

Observation on the Effect of Xiao Chaihu Tang Combined with Acupuncture on the Postoperative Nutritional Status of Lung Cancer Patients

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ABSTRACT

Aim: Lung Carcinoma (LC) is still one of the malignant neoplastic diseases with the fastest-growing morbidity and mortality worldwide. This study observes the influence of traditional Chinese medicine acupuncture and moxibustion on nutritional status and Cancer-Related Fatigue (CRF) in post-surgical LC patients, thus providing new references for the future treatment of LC. **Materials and Methods:** 94 LC patients admitted from March 2021 to May 2023 were selected as the research participants for a randomized controlled trial, were divided into a control group ($n=47$) and an experimental group ($n=47$) for routine postoperative rehabilitation and Xiao chaihu Tang combined with acupuncture and moxibustion based on routine postoperative rehabilitation, respectively. Changes in CRF scores, T-lymphocyte subpopulations and cell counts before and after treatment were compared between the 2 groups and differences in nutrient proteins were detected. **Results:** CRF scores were all lower in the experimental group than in the control group after treatment ($p<0.05$). CD3⁺ and CD4⁺ decreased and CD8⁺ increased after treatment in the control group ($p<0.05$), but there was no significant change in the experimental group ($p>0.05$). In addition, White Blood Cells (WBC), Neutrophils (NEU) and Platelets (PLT) were higher in the experimental group than in the control group after treatment ($p<0.05$). Finally, it was seen that the after treatment nutritional status of the experimental group was more favorable than that of the control group. **Conclusion:** Xiao chaihu Tang combined with acupuncture and moxibustion exert a positive effect on alleviating CRF and improving nutritional status in post-surgical LC patients.

Keywords: Acupuncture and moxibustion, Cancer-related fatigue, Immune function, Lung carcinoma, Nutritional Status, Xiao chaihu Tang.

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INTRODUCTION

Globally, Lung Carcinoma (LC) remains one of the most rapidly growing malignancies in terms of morbidity and mortality, with an average of about 51 cases per 100,000 people and approximately 1.4-1.6 million associated deaths annually.^{1,2} Surgery is still the most direct treatment for all kinds of neoplastic diseases, which combined with radiotherapy and chemotherapy can comprehensively kill tumor cells to ensure the life safety of patients.³ However, due to many factors, such as invasive surgical procedures, partial organ resection and toxic and side effects of chemoradio therapy, LC patients generally have poor body function, serious immune disorders and severely damaged

nutritional status after surgery.⁴ At the same time, Cancer-Related Fatigue (CRF), that is, a painful, persistent, subjective, physical, emotional, or cognitive cancer- or cancer treatment-related fatigue or weariness, is prevalent in patients receiving radiotherapy and chemotherapy, afflicting more than 75% of tumor patients and seriously affecting their quality of life.⁵ In recent years, the role of TCM treatment in tumor diseases has begun to receive attention. Traditional Chinese medicine is characterized by an extremely high degree of safety, followed by a gradual change in the patient's pathology and the continuous optimization of the patient's nutritional status and body function in the process.⁶

Acupuncture and moxibustion, as a characteristic treatment scheme of Traditional Chinese Medicine (TCM), have the characteristics of easy operation, fewer adverse reactions, high safety, cost-effectiveness and definite curative effect. It has achieved excellent results in the rehabilitation treatment of many diseases, but there is a lack of unified and standardized research protocols.⁷ In TCM, Qi deficiency syndrome, including Yin



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deficiency, phlegm-dampness, blood stasis and Qi stagnation, is defined as typical manifestations after LC. Therefore, Sanjiao (triple energizer) acupuncture aimed at "invigorating Qi and regulating blood, supporting the foundation and nurturing the essence" is theoretically helpful in enhancing various body functions of LC patients after surgery.⁸ In recent years, studies have shown that acupuncture and moxibustion can improve human function through a series of biochemical, immune and physiological adjustments through thermal and non-thermal biological effects.⁹ We speculate that this therapy may also be beneficial to the improvement of postoperative nutritional status and alleviation of CRF in LC patients.

