75% ethanol or iodophor routinely. Then, the medicinal paste with a length of 1 cm and a height of 0.5 cm is taken. The medicine is applied at the acupoint before being fixed with a desensitized adhesive tape of 5 cm × 5 cm
6. It is applied in summer each year, the first day of the first,

middle, and last of the dog-days (Three 10-day periods of the hot season. If the middle dog-days are 20 days, then it is used with an interval of 10 days)

7. Each application lasts for 3–6 h
8. The application is performed with an interval of 7–10 days
9. Three years of continuous application is considered as a course of treatment. The efficacy can be enhanced with multiple courses.

Shufei Tie (lung-regulating paste)

1. On the basis of traditional acupoint application therapy technology, a new type of external application is formed by combining with the modern drug preparation technology. About 1.5 g lung-regulating medicinal paste is injected into the depression of the paste film, then it is applied on the acupoint. After that, it is pressed gently and evenly
2. It is suitable for COPD patients in stable condition with deficiency syndrome, and can improve the score of Saint George's Respiratory Questionnaire and the quality of life (weak recommendation for use, level of evidence: B). It can also decrease acute exacerbation (weak recommendation for use, level of evidence: B), improve cough, expectoration, chest stuffiness, shortness of strength, fatigue, and other clinical symptoms (weak recommendation for use, level of evidence: B), and decrease the score of mMRC (weak recommendation for use, level of evidence: B)^[109-112]
3. The medicine used in the paste consists of *Semen Sinapis*, *Rhizoma Corydalis*, *Flos Genkwa*, and *Semen Zanthoxyli*, functioning for warming and inspiring lung qi, expelling phlegm and activating blood, and relieving cough and asthma
4. The acupoints used include Feishu (BL 13), Dazhui (GV 14), Gaohuang (BL 43), Tanzhong (CV 17), Dingchuan (EX-B1), and Tiantu (CV 22)
5. It is used for 6–8 h each time
6. The interval between two applications is 10 days
7. Five times is a course of treatment. It is applied on the 10th day before the dog-days, the 1st, 10th, and 20th day of the dog-days, and the 10th day after the dog-days once
8. Mild redness, swelling, and blisters appearing after application are all normal reactions, which are inconsequential to the treatment. If serious skin erythema, blisters, and other phenomena occur, the medicine should be stopped immediately, and symptomatic treatment should be performed. For serious cases, the patients should be sent to the hospital immediately.

Acupuncture

1. It is a method of treating diseases by inserting needles into specific acupoints of the human body^[113,114]
2. It is suitable for COPD patients in stable condition and can increase the 6-min walking distance (weak recommendation for use, level of evidence: C), decrease acute exacerbation (weak recommendation for use, level of evidence: C), and improve lung function, FEV₁%, and FEV₁/FVC (weak recommendation for use, level of evidence: C)^[111,115-131]

3. Filiform needle or electric needle is recommended
4. The area for acupuncture is selected according to the condition of the disease. Tanzhong (CV 17), Guanyuan (CV 4), Dingchuan (EX-B1), Feishu (BL 13), Zusanli (ST 36), and Tianshu (BL 13) are often used. Matching points for different syndromes: for lung qi deficiency, Taiyuan (LU 9) is used; for lung-spleen qi deficiency, Pishu (BL 20) is added; for both qi and yin deficiency of the lung and kidney, Gaohuang (BL 43) and Taixi (KI 3) are added.
5. When manipulating needles, it is the best to obtain qi, generating soreness, numbness, and distension and heaviness in the local area of acupoint
6. The needles are retained for 20–30 min each time
7. The acupuncture is performed 2–3 times a week.
8. Two weeks of acupuncture is considered as a course of treatment. A few courses can be applied.

Moxibustion

Traditional moxibustion

1. It is an external treatment that uses the ignited moxa wool or the moxibustion material, mainly made of moxa wool, to warm the acupoint or lesion site with suspended or direct moxibustion. By means of the heat of moxibustion and the functions of medicine, it achieves the goal of treating diseases^[132]
2. It is suitable for COPD patients in stable condition and can increase the 6-min walking distance (weak recommendation for use, level of evidence: C), reduce the score of Saint George's Respiratory Questionnaire (weak recommendation for use, level of evidence: D), and improve the quality of life. It can also improve the mMRC score (weak recommendation for use, level of evidence: C) and the lung function, FEV₁, FEV₁%, and FVC (weak recommendation for use, level of evidence: C)^[133-136]
3. The medicine used in moxibustion is selected according to the syndrome and disease differentiation in Chinese medicine. Moxa stick and moxa wool are the common moxibustion materials
4. The acupoint for moxibustion is reasonably selected according to different diseases, symptoms, and syndromes. Zusanli (ST 36), Dazhui (GV 14), Tanzhong (CV 17), and Shenque (CV 8) are mainly used. Matching points for different syndromes: for lung qi deficiency, Taiyuan (LU 9) is added; for lung-spleen qi deficiency, Taiyuan (LU 9) and Pishu (BL 20) are selected; for lung-kidney qi deficiency, Taiyuan (LU 9) and Shenshu (BL 23) are added. Matching points for different symptoms: for chest stuffiness, Tanzhong (CV 17) can be added; Kongzui (LU 6) and Chize (LU 5) are used for serious asthma and serious cough, respectively; for large amounts of phlegm, Zhongwan (CV 12) is added
5. The moxibustion is performed once a week. The frequency can be adjusted according to different moxibustion materials, acupoints, and patients' tolerance degrees
6. Each moxibustion lasts for 30 min or longer

