

Application of Dejian Psychosomatic Therapy to Smokers with Stable Chronic Obstructive Pulmonary Disease

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Abstract: To explore the intervention effect of Dejian psychosomatic therapy on chronic obstructive pulmonary disease (COPD) in elderly smokers, in as to improve clinical impact of COPD in smokers who are the aged. Forty elderly smokers with COPD were comprise of treatment group, control group, which are trained for 45 days to test the following indicators. Vital mass Index (VMI), forced Vital capacity (FVC), Maximum Chase air volume (MVV) and so on showed significant improvement in lung function indicators in both the treatment group and the control group ($P < 0.05$). Improvement impact of control group was not better than that of the treatment group, with statistical significance ($P < 0.01$). Dejian psychosomatic therapy has a systematic good effect on copd smokers, promoting the improvement and promotion of lung function, and strengthening the physical function of copd smokers in stable stage.

Key words: Dejian mind-body intervention; keep work inside; smokers with COPD; cardiopulmonary function

Tob Regul Sci.TM 2021;7(6): 5103-5107

DOI: doi.org/10.18001/TRS.7.6.4

INTRODUCTION

The world Health Organization's latest projections for COPD, a chronic respiratory disease concentrated in older smokers, show that the disease will continue to rise over the next 40 years, with 5.4 million deaths predicted annually by 2060. As the age of elderly smokers increases, the endurance of the respiratory system decreases year by year, and the decline of physical function may affect the quality of life of elderly smokers¹. With the attention paid by domestic and foreign scholars to the study of COPD, it is agreed that the intervention mode of deep breathing training has certain clinical effects on patients with COPD. He keeps work inside the physical and mental therapy

is the use of the characteristics of deep breathing exercise, keep work was built inside the Jackson compiled YangShengGong, principle is the use of abdominal qi realizes the whole body blood gas flow, main purpose is to practice how to promote human body gas, relating, and qi, achieve the effect of physical fitness, for the body's natural operation and meridian flow has a good effect.

METHODS

Participants

By choosing henan province hospital of 40 patients with senile male smokers, aged 60-70 years old, according to the physical characteristics, disease symptoms and chest X-ray, and lung

function of blood gas comprehensive analysis results indicate that the 40 patients were in line with the 2021 revision of the guide of diagnosis and treatment of chronic obstructive pulmonary disease diagnostic criteria, 40 patients in the plateau, The two groups were comprise of control group and

treatment group. The basic information of patients in the two groups can be seen from Table 1, and the data in the table were compared statistically. The datas have no difference,in contrast to the two groups ($P > 0.05$), indicating comparability.

Table 1 Comparison of Patients in the Two Groups					
	number	height	weight	acne	age
control group	20	163.52±2.26	58.81±3.45	11.2±4.3	64.45±4.75
treatment group	20	164.17±2.15	59.47±3.85	12.2±5.1	65.31±4.16

Measures

Control group conducts regular breathing machine trainer training, step one, inspiratory training, patients sitting position, keep your body relax, including live mouth pieces slowly expiratory gas rises slowly inhale make trainers after, try longer gas absorption make trainers sphere rising, continuous suction on the strength of the largest, try to make and keep the very top of the scale of 1 to 2 seconds, Release the bite and slowly exhale the air. After each deep breath, adjust the breath. 12 to 15 breaths can be used for the next inhalation training. Step two, breath training, patients sitting position, keep your body relax, including live mouth pieces after inhaling slowly exhale slowly make trainers gas rises, try to vomit a longer gas make trainers sphere rising, continue to exhale for maximum strength, try to make and keep the very top of the scale of 1 to 2 seconds, slow loosen the mouth pieces of the gas discharge, after each take a deep breath, Breathe for 12 to 15 reps for the next exhalation. The above training time is 30-40 minutes, once a day, five times a week.

