

## Traditional Chinese Medicine on COVID-19 Treatment

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### Traditional Chinese medicine about treating COVID-19

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#### SUMMARY

The article presents a differentiated approach to the use of acupuncture and moxibustion techniques in patients with COVID-19 at each stage of the disease. A combination of acupuncture with Chinese traditional pharmacotherapy is presented, taking into account the combined effect of acupuncture and moxibustion. It has been shown that the effect of acupuncture and moxibustion is maximal, which significantly inhibits the spread of infection. In regions where traditional Chinese medicine was widely used, recovery was faster, the frequency of positive treatment results increased, and the number of severe cases decreased.

Keywords: COVID-19, traditional chinese medicine, reflexology, acupuncture, moxibustion.

#### RESUME

The article presents a differentiated approach to the application of acupuncture and moxibustion techniques in patients with COVID-19 at each stage of the disease. A combination of acupuncture with Chinese traditional pharmacotherapy is given, taking into account the combined effect of acupuncture and moxibustion. It is shown that the effect of acupuncture and moxibustion is maximum, which significantly inhibits the spread of infection. In regions where traditional Chinese medicine methods were widely used, recovery came faster, the frequency of positive results from treatment increased, and the number of severe cases decreased.

Keywords: COVID-19, traditional Chinese medicine, reflexology, acupuncture, moxibustion.

#### INTRODUCTION

Traditional Chinese medicine clinically categorizes COVID-19 as an epidemic febrile disease (Wen Bing 温病) [12]. Modern concepts of viral infection explain a combination of the effects of Pathogenic heat (Wen Xie 温邪 wind-heat, heat-heat, dampness-heat, dryness-heat, latent cold-heat) and disease-causing "miasm". According to Wu You-ke's Treatise on Epidemic Febrile Diseases (1582-1652), "Febrile illness is not windy, cold, warm, or

wet; these are different feelings between heaven and earth ", the cause of this disease is different from the other six exogenous factors and has the characteristics of a strong and infectious epidemic virus [3].

Over the centuries of the existence of traditional Chinese medicine, a whole range of therapeutic measures has been formed, prescribed for the treatment of febrile diseases. This complex includes pharmacotherapy, acupuncture, moxibustion, vacuum therapy (cupping), acupressure (acupressure), traditional health systems and massage [4, 5].

The first experience of mass application of TCM methods in the treatment of pneumonia, Chinese health care received in 2003, when mankind was faced with SARS. In a situation where there was still no clear understanding of what medicine was faced with, there was not enough information about the pathogen, in conditions of time pressure, - traditional medicine came to the aid of modern doctors [4, 6].

Following an analysis of the 2003 SARS outbreak, guidelines were developed for traditional medical practitioners on the principles of pharmacotherapy, acupuncture and moxibustion for the treatment and rehabilitation of patients with severe acute respiratory syndrome. These recommendations are based on centuries of experience and achievements of modern medicine [7, 8].

The basic principles of therapy in this case are reduced to the elimination of the damaging effect of the pathogenic principle on the lungs, the elimination of disturbances in the circulation of vital energy (which lead to disruption of the functions of other organs and systems). In modern terms, it is necessary to deal with venous-interstitial-lymphatic stagnation and stagnant ischemic processes in the lungs themselves and other parenchymal organs. This is achieved by acting on the points of the meridians corresponding to the affected organs; points affecting the tone of the sympathetic and parasympathetic divisions of the ANS, etc. It should be emphasized that in the absence of contraindications, treatment is recommended to start from the moment the patient enters the hospital, ie. in the acute phase of the disease (TCM methods do not conflict with modern methods of drug treatment,

At the stage of convalescence within the framework of rehabilitation measures, acupuncture and moxibustion contribute to the early restoration of impaired functions by activating metabolic processes (activation of qi and blood) in the lungs (fight against pulmonary fibrosis) and other organs, normalizing the tone of the ANS, and normalizing the patient's psycho-emotional state. In addition to zhen-jiu therapy, the use of TCM pharmacotherapy, vacuum-gradient therapy (vacuum cupping), acupressure, and auriculoreflexotherapy is very effective [4, 9, 10].