7. It is performed with an interval of 1–2 weeks
8. Three months of moxibustion is a course of treatment. More courses can be applied
9. After moxibustion, the skin probably has a burning sensation, which can disappear by itself and is inconsequential to treatment. If blisters appear with a diameter of about 1 cm, there is no need for treatment, in general. However, if the blisters are large, with skin edema and ulceration, exudation of body fluid, and suppuration, local disinfection shall be performed for mild ones. If there are redness, swelling, and heat pain in a large area, aside from local disinfection, oral administration or external anti-infective drugs should also be used. For the suppuration in deep parts, the surgical department should get involved.

YiFei moxibustion

1. It is a method combining the effects of external medicinal treatment and moxibustion. Before moxibustion, Chinese herbal powder, mulberry paper, mashed ginger, and moxa wool are successively placed on the area of governor vessel (GV)
2. It is suitable for COPD patients in stable condition with deficiency syndrome. It can increase the 6-min walking distance (weak recommendation for use, level of evidence: B) and improve the score of CAT (weak recommendation for use, level of evidence: B) and quality of life. It can also decrease acute exacerbation (weak recommendation for use, level of evidence: B), improve cough, expectoration, chest stuffiness, shortness of strength, panting, chest stuffiness, fatigue, and other clinical symptoms (weak recommendation for use, level of evidence: B), and improve mMRC score (weak recommendation for use, level of evidence: B) and lung function, FVC, and FEV₁% (weak recommendation against use, level of evidence: B)^[137-139]
3. The medicine of moxibustion powder includes *Moschus*, *Radix Paeoniae Alba*, *Flos Caryophylli*, *Cortex Cinnamomi*, and *Semen Sinapis*, functioning as warming meridian and collateral, promoting qi and blood circulation, warming and ventilating lung collateral, and warming GV and strengthening yang.
4. The acupoints from Dazhui (GV 14) to Yaoshu (GV 2) along the GV are selected for moxibustion
5. The procedure of moxibustion includes 12 steps, which include choosing body position, selecting acupoints, disinfection, smearing ginger juice, spraying moxibustion powder, applying mulberry paper, placing mashed ginger, igniting moxa cone, changing moxa cone, removing mashed ginger, gently wiping the moxibustion area, and putting blisters. Three moxa cones are changed each time
6. Each treatment lasts for 120 min
7. The moxibustion is performed with an interval of 14 days
8. Three months is a course of treatment.

Heat-sensitive moxibustion

1. It is a kind of moxibustion therapy that involves suspended moxibustion on heat-sensitive acupoints, resulting in

meridian qi conduction to the affected area through heat penetration, expansion, and transmission; thus, the therapeutic effects are improved^[140]

2. It is suitable for patients with COPD in stable condition and can improve lung function, FEV₁/FVC, and FEV₁% (weak recommendation against use, level of evidence: B)^[19-21]
3. The moxibustion material is mostly cone-shaped moxa wool. Moxa sticks with different diameters are selected according to the need of the disease condition and different diameters of heat-sensitive acupoint areas
4. As for the body position, the patient should feel comfortable, and the moxibustion site must be fully exposed. The recumbent position is preferred
5. The acupoint is selected based on the moxibustion–sensation positioning method. With the moxa heat about 3 cm away from the body surface, centered on the traditional acupoint positioning, suspended moxibustion is carried out by combining manipulations along the meridian, circling, pecking, and applying mild moxibustion, to search the heat-sensitive acupoint. If the local area feels moderate heat without burning pain, and the patient has one or more kinds of the six heat-sensitive moxibustion sensations, it is regarded as the heat-sensitive acupoint, regardless of whether it is in the standard position of traditional acupoint
6. The duration of each moxibustion depends on the disappearance time of the heat-sensitive moxibustion sensation, which is different for different diseases, people, and acupoints. The average time is about 40 min
7. At the first continuous 8 days, it is performed once a day. After that, at least 15 times of treatment is carried out every month
8. There is no regular course of treatment. As long as the disease-related heat-sensitive acupoints exist, moxibustion is needed until all the related heat-sensitive acupoints are desensitized.

Pulmonary Daoyin

1. It is a lung rehabilitation technique in Chinese medicine that uses limb movement and breathing to regulate breath, mind, and body position
2. It is suitable for COPD patients in stable condition and can increase the 6-min walking distance (weak recommendation for use, level of evidence: B) and improve CAT score and quality of life (weak recommendation for use, level of evidence: B)^[22,23]
3. Pulmonary Daoyin includes six steps: standing and relaxing the whole body and mind, breathing using the two Dantians (the energy center), regulating lungs and kidneys, turning around and referring to the side, rubbing and circling the kidney, and nourishing the spirit and closing the practice
4. Each rehabilitation exercise lasts for 30 min
5. The rehabilitation exercise is performed more than 5 days a week, twice a day
6. The rehabilitation duration should be more than 3 months. It will achieve better effects with a longer duration.