In addition to the routine ventilator training, the treatment group also assisted with the physical and mental health training of Yiddejian therapy. Movement 1: shoulder release, put hands between shoulders and neck, and then move hands slowly with elbow joint. Bend your waist slightly forward and lift your heels naturally. Action two, virtual pile, choose fresh air environment, feet gather force apart and shoulder width, hands bent up, hanging in front of chest and abdomen, similar to ape posture,

eyes and mouth slightly closed, natural breathing, time for 5-10 minutes. Action three, self breathing, standing posture, both hands gently press below the navel, inhale force, close the abdomen and lift the anus, close the mouth, eyes open, expiratory force, drum belly concave waist, eyes closed, the body relaxed.

After 60 days of training intervention, patients of two groups were tested for lung function. The main measures included Vital mass Index (VMI), peak expiratory flow rate (PEF), respiratory rate (RR), forced Vital capacity (FVC), Maximum chase air Volume (MVV), forced expiratory volume in the first second (FEV1).

In data processing, the test indexes were represented by standard deviation, and the changes of each index before and after the exercise were analyzed by paired T-test. Which means that the data of two groups are different from the process ($P < 0.05$).

RESULTS

After 60 days of training intervention, can be seen from table 2, through to the control group and treatment group two groups of patients with pulmonary function test indexes of contrast, you can see all improved ($P < 0.05$), but the contrast lung function test index of the treatment group can be found that the improvement of lung function in treatment group and relative to significantly improve degree, The comparison with the control group was significant from the data of two groups ($P < 0.01$).

Table 2
In Contrast to Two Groups of Lung Function Indexes after and before Intervention

		PEF	RR	FEV1/FVC	MVV	VMI
Control Group	A	3.31±2.02	30.9±6.7	62.85±9.24	2.16±0.55	17.33±0.71
	B	3.69±2.25*	29.9±6.1*	70.12±9.65*	2.78±0.69*	18.02±0.72*
Treatment Group	A	3.54±2.19	31.6±6.8	62.91±9.75	2.13±0.45	17.43±0.65
	B	4.62±2.09**	29.8±6.2**	76.58±9.81**	2.38±0.58**	18.52±0.73**

*p < .05; **p < .01

Note.

A=Before the intervention,B= After the intervention,VMI=Vital mass Index,PEF=peak expiratory flow rate, RR=respiratory rate, FVC=forced Vital capacity, MVV=Maximum chase air volume=, = FEV1=forced expiratory volume in the first second.

DISCUSSION

COPD patients is due to body of airway obstruction, reduced lung function and thoracic compliance, caused by abnormal pulmonary alveolus, smokers' lungs dysfunction rate is higher, especially the first second forced expiratory volume drop rate increase fast, gradually increase the incidence of respiratory disease, affect the normal operation of the patients' immune systems. When patients inhale tobacco caused by respiratory oxidative stress, inflammation, and protease and resistance to protease imbalances, macrophages, neutrality, cells and immune cell function decline, damage to the alveolar epithelium, produce irreversible lung damage, cause emphysema, destruction of airway smooth muscle and fibre hyperplasia of cells around, Epithelial cells also produce cup-shaped gases and more mucus in the airways, leading to emphysema and irreversibly affecting gas exchange in lung function². The theoretical training basis of respiratory function shows that due to the decline of lung function, the compensatory function of pulmonary circulation will be activated. Patients can realize the compensatory effect of pulmonary circulation and complete gas exchange through corresponding professional training. Related studies have shown that only when breathing intensity load increases, or well fatigue, COPD patients could not breath easily, become shallow, increased frequency of breathing, reduce tidal volume, reduce the pressure of well, promote can aggravate the lungs breathing shallow gas exchange, uneven ventilation flow ratio, Indicators of arterial blood gas deterioration, airflow restriction and gas trapping³, abnormal gas

exchange, high mucus secretion and ciliary dysfunction, pulmonary arterial hypertension. Therefore, improving breathing pattern becomes one of the ultimate goals of COPD.