In addition, Xiao chaihu Tang is a classic Chinese medicine prescription, composed of Chai Hu, *Scutellaria baicalensis*, Ginseng, Radix et Rhizoma Glycyrrhizae, Ginger, which has been proven to have significant effects in a variety of tumor diseases and modern pharmacological experiments have shown that it has a definite efficacy in improving the inflammatory response state, boosting the immune function and inhibiting and killing cancer cells.¹⁰ A study by Song K *et al.*, noted that Xiao chaihu Tang had a significant effect on improving inflammation in the lungs.¹¹ In the case of LC, Xiao chaihu Tang is believed to improve the immune function of patients and enhance the clinical efficacy.¹²

However, few studies have focused on the effects of Xiao chaihu Tang on the nutritional status of LC patients. Therefore, this study attempts to provide a more reliable and comprehensive reference for future clinical treatment of LC by observing the influence of Xiao chaihu Tang combined with acupuncture and moxibustion on postoperative nutritional status and CRF in patients after surgery for LC.

MATERIALS AND METHODS

Study participants

The PASS software (NCSS, USA) was used to calculate the sample size needed for this study. 94 LC patients admitted from March 2021 to May 2023 were selected as the research participants for a randomized controlled trial. Using a random number table, they were divided into a control group ($n=47$) and an experimental group ($n=47$) for routine postoperative rehabilitation and Xiao chaihu Tang combined with acupuncture and moxibustion based on routine postoperative rehabilitation, respectively. Patients in the control group (65.15 ± 4.47) years old, 34 males and 13 females. Patients in the experimental group (65.60 ± 4.56) years old, 36 males and 11 females. The study involving human subjects complied with the Declaration of Helsinki and was approved by the ethical committee of the hospitals (KL00154) and all participants provided written informed consent.

Eligibility and exclusion criteria

(1) Patients diagnosed with non-small cell LC by clinical findings, imaging, endoscopy and pathology, with an expected

survival of 6 months; (2) Patients with IIb-IIIb LC according to the Tumor-Nodes-Metastasis (TNM) definitions for LC (International Union against Cancer TNM classification, 8th Edition, 2017),⁹ who met the indications for surgical resection and completed the operation successfully; (3) No use of preoperative radiotherapy or chemotherapy; (4) No hilar or mediastinal lymph node metastasis; (5) Patients aged 30-70 who signed informed consent. Exclusion criteria: (1) Patients with Yin deficiency; (2) Patients who cannot cooperate with nursing intervention and observation due to cognitive impairment; (3) Patients with benign lung lesions; (4) Patients with a history of drug and alcohol dependence; (5) Pregnant or lactating patients; (6) Patients with autoimmune diseases.

Chemotherapy

Routine chemotherapy

Patients were intravenously injected with paclitaxel (Guilin Hui'ang Biochemical Pharmaceutical Co., Ltd., China, H20050598) at a dose of 175 mg/m^2 and cisplatin (Shandong Luoxin Pharmaceutical Group Stock Co., Ltd., China, H20046375) at a dose of 75 mg/m^2 . They received 4-6 cycles of chemotherapy, with 21 days per cycle. During chemotherapy, routine treatments such as anti-vomiting, hydration, diuresis and anti-allergy were also given.

Rehabilitation

Routine rehabilitation therapy included admission education, respiratory function exercise, analgesia management, early postoperative activities, etc. The immunocompromised patients were given 20 mg of Mannatide for Injection (Sinopharm Yixin Pharmaceutical Co., Ltd., China, H10970426) or 6 mL of Calf Spleen Extractive Injection (Jilin Aodong Taonan Pharmaceutical Co., Ltd., H22026121), once a day. On this basis, patients in the experimental group were given Sanjiao acupuncture and moxibustion: Tiaoyi Sanjiao acupuncture and moxibustion were given from day 3 to day 16 of chemotherapy. (1) The major acupoints were Danzhong, Qihai, Zhongwan and bilateral Zusanli. Mild moxibustion was performed: A moxa stick was lit and suspended within a radius of 3 cm from the acupoint and 3-5 cm away from the skin, with tolerance as the degree. Each acupoint was treated for 30 min. (2) The auxiliary acupoints were bilateral Xuehai, Waiguan and Taichong. After routine disinfection, disposable sterile acupuncture needles of $0.25 \text{ mm} \times 40 \text{ mm}$ were used to insert perpendicularly into Xuehai for 15-20 mm, obliquely into Taichong for 5-10 mm and perpendicularly into Waiguan for 15-20 mm. After achieving needling sensation, strengthening and reducing by rotating needles were performed for 1 min and the needle was retained for 30 min. Acupuncture and moxibustion were performed once a day for 14 days. In addition, Xiaochaihu Tang (take 15 g of Chaihu into 100 mL of water, boil it for 2 hr and take it orally twice in the morning/evening) was taken orally daily.