APPENDIX 1 DESCRIPTION

The Leading Drafting Organizations of the Guideline: Henan University of Chinese Medicine, the First Affiliated Hospital of Henan University of Chinese Medicine.

The Participating Drafting Organizations of the Guideline: Peking University People's Hospital, China-Japan Friendship Hospital, Chinese Rehabilitation Research Center, Beijing Hospital of Traditional Chinese Medicine affiliated to capital medical university, Beijing Xiaotangshan Hospital, Evidence-based Medicine Center of Beijing University of Chinese Medicine, Guang'anmen Hospital of China Academy of Chinese Medical Sciences, Shuguang Hospital Affiliated to Shanghai University of Traditional Chinese Medicine, the Second Affiliated Hospital of Tianjin University of Traditional Chinese Medicine, West China Hospital of Sichuan University, Chongqing General Hospital, Xiangya Hospital of Central South University, Hebei Provincial Hospital of China Medicine, Liaoning Provincial Chinese Medicine Research Institute, the First Affiliated Hospital of Liaoning University of Traditional Chinese Medicine, Jiangsu Province Hospital of Chinese Medicine, the First Affiliated Hospital with Nanjing Medical University, Zhejiang Provincial Hospital of Traditional Chinese Medicine, Anhui University of Chinese Medicine, the First Affiliated Hospital of Anhui University of Chinese Medicine, the Second People's Hospital of Fujian Traditional Chinese Medical University, Henan University of Chinese Medicine, the First Affiliated Hospital of Henan University of Chinese Medicine, Henan Province Hospital of TCM, the Third Affiliated Hospital of Henan University of Chinese Medicine, Henan Provincial People's Hospital, Taihe Hospital in Hubei Province, the First Affiliated Hospital of Guangzhou Medical University, the Third Affiliated Hospital of Guangzhou University of Chinese Medicine, and the Chinese Medicine College of Ningxia Medical University.

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Please bear in mind that some of the contents in the guideline may involve patents. The publisher of this document is not responsible for identifying them.^[141-145]

The guideline is a clinical practice guidance of chronic obstructive pulmonary disease (COPD) rehabilitation with Chinese medicine methods. It shall not replace other clinical practice such as Chinese medicinal treatment based on syndrome differentiation.

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Conflicts of interest

There are no conflicts of interest.

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规范与标准

慢性阻塞性肺疾病中医康复指南

世界中医药学会联合会肺康复专业委员会

摘要 慢性阻塞性肺疾病(COPD,以下简称慢阻肺)是慢性呼吸系统常见、多发的重大疑难病,疾病负担巨大。肺康复是慢阻肺临床治疗的重要组成部分。中医肺康复是在中医理论指导下,遵循中医肺系疾病特点,采用中医康复技术与方法,预防肺系病证进展,保护身心功能,以回归社会的综合康复措施。为更好指导慢阻肺中医肺康复临床实践,在世界中联肺康复专业委员会组织下,成立《慢性阻塞性肺疾病中医康复指南》研制专家组,按照国际循证指南研制规范,系统检索国内外文献,进行系统评价,经过专家咨询和现场讨论,形成本指南。指南内容主要包括前言、引言、范围、规范性引用文件、术语和定义、疾病证候类型、疾病评估、中医康复技术、附录7个部分。中医康复技术包括7大类11项技术,包括简化太极拳、八段锦、六字诀、穴位贴敷、针刺、艾灸、呼吸导引术等。明确每项康复技术的技术要点(时间、频率、疗程等)、适用人群、使用药物、常用穴位、操作方法等内容。同时规定了慢阻肺中医康复术语和定义、中医肺康复、西医肺康复、疾病证候类型、中医康复技术的基本内容。该指南适用于呼吸科、康复科及其相关科室的医生、技师和护理人员对慢阻肺患者进行的中医康复临床实践。该指南发布将有助于提高慢阻肺中医康复技术的规范化,提高康复疗效和水平。

关键词 慢性阻塞性肺疾病;中医肺康复;指南

Guidelines for Chinese Medicine Rehabilitation of Chronic Obstructive Pulmonary Disease

Specialty Committee of Pulmonary Rehabilitation of World Federation of Chinese Medicine Societies