COPD patients could be treated with previous official diastolic agents during the treatment period. Salmeterol and Ormoterol were used in the early stage of clinical treatment. In recent years, drugs with faster effects and longer duration include Indacaterol, Oladaterol and Vilanterol. The long-acting antimuscarinic antagonist can bind M3 receptor for a long time and quickly separate from M2 receptor, thus prolonging the bronchodilation time over 12 h. The new LAMA can extend the bronchodilation time over 24 h. Common lamas include Tiotropium, Glycopyrronium, Umeclidinium, and Aclidinium bromide. For stable COPD patients, not only through getting rid of drug dependence, but also through regular exercise training to achieve respiratory rehabilitation. Relevant studies have shown that the functional improvement of respiratory muscles and other skeletal muscles can be improved through professional and targeted training⁴, which is crucial for the training of respiratory muscles in patients with stable COPD. Existing research proves⁵, through to COPD patients of breathing aid training, could strengthen the patient's lung capacity⁶, promote patients take a deep breath of time, strengthen the gas exchange of lung tissue can effectively and to reduce the gas exchange of invalid cavity solvent, is conducive to the improving of the pulmonary function in patients with⁷, to strengthen the increase of the lung capacity, The airway elasticity resistance during

respiration is improved and the compliance of lung tissue is improved.

COPD stabilizer with breathing training apparatus, also can promote the expansion of the thoracic degree increasing, the auxiliary muscle strengthening, as you exhale, abs effective help relax the diaphragmatic muscle contraction, the tidal volume increase breathing⁸, breathe in, can delay the auxiliary muscle fatigue, reduce the residual volume function, strengthen the alveolar ventilation frequency, reduce respiratory function loss. Patients can carry out professional training of respiratory system through relaxed shoulder type⁹, virtual pile type and self-breathing type to promote the improvement of ventilator muscular endurance when using dejian body and mind therapy internal nourishing function for breathing training. After 45 days of respirator training and aerobic exercise training in the treatment group¹⁰, it was found that the indexes of lung function in the control group were not better than those in the treatment group. The main intervention mechanisms were as follows:

The shoulder type can improve the functional sex of the patients with thoracic and chest, to promote the synergistic effect of cardiopulmonary function, enhanced through the head, shoulders, chest, back and other skeletal muscle collaborative effect¹¹, patients with thoracic in through the shoulder type of training, improve the activity of the thoracic and elasticity, and promote the role of participation in abdominal breathing, to strengthen the patients intercostals muscles and improve within the intercostals muscles¹². Virtual pile type is, in coordination with the onset of the flesh of the body open, make breathing and blood running at the same time, through the virtual pile method of standing body relax, lower limb blood and gas flow¹³, help to increase the body function of lower limbs, in practice, the head and neck of Chiang kai-shek and chin on the head on the tongue, will stimulate the mouth fluid¹⁴, accelerate the metabolism of the respiratory tract, By running the production of body fluid, blood gas is a kind of digestion, strengthen the muscles and fill the chemical composition of the gas¹⁵, as a result, virtual pile type can strengthen the patient's lower limb, makes the onset of coordination of the body, the

existing research proves, through the onset of the coordination of training, as well as the lower limb function training¹⁶, can promote the natural operation of the well, the improved well endurance. Self conduct breath, can strengthen the body's respiratory function, circulation function, digestive function, according to the related studies confirm that keep work inside of the shaolin chanwuyi, the main is a kind of abdominal breathing method, stick to one form Yin, can strengthen abdominal muscle¹⁷, rib between internal and external coordination, strengthen XiongFuQiang breathing, the pressure of can be targeted to strengthen well, It can also improve the alveolar ventilation, strengthen the elasticity of lung tissue¹⁸, promote the resistance effect of lung tissue when breathing, and make the bronchial tissue maintain a certain tension, which is conducive to the full exchange of air in the lung, and improve the lung function.

CONCLUSION

Through the training of breathing trainer for copd smokers at stable stage and the assistance of Dejian mind-body therapy, the improvement of patients' respiratory function and function in the stabilizer can be promoted, the continuous improvement of lung function can be strengthened, and the improvement of physical quality can be promoted.

Author Declaration

This research is not funded by any organization related to tobacco production.

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