The scientific and practical work carried out made it possible to use these methods in the complex treatment and rehabilitation of patients with coronavirus pneumonia [1, 4, 6, 11].

## RESULTS AND DISCUSSION

In February 2020, a group of 25 international and Chinese experts

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A joint WHO-China mission visited Beijing, Hubei, Guangdong and Sichuan provinces to assess the epidemiological situation associated with the disease caused by the COVID-19 virus. In its report, the WHO-China Joint Mission confirmed that China has played a pivotal role in protecting the international community, gaining valuable time for proactive prevention and control measures and providing valuable experience to other nations [12, 13]. As the country with the greatest knowledge of COVID-19, the report says China should continue to expand the systematic exchange of epidemiological data, clinical findings and experiences to shape the global response to the pandemic. Experts drew attention to the fact that Chinese doctors are widely using traditional Chinese medicine (TCM) methods in the treatment of patients with COVID-19, as reflected in the "COVID-19 Diagnostic and Treatment Plan" (preliminary seventh edition) issued by the National Health Commission (NHC) People's Republic of China and the State Administration of Traditional Chinese Medicine (SATCM) of the People's Republic of China. Following this, the Chinese Association of Acupuncture and Moxibustion (CAAM), on behalf of the government, issued TCM Treatment Guidelines for COVID-19 [10].

The guide is divided into three sections:

- principles of treatment (strict adherence to the epidemiological regime, a combination of Western and traditional medicines, the use of TCM methods at all stages of treatment);
- methods of treatment (all methods are used in the absence of contraindications for this patient - acupuncture, acupressure, moxibustion, vacuum therapy, massage, etc.);
- self-treatment of patients under the supervision of a doctor (self-massage, breathing exercises, physical exercises).

When treating COVID-19 patients, it is recommended to combine Western medicines with traditional herbal decoctions and acupuncture. Upon reaching the stage of recovery, BMT methods should be given the main role in rehabilitation. Along with specialized medical institutions, it is recommended to create rehabilitation clinics for patients who have undergone COVID-19, based on the treatment using TCM methods and health-improving techniques (Tai Chi, Qigong, etc.)

The National Health Commission of the People's Republic of China, together with the State Administration of Traditional Chinese Medicine, has released the "Guidelines for the Diagnosis and Treatment of Coronavirus Disease 2019", which identifies three stages of patient treatment (monitoring a potentially sick person, treatment, rehabilitation). For each stage, treatment regimens with TCM methods are described. The following are approximate treatment regimens by stages.

#### 1. Application of acupuncture and moxibustion at the stage of medical supervision (laboratory unconfirmed cases)

Purpose: to activate the protective and Qi of the body and the functions of the lungs and spleen, to weaken the disease-causing factors (separation, excretion and dispersion of pathogenic heat), to strengthen the protective abilities of internal organs, to eliminate

stagnation of blood and release of collaterals.

#### Key points

Particular attention is paid to the Triple Heater and Bladder Meridians (dissipate and dissolve dampness, eliminate blood stasis and release collaterals) Tai-yuan (MC 6), Wei-chzhong V38 (52), Fu-si V40 (54).

Group 1: Feng-men (V12), Fei-shu (V13) and P-shu (V20). Group 2: He-gu (GI4), Qu-chi (GI11), Chi-chie (P5) and Yu-chi (P10).

Group 3: Chi-hai (VC6), Tszu-san-li (E36) and San-ying-jiao (RP6). One or two points from each group are selected for one procedure.

#### Symptomatic points

For fever, dry throat and dry cough, add Da-jui (VG14), Tien-tu (VC22) and Kun-tsui (P6). For nausea, vomiting, loose stools, swollen tongue with a sticky coating and sluggish pulse, add Zhong-wan (VC12), Tien-shu (E25) and Feng-lun (E40). In asthenia and anorexia, VC12 and four points around the navel are added (1 tsun in both directions, directly above and below the center of the navel), V20. For rhinorrhea, soreness in the shoulders and back, pallor of the tongue with a white coating and a slow pulse, Tien Chu (V10), V12 and VG14 are added.