Outcome measures

CRF score

CFS scores (0-28 for physical fatigue, 0-16 for emotional fatigue and 0-16 for cognitive fatigue) were compared before and 6 months after treatment; a higher score is associated with a higher degree of fatigue. Then we collected fasting venous blood from both groups and divided it into three parts: one part was detected by flow cytometer (Attune NxT, Thermo Fisher, USA) for T lymphocyte subsets CD3⁺, CD4⁺ and CD8⁺; another part was used to count White Blood Cells (WBC), Neutrophils (NEU) and Platelets (PLT) with an automatic blood cell analyzer; the last part was used for the measurement of Albumin (ALB), Transferrin (TRF), Prealbumin (PA) and Total Protein (TP) by an automatic biochemical analyzer (BS-800M, Myriad, USA). Finally, the risk of malnutrition was assessed with the Nutrition Risk Screening (NRS 2002),¹³ with a score of 0, 1, 2 and 3 indicating normal nutritional status, as well as mild, moderate and severe malnutrition, respectively. The patients were also tested for their left and right hand grip strength using a grip strength device and underwent a 6-Min Walk Test (6MWT, walking as fast as possible on a flat, straight surface, to determine their 6-min walk distance, which is used to reflect the cardiopulmonary capacity of the patients).¹⁴

Statistical Methods

This study used SPSS27.0 software (IBM, USA) to conduct statistical analyses of the data. The Chi-square test was used to compare patient gender, adverse reactions and other counting data [n (%)] and the independent sample t-test and paired t-test were used to compare patient age, CRF score and other measurement data (\pm s), the Shapiro-wilk test was performed to confirm that all data conformed to a normal distribution. When $p < 0.05$ indicates that the difference is statistically significant.

RESULTS

CRF scores in the experimental group were lower than those in the control group.

First of all, the two groups were similar in before treatment CRF scores ($p > 0.05$). After treatment, the physical, emotional and cognitive fatigue scores in the control group remained unchanged ($p > 0.05$), while those in the experimental group decreased and were lower versus the control group ($p < 0.05$, Table 1).

The experimental group had better immune function than the control group

Similarly, there was no significant inter-group difference in the detection results of T lymphocyte subsets before treatment ($p > 0.05$). After treatment, the T lymphocyte subsets in the experimental group did not change ($p > 0.05$); CD3⁺ and CD4⁺ in the control group reduced and were lower compared with the

experimental group, while CD8⁺ elevated and was higher ($p < 0.05$, Table 2).

Myelosuppression was lower in the experimental group than in the control group

In terms of cell counting, WBC, NEU and PLT increased in both groups after treatment, especially in the experimental group ($p < 0.05$, Table 3).

Better nutritional status in the experimental group

ALB, TRF, PA and TP did not differ statistically between groups before treatment ($p > 0.05$). After treatment, ALB, TRF, PA and TP reduced markedly in both groups, with lower levels of them in the experimental group compared with the control group ($p < 0.05$, Table 4).

The risk level of malnutrition in the experimental group was higher for the control group

The NRS2002 survey results showed no notable inter-group difference in the number of people with mild and moderate malnutrition ($p > 0.05$); while the experimental group had fewer people with severe malnutrition and more people with normal nutrition ($p < 0.05$, Table 5).

The experimental group was healthier

Finally, comparing the physical fitness of the two groups of patients, we can see that the experimental group's left- and right-hand grip strength and 6MWT test results were higher than those of the control group ($p < 0.05$, Table 6).

DISCUSSION

In the present study, we found that Xiao chaihu Tang combined with acupuncture and moxibustion can effectively improve the immune function of LC patients and enhance their nutritional status, which provides a new direction for the future rehabilitation treatment of LC.

In this study, we first observed the effect of Xiao chaihu Tang combined with acupuncture and moxibustion on CRF in LC patients. Xiao chaihu Tang combined with acupuncture and moxibustion were found to contribute to significantly reduced CRF scores in the experimental group. In contrast, the CRF score of the control group remained unchanged and was higher than that of the experimental group. It suggests that Xiao chaihu Tang combined with acupuncture and moxibustion have a positive effect on relieving postoperative CRF in LC patients. CRF has been indicated to be the most prominent complication of LC, mainly manifested as nonspecific fatigue, lethargy, debilitation and morbus asthenicus, which lasts for a long time and cannot be alleviated even with rest, leaving patients in a state of chronic energy exhaustion and seriously affecting their physical and mental health and quality of life.¹⁵ Without

Table 1: Comparison of CRF alleviation.