Abstract Chronic Obstructive Pulmonary Disease (COPD), with huge disease burden, was a common, frequently-occurring and major difficult disease of chronic respiratory system. Pulmonary rehabilitation was an important part of clinical treatment for COPD. Chinese medicine lung rehabilitation (CMLR), guided by Chinese medicine (CM) theory, following the pulmonary disease characteristics in TCM and using CM rehabilitation techniques and methods, was a comprehensive rehabilitation measure that can prevent the progress of pulmonary disease syndrome, and protect the physical and mental functions so as to promote patients to return to society as soon as possible. In order to better guide the clinical practice of COPD rehabilitation with CM, the expert panel for Guidelines for Chinese Medicine Rehabilitation of Chronic Obstructive Pulmonary Disease was set up under the the Specialty Committee of Pulmonary Rehabilitation of World Federation of Chinese Medicine Societies (WFCMS). According to the formulation standard of international evidence-based guidelines, domestic and foreign literature were systematically retrieved. After expert consultation and on-the-spot discussion, the guide is formed. The content of the guidelines has 7 parts, which are the preface, introduction, scope, normative references, terms and definitions, types of disease syndromes, diseases assessment, CM rehabilitation technology, and appendix. The techniques of lung rehabilitation in CM include 7 categories and 11 techniques, such as simplified Taijiquan, Baduanjin, Liuzijue, acupoint application therapy, acupuncture, moxibustion, respiratory guidance, etc. The guideline defines the technical points (time, frequency, course, etc), the optimal applicable population, use of drugs, common acupoints, operation methods and so on for each rehabilitation technique. Meanwhile, the guideline stipulates the basic contents involving terms and definitions of CMLR for COPD, pulmonary rehabilitation with Western medicines, types of disease syndromes and CMLR techniques. The guideline is applicable to the clinical practice of CMLR on COPD patients by doctors, technicians and nurses in respiratory, rehabilitation department and related departments. The release of the guideline is helpful to improve the standardization of CM rehabilitation technology for COPD, and improve the curative effect and level of rehabilitation.

Keywords Chronic obstructive pulmonary disease; Chinese medicine lung rehabilitation; Guidelines

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慢性阻塞性肺疾病(Chronic Obstructive Pulmonary Disease, COPD,以下简称慢阻肺)是慢性呼吸系 统常见病、多发病、重大疑难病,疾病负担巨大,近年来日益受到重视。全球慢阻肺患者约3.84亿,居世

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界第 4 位死因,WHO 估计 2020 年将上升至第 3 位,全球每年有 3 百万人死于慢阻肺^[1-3]。预计 2030 年估计每年将有 450 万人死于慢阻肺相关疾病^[4-5]。慢阻肺在全球范围致死致残的危害越来越严重。我国慢阻肺居第三位主要死因,总患病人数约 1 亿人^[6-7]。全球疾病负担数据显示,2016 年中国慢阻肺死亡人数(87.63 万)占全球慢阻肺死亡总数的 29.86%,是中国第三大死因^[8]。2019 年《柳叶刀》发表中国及其各省的死亡率、发病率和危险因素调查研究显示,根据排名伤残调整寿命年,慢阻肺已经成为中国居民健康负担最重的前五位疾病,位居第三,是 2017 年导致国人死亡和生命损失年的第三大原因^[9]。慢阻肺防治措施包括预防、早期诊断、规范治疗(药物治疗、运动疗法、心理干预、肺康复等),肺康复是其组成部分。中医肺康复是在中医理论指导下,遵循中医肺系疾病特点,采用中医康复技术与方法,防治肺系病证,保护身心功能,使患者早日回归社会的综合康复措施。康复已在肺系疾病中进行较广泛的应用,并获得一定的临床疗效,但同时也存在缺乏高质量循证临床研究、缺乏中医肺康复指南等问题。因此,为更好指导慢阻肺中医康复的临床实践,世界中医药学会联合会肺康复分会按照国际循证指南研制规范,系统检索国内外文献,并进行系统评价,经过专家咨询和现场讨论,最终形成了慢阻肺中医康复指南(以下简称“本指南”)。

本指南不是医疗行为的标准或者规范,而是依据现有的研究证据、特定的方法制定出的声明性文件。在临床实践中,医师可参考本指南并结合患者具体情况进行个体化诊疗。

1 适用范围

本指南规定了慢性阻塞性肺疾病中医康复术语和定义、中医肺康复、西医肺康复、疾病证候类型、中医康复技术的基本内容。本指南适用于呼吸科、康复科及其相关科室的医生、技师和护理人员对慢阻肺患者进行的中医康复临床实践。

2 规范性引用文件

下列文件对于本文件的应用是必不可少的。凡是注日期的引用文件,仅注日期的版本适用于本文件。凡是不注日期的引用文件,其最新版本(包括所有的修改单)适用于本文件。GB/T21709.1-21-2008 中华人民共和国国家标准《针灸技术操作规范》^[10]; WS 318—2010 慢性阻塞性肺疾病诊断标准^[11]; 中国全国科学技术名词审定委员会 中医药学名词(2010)^[12]; 中华中医药学会内科分会肺系病专业委

员会《慢性阻塞性肺疾病中医证候诊断标准》(2011 版)^[13]; 中国国家体育总局健身气功管理中心《健身气功》(易筋经·五禽戏·六字诀·八段锦)^[14]; ATS/ERS Task Force on Pulmonary Rehabilitation An official American Thoracic Society/European Respiratory Society statement:key concepts and advances in pulmonary rehabilitation(2013 年)^[15]