Pharmacotherapy at the Shangjiao level is aimed at cleansing the moist heat, including separating and dissipating the moist heat, and excreting the Qi of the lung. Also, therapy is aimed at strengthening the protective energy of Wei, activating the movement of Qi, eliminating blood stasis, and cleansing collaterals. For this purpose, Huopu Xialing and Sanren decoction is used. The combination of these agents strengthens the Qi of the Triple Heater, dissipates and dissolves dampness, removes blood stasis and cleanses collaterals. For asthenia and dysfunction of the gastrointestinal tract, Huoxiang Zhengqi is recommended. Clinical manifestations of asthenia in combination with fever are relieved by the following remedies Jinhua Qinggan, Lianhua Qingwen, Shufeng Jiedu, Fangfeng Tongsheng.

#### 2. Application of acupuncture and moxibustion at the stage of clinical treatment (confirmed cases)

Purpose: to activate the movement of the protective Qi of the lungs and spleen, protect internal organs, reduce damage, eliminate epidemic pathogens (cleansing Yin, eliminating dampness and heat of the lungs), “nourishing the earth” (spleen) to “stimulate the metal” (lungs), cooling the blood, block the progression of disease, dampen emotions, and build confidence in fighting pathogens.

The focus is on the relationship of Qi and Yin, the fixation of Qi and essence in the patient's body.

#### Key points

Group 1: GI4, Tai Chun (F3), VC22, P5, P6, E36 and RP6. Group 2: Da-chu (V11), V12, V13, Xin-shu (V15) and Ge-shu (V17).

Group 3: Chung-fu (P1), Tan-chung (VC17), VC6, Guan-yuan (VC4) and VC12. V

For mild cases or moderate severity, 2-3 points from group 1 and group 2 are selected per session. In severe cases, it is necessary to use 2 or 3 points from group 3.

### Symptomatic points

In case of persistent fever, VG14 and GI11 or phlebotomy from the Shi-xuan points (EX-UE11) and at the Er-jian points (HX6) are added.

With a feeling of compression in the chest and shortness of breath, Nei-guan (MC6) and Le-que (P7) or Ju-chue (VC14), Qi-men (F14) and Zhao-hai (R6) are added.

For coughing up sputum, add P7, E40 and Dìngchuǎn (EX-B1). For diarrhea and loose stools: add E25 and Shang-tsu-xu (E37).

For cough with yellow and sticky phlegm and constipation: VC22, Ji-guo (TR6), E25 and E40 are added.

Pharmacotherapy at this stage is used depending on the stage of the clinical course and the leading syndrome. The following syndromes are distinguished: stagnation of toxin-heat in the lungs, syndrome of stagnation and retention of cold and dampness in the lungs, intoxication and Qi deficiency of the lungs, persistent fever in the Ying and Qi systems, dampness and stagnation of the lungs, heat syndrome at the level of Qifen and Yingfen. Common remedies are Jiedu Huoxue infusion in a combination of Shengjiang Powder, Shenfu Sini infusion, and three pearls (Angong Niu Huang Pill, Zhibao Dan, and Zixue Dan pills) or Suhe Xiang pills. In severe cases of internal blockage syndrome causing collapse, Xuebijing, Reduning, Tanreqing, Xingnaojing, Shenfu, Shengmai, Shenmai injections are recommended.

### 3. Application of acupuncture and moxibustion during the recovery stage

Purpose: to cleanse residual toxins, restore primary qi, promote internal organ recovery, and restore lung and spleen function.

Key points: PC6, E36, VC12, E25 and VC6

With a Qi deficiency in the lungs and spleen, the main symptoms are shortness of breath, fatigue, anorexia, nausea, vomiting, a feeling of fullness in the epigastric region, weak bowel movements, loose stools, decreased bowel motility, a pale and swollen tongue with a white and sticky coating. For cases with severe symptoms of the pulmonary system, such as chest tightness and shortness of breath, add VC17, V13, P1. For cases with severe symptoms of spleen and stomach dysfunction, such as poor appetite and diarrhea, Shang-wan (VC13) and Yin-ling-chuan (RP9) are added.