		Control group (n=47)	Experimental group (n=47)	t	p
Physical fatigue score	Before treatment	10.66±1.09	10.09±1.36	2.042	0.094
	After treatment	10.85±0.88	6.53±1.16 [#]	20.340	<0.001
Emotional fatigue score	Before treatment	8.30±0.66	8.06±0.67	1.749	0.084
	After treatment	8.04±0.62	6.13±0.61 [#]	15.050	<0.001
Cognitive fatigue score	Before treatment	7.21±0.78	7.28±0.68	0.464	0.644
	After treatment	7.06±0.70	6.02±0.77 [#]	6.852	<0.001

Note: # denote $p < 0.05$ compared to before treatment.

Table 2: Comparison of immune function improvement.

		Control group (n=47)	Experimental group (n=47)	t	p
CD3 ⁺ (%)	Before treatment	33.83±3.92	32.80±3.10	1.413	0.161
	After treatment	28.99±3.95	32.97±3.90 [#]	4.916	<0.001
CD4 ⁺ (%)	Before treatment	35.38±5.61	35.28±5.26	0.089	0.929
	After treatment	31.18±4.61	35.71±4.77 [#]	4.682	<0.001
CD8 ⁺ (%)	Before treatment	24.57±2.97	24.09±3.08	0.769	0.444
	After treatment	29.75±3.08	24.02±2.93 [#]	8.187	<0.001

Note: # denote $p < 0.05$ compared to before treatment.

Table 3: Comparison of Alleviation in myelosuppression.

		Control group (n=47)	Experimental group (n=47)	t	p
WBC ($\times 10^9/L$)	Before treatment	2.12±0.45	2.05±0.43	0.771	0.443
	After treatment	4.09±1.37 [#]	5.03±1.22 [#]	3.513	<0.001
NEU ($\times 10^9/L$)	Before treatment	1.96±0.41	2.05±0.44	1.026	0.308
	After treatment	2.66±1.00 [#]	3.16±0.85 [#]	2.612	0.011
PLT ($\times 10^9/L$)	Before treatment	159.30±20.74	158.67±24.19	0.136	0.893
	After treatment	168.70±19.12 [#]	177.09±23.24 [#]	1.987	0.043

Note: # denote $p < 0.05$ compared to before treatment.

Table 4: Comparison of nutritional status improvement.

		Control group (n=47)	Experimental group (n=47)	t	p
ALB (g/L)	Before treatment	36.68±3.96	36.99±3.94	0.380	0.705
	After treatment	30.57±3.47 [#]	34.04±3.26 [#]	4.997	<0.001
TRF (g/L)	Before treatment	3.36±0.46	3.51±0.51	1.497	0.138
	After treatment	2.90±0.49 [#]	3.20±0.45 [#]	3.091	0.003
PA (mg/L)	Before treatment	284.87±24.97	285.73±25.54	0.165	0.869
	After treatment	265.66±25.38 [#]	275.05±23.04 [#]	1.978	0.043
TP (g/L)	Before treatment	54.40±3.81	55.13±5.65	0.734	0.465
	After treatment	46.86±4.15 [#]	51.34±4.86 [#]	4.806	<0.001

Note: # denote $p < 0.05$ compared to before treatment.

Table 5: Comparison of nutrition reduction grades.

Group	n	Normalcy	Mildly reduced	Moderately reduced	Severely reduced
Control group	47	4 (8.51%)	22 (46.81%)	11 (23.40%)	10 (21.28%)
Experimental group	47	12 (25.53%)	25 (53.19%)	7 (14.89%)	3 (6.38%)
²		4.821	0.383	1.099	4.374
P		0.028	0.536	0.294	0.037

Table 6: Comparison of physical fitness.