3 术语和定义

下列术语和定义适用于本指南。

3.1 慢性阻塞性肺疾病 一种具有气流受限特征的可以预防和治疗,气流受限不完全可逆、呈进行性发展,与肺部对香烟烟雾等有害气体或有害颗粒的异常炎症反应有关的疾病^[11]。注:主要累及肺脏,但也可引起全身(或称肺外)的不良反应。

3.2 肺胀病 由咳嗽、哮喘、喘病等肺系疾病反复发作,迁延不愈,导致肺气胀满,不能敛降,临床表现为咳嗽、咳痰、气短、胸中胀闷,甚则呼吸困难、喘息等症状的肺系疾病。

3.3 中医肺康复 在中医理论指导下,遵循中医肺系疾病特点,采用中医康复技术与方法,防治肺系病证,保护身心功能,使患者早日回归社会的综合康复措施。注 1:中医肺康复强调整体康复观、辨证康复观、功能康复观、预防康复观的基本观点,具有预防与康复结合、外治与内治结合、药疗食治并举等特点^[16]。注 2:中医肺康复针对肺系疾病,包括但不限于西医呼吸疾病(如慢阻肺等),也包括部分鼻部疾病(如慢性鼻炎等)进行康复,改善患者的临床症状、肺功能、提高运动耐力、生命质量等,尽可能恢复工作和生活能力,回归社会。注 3:中医肺康复技术包括传统康复技术如中药疗法、针灸疗法、导引疗法等,以及融合西医肺康复技术理念及方法创立的新技术如穴位埋线、穴位注射等。肺康复技术可单独使用,也可联合进行使用。

3.4 西医肺康复 基于对患者全面评估并量身定制的,包括但不限于运动训练、教育和行为改变,旨在提高慢性呼吸系统疾病患者生理心理状况,并促使患者长期坚持促进健康的综合干预措施^[15]。注 1:肺康复的广义范畴包括:运动、呼吸肌训练、长程氧疗、营养治疗、胸部体疗、放松疗法等。狭义的肺康复包括:运动训练、呼吸肌训练、健康教育、心理和行为干预及其效果评价。运动训练是肺康复方案的基石,下肢运动训练是关键性核心内容。注 2:肺康复多学科团队应包括医生、护士、呼吸治疗师、物理治疗师、职业治疗师、心理医师、运动专家和其他专

门人才。注3:肺康复运动处方制定的要素包括运动强度、频率和持续时间。注4:肺康复经过6~12周的锻炼可获得较为明显的康复效果,但临床获益在康复训练停止后会逐渐减退,持续较长时间的肺康复可获得更长的持续获益^[17]。注5:康复效果评价多采用多种评价方法和指标,如评价运动能力的心肺运动试验、6 min步行试验等,评价生命质量的圣乔治呼吸困难问卷、一般健康状态问卷等,以及改善肺功能和临床症状等。

4 疾病证候类型

“正虚积损”为慢性阻塞性肺疾病(肺胀病)的主要病机。临床常见证候分为虚证类、实证类、兼证类3类十证候。其中虚证类证候包括肺气虚、肺脾气虚、肺肾气虚、肺肾气阴两虚;实证类包括风寒袭肺、外寒内饮、痰热壅肺、痰湿阻肺、痰蒙神窍;兼证类有血瘀证。临床常见证候中各证候可单独存在,也可以复合证候出现,如肺肾气虚兼痰热壅肺证、肺脾气虚兼痰湿阻肺证等^[13,18]。

5 疾病评估

肺康复实施前要对患者进行全面评估,综合既往病史、本次发病情况、日常生活习惯和运动方式等,通过6 min步行距离、呼吸肌功能、心肺运动负荷、生命质量、运动相关功能、营养状况、认知心理等进行全面评估,选择患者能够耐受、适宜的方式方法,制定运动处方。

同时通过望闻问切四诊信息,明确虚实寒热,进行中医康复评估,选择患者易于掌握接受、方便实施、风险较小的方式方法,确定中医康复技术。

6 中医康复技术

6.1 简化太极拳 简化太极拳是中国国家体育总局1956年组织太极拳专家汲取太极拳精华编撰而成,包括左右野马分鬃、白鹤亮翅、左右搂膝拗步等共24式,动作柔和,强调意识引导呼吸,配合全身动作。以棚、捋、挤、按等技击特点为主^[19]。适用于慢阻肺稳定期患者,能够提高6 min步行距离(强推荐,证据级别B);改善肺功能FEV1(弱推荐,证据级别B)^[20]。每次康复锻炼60 min。每周康复锻炼5~7次。康复疗程3个月以上;长期康复锻炼效果更佳。

6.2 八段锦 八段锦包括两手托天理三焦、左右开弓似射雕、调理脾胃须单举、五劳七伤往后瞧、摇头摆尾去心火、两手盘足固肾腰、攒拳怒目增气力、背后七颠百病消8种动作。功法特点强调柔和缓慢、圆活连贯,松紧结合、动静相兼,神与形和,气寓其

中。练习时注意要松静自然、准确灵活、练养相兼、循序渐进^[14]。适用于慢阻肺稳定期患者,能够提高6 min步行距离(强推荐,证据级别C);降低圣乔治呼吸困难问卷评分(强推荐,证据级别C),提高生命质量;改善肺功能FEV1、FEV1%和FVC(弱推荐,证据级别C)^[21-40]。每次康复锻炼30 min。每周康复锻炼4次以上。康复疗程3个月以上;长期康复锻炼效果更佳。