Group	n	Grip strength of left hand (kg)	Grip strength of right hand (kg)	6WMT (m)
Control group	47	37.79±4.93	38.45±4.76	332.74±34.19
Experimental group	47	40.95±4.43	41.32±4.89	358.51±26.47
t		3.272	2.880	4.085
p		0.002	0.005	<0.001

an effective treatment at present, CRF can only be relieved by clinical interventions, such as proper diet, appropriate exercise and psychological counseling. At the same time, for patients with advanced non-small cell LC with no hope of cure, the control of pain and discomfort symptoms, the maintenance of self-dignity and the improvement of quality of life are more active than the treatment-oriented intervention.¹⁶ From a TCM perspective, CRF itself is not an independent disease but can occur in the process of many diseases.¹⁷ In ancient Chinese medicine literature, there is no Chinese medicine disease name corresponding to CRF. However, there are some records in ancient Chinese medicine books about the clinical manifestations of cancer, similar to the clinical manifestations of CRF referred to in modern times, that is, a general term for various chronic weakness syndromes, characterized by Zang-fu deficits, deficiency of Qi, blood, Yin and Yang and prolonged deficiency without recovery, with the main clinical manifestations being the deficiency of the five organs.¹⁸ Sanjiao acupuncture and moxibustion is another term for the "tonifying Qi and regulating blood, supporting the foundation and nurturing the essence" acupuncture method, with Danzhong, Qihai, Xuehai, Zusanli, Zhongwan and Waiguan being the acupoints selected.¹⁹ TCM treats different diseases with the same therapy through syndrome differentiation. It adopts the methods of invigorating Qi and activating blood, strengthening the spleen and harmonizing the stomach, soothing the liver and regulating Qi, calming the adverse-rising energy and controlling vomiting, activating blood circulation and removing blood stasis, detoxifying and resisting cancer, etc., and flexibly adds and subtracts drugs, which can better alleviate patients' symptoms and improve their quality of life.²⁰ Acupuncture and moxibustion can better mitigate fatigue symptoms, improve quality of life and enhance immunity, making it possible for patients to receive more aggressive therapies.²¹ Sanjiao acupuncture and moxibustion are effective in tonifying the heart and lungs (upper energizer), spleen and stomach (middle energizer) and liver and kidneys (lower

energizer) through Danzhong, Zhongwan and Qihai acupoints and can cooperate with Zusanli acupoint to nurture the nature. Moxibustion on the above acupoints can achieve the functions of invigorating Qi and blood, improving immunity, consolidating the foundation and nurturing vitality. Acupuncture and moxibustion at Waiguan and Xuehai can regulate the function of Qi and blood and acupuncture and moxibustion at Taichong can dredge the liver Qi.²² This is also confirmed by the lower CD3⁺ and CD4⁺ and higher CD8⁺ in the experimental group when we compared the T lymphocyte subsets between the two groups. In actual clinical practice, the main manifestations were reduced toxic and side effects of chemotherapy in the experimental group, alleviated myelosuppression and increased WBC, NEU and PLT. Improvement of immune function and nutritional status not only more conducive to chemotherapy, but also better improve the patient's tolerance and compliance to chemotherapy, providing a more reliable guarantee for patient prognosis.

Furthermore, in the comparison of nutritional status, we can also see a more significant improvement in nutritional protein indexes and a lower risk level of malnutrition in the experimental group after treatment, which also suggests that TCM acupuncture and moxibustion are more conducive to promoting the recovery of nutritional status in post-surgical LC patients. In the course of chemotherapy, chemotherapy drugs not only kill cancer cells but also damage normal cells, leading to a decrease in white blood cells and a weakened body.²³ Moreover, chemotherapy can also inhibit bone marrow hematopoiesis, predisposing patients to anemia.²⁴ Acupuncture and moxibustion therapy, on the other hand, has the following advantages: By stimulating specific acupoints, it regulates Qi and blood circulation in the body and promotes muscle contraction and relaxation. Through reasonable acupoint selection and acupuncture techniques, acupuncture and moxibustion can enhance muscle strength and improve muscle contractility and explosive force, while improving Qi and blood

circulation and promoting the absorption and transportation of nutrients. In addition, it modulates the Qi-blood balance by stimulating the corresponding acupoints and meridians. These improvements are helpful in improving the recovery and stability of patients' nutritional function, reducing the risk of malnutrition and ensuring the prognosis and health of patients. Zhao Q *et al.*, also reported enhanced nutritional status after hysterectomy by TCM acupuncture and moxibustion,²⁵ which can also support the findings of this paper.