6.3 六字诀 通过咽、呵、呼、嘘、吹、嘻6个字的发音口型,调节脏腑经络气血运行的呼吸吐纳法。六字分别与肺、心、脾、肝、肾、三焦等脏腑经络相对应。按预备式一起式一嘘一呵一呼一咽一吹一嘻一收势顺序进行锻炼,共包含9个动作^[14]。适用于慢阻肺稳定期患者,能够提高6 min步行距离(弱推荐,证据级别C);降低圣乔治呼吸困难问卷评分(强推荐,证据级别C),改善慢阻肺评估测试(COPD Assessment Test, CAT)评分(强推荐,证据级别D),提高生命质量;减少急性加重(弱推荐,证据级别C);降低呼吸困难mMRC(Modified Medical Research Council, mMRC)评分(强推荐,证据级别D);改善肺功能FEV1%(弱推荐,证据级别C)^[41-49]。每个字锻炼6遍,每次康复锻炼30 min。每周康复锻炼5次以上。康复疗程3个月以上;长期康复锻炼效果更佳。

6.4 穴位贴敷

6.4.1 传统穴位贴敷 在穴位上贴敷某种药物的治疗方法^[50]。适用于慢阻肺稳定期虚证类患者,能够提高6 min步行距离(弱推荐,证据级别B);降低圣乔治呼吸困难问卷评分(弱推荐,证据级别C),提高生命质量;减少急性加重(弱推荐,证据级别C);降低呼吸困难mMRC评分(弱推荐,证据级别C);改善肺功能FEV1%、FVC、FEV1(弱推荐,证据级别C)^[51-71]。贴敷药物以温阳益气、通经活络、开窍活血、宣肺止咳定喘类药物为首选,常用药物有细辛、白芥子、甘遂、延胡索等。贴敷穴位根据病情及辨证分型进行选择,以肺俞、定喘、肾俞、天突、大椎、膻中等为主。证候配穴肺气虚可选太渊、足三里;肺脾气虚配太渊、脾俞;肺肾气虚配太渊、足三里。贴敷时间长短由药物刺激及发泡程度、患者皮肤反应决定。刺激性小的药物,可每隔1~3 d换药1次;刺激性大的药物,数分钟至数小时不等。每次贴敷时间4~6 h居多。2次贴敷间隔时间10 d。贴敷1个月、贴敷3次为1个疗程。贴敷后出现色素沉着、潮红、轻微痒痛、轻微红肿、轻度水泡等均为正常反应,无

需处理;若出现皮肤过敏反应范围较大、程度较重的皮肤红斑、水泡、痒痛等现象,应立即停药,进行对症处理,必要时应到医院就诊。

6.4.2 冬病夏治穴位敷贴 夏季三伏天在人体特定穴位上贴敷药物,用以治疗和预防疾病的一种外治法。又称为“三伏贴”。适用于慢阻肺稳定期虚证类患者,能够降低圣乔治呼吸困难问卷评分(弱推荐,证据级别 C),提高生命质量;减少急性加重(弱推荐,证据级别 C);降低呼吸困难 mMRC 评分(弱推荐,证据级别 C)^[72-103]。药物组成以白芥子、延胡索、甘遂、细辛、生姜等为基本处方,配伍加减常用药物有人工麝香、麻黄、肉桂、小茴香等。贴敷部位以肺俞为基本穴位,主要配伍穴位有膻中、大椎、定喘、膏肓,可辨证选用心俞、膈俞、肾俞、脾俞等穴位。贴敷时先将贴敷部位用 75% 乙醇或碘伏常规消毒,然后取长度 1 cm,高度 0.5 cm 左右的药膏,将药物贴于穴位上,用 5 cm × 5 cm 的脱敏胶布固定。贴敷时间在每年夏季,三伏天的初、中、末伏的第一天进行贴敷治疗(如果中伏为 20 d,间隔 10 d 可加贴 1 次)。每次贴敷时间 3 ~ 6 h。2 次贴敷间隔时间 7 ~ 10 d。连续贴敷 3 年为 1 个疗程;多疗程贴敷可提高疗效。

6.4.3 舒肺贴 在传统穴位贴敷治疗技术基础上,结合现代药物制备工艺技术所形成的一种新型外用贴剂,贴敷时取舒肺贴药膏约 1.5 g 注入贴膜凹陷处,敷于穴位上,轻轻按压均匀即可。适用于慢阻肺稳定期虚证类患者,能够改善圣乔治呼吸困难问卷评分,提高生命质量(弱推荐,证据级别 B);减少急性加重(弱推荐,证据级别 B);改善咳嗽、咯痰、胸闷、气短、乏力等临床症状(弱推荐,证据级别 B);降低呼吸困难 mMRC 评分(弱推荐,证据级别 B)^[104-107]。药物组成有白芥子、延胡索、芫花、椒目等,具有温振肺气、逐痰活血、止咳平喘功效。贴敷穴位包括肺俞、大椎、膏肓、膻中、定喘、天突等穴位。每次贴敷时间 6 ~ 8 h。2 次贴敷间隔时间 10 d。贴敷 5 次为 1 个疗程,夏季“三伏天”前的第 10 天、“三伏天”内的第 1、10、20 天,“三伏天”后的第 10 天各贴敷 1 次。贴敷后出现轻微红肿、轻度水泡等均为正常的皮肤反应,无需处理;若出现较为严重的皮肤红斑、水泡等现象,应立即停药,进行对症处理,严重时应及时到医院就诊。