On the other hand, the results of the experimental group were better than those of the control group and we believe that this is also closely related to Xiao Chaihu Tang, which was originally derived from *Shang Han Lun* and then has become an extremely common Chinese herbal tonic in clinical practice through the continuous improvement and practice of modern medical practitioners.²⁶ In modern pharmacological experiments, researchers have found that Chaihu has the ability to regulate the hypothalamic-pituitary-adrenocortical endocrine axis and thus inhibit the inflammatory response.²⁷ Moreover, many kinds of Chaihu polysaccharides contained in Chaihu can significantly improve the function of humoral and cellular immunity, improve the function of lymphoid T cells and restore the damaged immune function.¹⁹ Therefore, Xiao Chaihu Tang is also commonly used as an adjuvant treatment for various types of immune dysfunction. Not only that, the crude saponin of Chaihu contained in Chaihu has a strong antitussive effect, but also promotes the secretion of bronchial mucosa, which helps the recovery of respiratory and lung diseases.²⁸ As for the nutritional status, Chaihuoside can act as an inhibitor on the cholesterol biosynthesis pathway, lowering cholesterol and promoting the role of nutrient absorption,²⁹ which also helps to improve the postoperative nutritional status of the organism in LC patients and lays a more reliable foundation for the prognostic recovery of the patients. Similarly, in a previous study by Bo *et al.*, they also confirmed that Xiaochaihu Tang could improve the nutritional status of chronic hepatitis B patients,³⁰ which can also support the results of this study.

Finally, the results of physical fitness comparison between the two groups of patients were also realistic that the experimental group's grip strength and 6WMT were higher than those of the control group after treatment, which again verified that Xiao Chaihu Tang combined with acupuncture and moxibustion had a better effect on the improvement of the physical health of the LC patients, which was presumed to be due to the fact that Xiao Chaihu Tang combined with acupuncture and moxibustion had a better effect on the immune function, inflammatory response and nutritional status of the patients. These findings may provide a better and more reliable guarantee for the treatment of LC patients in the future.

The small number of cases in this study and the short follow-up time may lead to contingency of research results. In addition, since there is currently no unified acupuncture and moxibustion

guideline for LC, there may be room for optimization and improvement in the selection of acupuncture points and the time of needle retention. Later, we will conduct a more comprehensive and in-depth analysis and discussion to address the above limitations.

CONCLUSION

Xiao Chaihu Tang combined with acupuncture and moxibustion can effectively relieve postoperative CRF and enhance immunity in LC patients, reduce chemotherapy-induced myelosuppression and improve nutritional status, which is expected to be popularized in future treatment of LC to provide a more reliable prognosis guarantee for patients.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ABBREVIATIONS

6MWT: 6-Minute walk test; **ALB:** Albumin; **LC:** Lung carcinoma; **CRF:** Cancer-Related Fatigue; **NRS 2002:** Nutrition Risk Screening; **PA:** Prealbumin; **TP:** Total protein; **TCM:** Traditional Chinese medicine; **TRF:** Transferrin; **TNM:** Tumor-nodes-metastasis; **WBC:** White Blood Cells; **NEU:** Neutrophils; **PLT:** Platelets.

CONTRIBUTION OF AUTHORS

Changle Chen conceived and designed the study, Yan Wang wrote and revised the manuscript, Changle Chen and Yan Wang collected and analyzed data, and All authors read and approved the final submitted manuscript.

ETHICAL STATEMENTS

The study involving human subjects complied with the Declaration of Helsinki and was approved by the ethical committee of the School of Health Science and Engineering, University of Shanghai for Science and Technology (KL00154) and all participants provided written informed consent.

SUMMARY

Lung Carcinoma (LC) is still one of the malignant neoplastic diseases with the fastest-growing morbidity and mortality worldwide. How to provide more reliable postoperative rehabilitation for patients largely determines patient outcomes. Xiao Chaihu combined with acupuncture and moxibustion, as a characteristic treatment scheme in traditional Chinese medicine,

have high safety and strong pertinence, which may have positive significance for the postoperative rehabilitation of LC patients. Therefore, this study observes the influence of traditional Chinese medicine acupuncture and moxibustion on nutritional status in post-surgical LC patients. The results of the study showed that Xiao chaihu Tang combined with Sanjiao acupuncture and moxibustion could effectively improve immune function in lung cancer patients undergoing postoperative chemotherapy, as well as improve their nutritional status and reduce the risk of malnutrition.

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