6.5 针刺 一种以针刺入人体特定穴位来达到治病目的方法^[108-109]。适用于慢阻肺稳定期患者,能够提高 6 min 步行距离(弱推荐,证据级别 C);减少急

性加重(弱推荐,证据级别 C);改善肺功能 FEV1%、FEV1/FVC(弱推荐,证据级别 C)^[110-128]。推荐使用毫针或电针。针刺部位根据病情进行选择,常选择膻中、关元、定喘、肺俞、足三里、天枢等。证候配穴肺气虚可选太渊;肺脾气虚可选脾俞;肺肾气阴两虚可选膏肓、太溪等。行针时得气最佳,腧穴部位产生痠、麻、胀、重等感觉。每次留针时间 20 ~ 30 min。针刺频率每周 2 ~ 3 次。针刺 2 周为 1 个疗程;可多疗程。

6.6 艾灸

6.6.1 传统艾灸 用艾绒或以艾绒为主要成分制成灸材,点燃后悬置或放置在穴位或病变部位,进行烧灼、温熨,借灸火的热力以及药物的作用,进行治疗的外治方法^[129]。适用于慢阻肺稳定期患者,能够提高 6 min 步行距离(弱推荐,证据级别 C);改善圣乔治呼吸困难问卷评分(弱推荐,证据级别 D),提高生命质量;改善呼吸困难 mMRC 评分(弱推荐,证据级别 C);改善肺功能 FEV1、FVC、FEV1%(弱推荐,证据级别 C)^[130-133]。艾灸药物根据中医辨证辨病原则进行选择,艾条、艾绒为常用灸材。艾灸穴位依据疾病、症状及证型的不同合理选取,以足三里、大椎、膻中、神阙等为主。证候配穴肺气虚配太渊等;肺脾气虚配太渊、脾俞等;肺肾气虚配太渊、肾俞等。症状配穴胸闷可配膻中;喘甚可配孔最;咳甚可配尺泽;痰多可配中脘。艾灸频次每周 1 次,可根据灸材、穴位不同以及患者耐受程度等进行调整。每次艾灸时长 30 min 或更长。2 次艾灸治疗间隔时间 1 ~ 2 周。艾灸 3 个月为 1 个疗程;可多疗程。施灸后皮肤多有红晕灼热感,不需处理,可自行消失。若出现水泡,直径在 1 cm 左右,一般不需任何处理;若水泡较大,发生水肿、溃烂、体液渗出、化脓,轻度可在局部做消毒处理;若出现红肿热痛且范围较大,在局部做消毒处理同时口服或外用抗感染药物,化脓部位较深应请外科进行处理。

6.6.2 益肺灸 在督脉上依次铺以中药粉、桑皮纸、生姜泥、艾绒,进行灸疗的一种集药物外治、艾灸等综合作用的方法。适用于慢阻肺稳定期虚证类患者,能够提高 6 min 步行距离(弱推荐,证据级别 B);改善 CAT 评分(弱推荐,证据级别 B),提高生命质量;减少急性加重(弱推荐,证据级别 B);改善咳嗽、咯痰、气短、喘息、胸闷、乏力等临床症状(弱推荐,证据级别 B);改善呼吸困难 mMRC 评分(弱推荐,证据级别 B);改善肺功能 FVC、FEV1%(弱不推荐,证据级别 B)^[134-136]。灸粉药物组成包括麝香、白芍、丁香、肉桂、白芥子等,具有温通经络、运行气血、

温宣肺络、温督壮阳等功效。施灸部位取督脉大椎穴至腰俞穴。施灸程序包括选择体位、取穴、消毒、涂抹姜汁、撒灸粉、敷盖桑皮纸、铺姜泥、点燃艾炷、换艾炷、移去姜泥、轻擦灸处及放泡 12 步;每次更换艾炷 3 壮。每次治疗时间 120 min。2 次灸治间隔时间 14 d。疗程为 3 个月。

6.6.3 热敏灸 选择热敏腧穴进行悬灸,通过激发透热、扩热、传热等经气传导,达到气至病所,提高临床疗效的一种灸法^[137]。适用于慢阻肺稳定期患者,能改善肺功能 FEV1/FVC、FEV1% (弱不推荐,证据级别 B)^[138-140]。灸材以艾绒为主,圆柱形居多,根据病情需要和腧穴热敏直径的不同而选择不同直径的艾条。体位选择以被灸者感到舒适为宜,充分暴露施灸部位。首选卧位。穴位选择以灸感定位法进行确定。艾条距离体表约 3 cm,以传统腧穴定位为中心,在其上下左右施以循经、回旋、雀啄、温和组合手法进行悬灸探查,热感强度适中而无灼痛,被灸者出现 6 类热敏灸感中的 1 类或 1 类以上的部位,即为热敏腧穴,不拘是否在传统腧穴的标准位置上。每次施灸时间以热敏灸感消失为度,因病因人因穴而不同,平均施灸时间约为 40 min。开始连续 8 d 每天 1 次,后每月治疗不少于 15 次。无固定疗程。只要与疾病相关的热敏腧穴存在,就需要进行施灸,直至所有与该病症相关的热敏腧穴消敏。

6.7 呼吸导引术 通过肢体运动及呼吸吐纳,调息(呼吸)、调心(意念)、调形(身体姿势)相结合的中医肺康复技术。适用于慢阻肺稳定期患者,能够提高 6 min 步行距离(弱推荐,证据级别 B);改善 CAT 评分,提高生命质量(弱推荐,证据级别 B)^[141-142]。呼吸导引术包括松静站立、两田呼吸、调理肺肾、转身侧指、摩运肾堂、养气收功等 6 个步骤。每次康复锻炼 30 min。每周康复锻炼 5 d 以上,每天 2 次。康复疗程 3 个月以上;长期锻炼效果更佳。

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说明

本指南编制程序遵守了世界中医药学会联合会发布的 SCM 0001-2009《标准制定和发布工作规范》和世界中医药学会联合会秘书处发布的 2011(20 号)文件《世界中联各专业委员会专业技术标准制定实施办法》。请注意本指南的某些内容可能涉及专利,本文件的发布机构不承担识别这些专利的责任。本指南主要内容为中医康复技术在慢阻肺的临床实践指南,并不能替代临床实践中的其他临床实践,如中医药辨证治疗等。本指南依据 WHO 指南制订步骤,参考卫生保健实践指南的报告条目(RIGHT)进行撰写。制订步骤简述如下。

1) 指南注册:本指南在国际实践指南注册平台(<http://www.guidelines.registry.cn>)进行了中、英文双语注册(IPGRP—2018CN033)。

2) 指南使用者与目标人群:本指南适用于呼吸科、康复科及其相关科室的医生、技师和护理人员对慢阻肺患者进行的中医康复临床实践。指南推荐意见的应用目标人群为诊断为慢阻肺稳定期的患者。

3) 指南工作组:本指南成立了多学科人员工作组,包括西医呼吸专业、中医呼吸专业、康复专业、针灸专业、推拿专业、体育专业、流行病学专业、循证医学专业的专家及从事肺康复的医生、技师和护理人员。分 5 个小组,分别是指导专家组、方法学专家

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4) 基金资助与利益冲突声明。a. 基金资助: 国家“万人计划”百千万工程领军人才(W02060076)、国家中医药管理局国家中医临床研究基地业务建设科研专项(JDZX2015152)。b. 利益冲突声明: 本指南所有成员均签署利益冲突声明, 完全独立进行指南的编制工作, 申明无任何与本指南主题相关的商业的、专业的或其他方面的利益冲突。

5) 临床问题遴选和确定: 通过系统检索国内外文献和指南, 收集临床问题和结局指标, 并通过世界中医药学会联合会肺康复专业委员会(约 100 名医师) 进行问卷调查。基于调查结果, 纳入最终需解答的 11 个临床问题和 14 个结局指标。

6) 证据检索及质量评价: 按照“人群、干预、对照和结局(PICO)”原则解构临床问题, 制定检索策略, 分别通过 PubMed、Embase、Cochrane library、中国知网(CNKI)、中文科技期刊全文数据库(VIP)、中国生物医学文献数据库(CBM)、万方全文数据库(WANFAN DATA) 数据库检索文献, 时间为各数据库建库至 2017 年 3 月 1 日。采用 AMSTAR 工具评价系统评价、Meta 分析的方法学质量, Risk of bias 工具评价随机对照研究方法学质量, 最终 124 篇相关文献纳入本指南。

7) 证据级别和推荐强度: 本指南采用推荐分级的评估、制定和评价(The Grading of Recommendations Assessment Development and Evaluation, GRADE) 系统进行证据质量分级。推荐意见强度权衡文献证据、呼吸专著、标准化文件形成综合证据体, 初步拟定。

8) 推荐意见形成: 将综合证据体、初拟推荐意见强度, 采用的德尔菲法进行 2 轮问卷调研, 整理调研结果, 召开面对面共识会议, 由专家投票表决最终的推荐意见及推荐强度。本指南最终形成 39 条推荐意见, 其中强推荐使用 6 条、弱推荐 31 条、弱不推荐 2 条。

9) 指南的发布与更新: 撰写指南初稿, 由世界中联肺康复专业委员会专业技术标准审定委员会和理事会投票通过, 送国际标准部进行审核、修订后发布。

本指南根据世界中联的《标准制定和发布工作规范》和《世界中联各专业委员会专业技术标准制定实施办法》进行制定, 拟 3~5 年进行更新。

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