With Qi and Yin deficiencies, the main symptoms are fatigue, dry mouth, thirst, palpitations, profuse sweating, poor appetite, low-grade or normal temperature, dry cough with little phlegm, dry tongue and lack of moisture, rapid or weak pulse of a deficient type. For severe fatigue and shortness of breath, the VC17 and Shen-chue (VC8) points are used. For severe dry mouth and thirst, add Tai-si (R3) and Yang-chi (TR4). In the case of a pronounced heartbeat, V15 and Jue-yin-shu (V14) are added. With profuse sweating, influence on GI4, Fu-lu (R7)

and E36. For cases of insomnia, Shen-Men (C7), Yin-Tang (EX-HN3), Ming-Mian (EX-HN22) and Yong-Chuan (R1) are added.

With lung and spleen insufficiency, sputum congestion and blockage of collaterals, the main symptoms are chest tightness, shortness of breath, unwillingness to talk, fatigue, sweating during exercise, coughing up phlegm, difficult coughing, rough skin, mental fatigue, loss of appetite, etc. affect points V13, V20, V15, V17, V23, P1 and VC17. For difficult coughing, add points E40 and EX-B1.

In the recovery period, asthenia prevails with deficient changes that require individual differentiation of the syndrome and treatment. The main syndromes are Qi emptiness of the lungs and spleen, and Yin and Qi deficiency. Some studies have highlighted that Wuye Lugen Xue decoction pharmacotherapy can be used as a reference to cleanse residual toxin and improve lung circulation, activate the spleen, and strengthen healthy qi.

COVID-19 is a serious epidemic disease, TCM and acupuncture-moxibustion have not been accepted as the first treatment options. In addition to the limited understanding of their effectiveness, another key reason is that the physician must be in very close contact with the patient during treatment, which greatly increases the risk of infection of the medical staff.

Particular attention in the Guide is paid to cauterization as an effective method of dealing with pathogenic factors, with wind and cold syndromes, phenomena of stagnation of vital energy in collaterals (all factors leading to a decrease in VC). In addition to specific methods of influence, the important role of health-improving methods is emphasized: massage (which the patient performs independently or under the remote guidance of a specialist), breathing exercises (Qigong), physical exercises (exercise therapy, tai-tzu).

The authors believe that gentle moxibustion using a cigar holder is not recommended for moxibustion treatment. A cauterization device with a smoke removal function should be provided to avoid irritation of the patient's respiratory tract mucosa. But moxibustion can be useful for home care. Academic consensus has yet to be reached on the effectiveness of wormwood smoke. But, referring to the records of ancient medical works and the now popular method of moxibustion, wormwood smoke is used to prevent infectious diseases. For example, in

Zhōuhòu Bèijífāng (《肘后备急方》 Extraordinary formulas to keep yourself in hands)) written by Hong Ge, in the Jin Dynasty (317 - 420 AD) it is recorded that fumigating with wormwood around the patient's bed, one moxa cone on each side of the bed, is optimal for preventing epidemic infection. Medical practitioners in subsequent generations have inherited this idea. The same prevention method is also recorded in the Tàipíng Shèngguàifāng (《太平圣惠》) and Pǔjífāng (《普济方》 formulas for general relief). it moxibustion intervention is the earliest recorded air decontamination measure in history. Modern research shows that moxa smoke has antibacterial, antifungal, antiviral

activity. Therefore, based on individual sensitivity, the correct use of moxa indoors brings a certain disinfection effect. In the Guide, the duration of moxibustion in each case is 10 to 15 minutes. But in clinical practice, moxibustion is rarely applied consistently to acupuncture points. Instead, a special device in the form of a stand is used, which allows you to act on several points at the same time. The duration of the procedure, as a rule, is more than 30 minutes, and it should be increased if a positive reaction from the patient appears. Thus, the authors believe that the duration of the moxibustion intervention should be longer to achieve the best effect if the patient is in a comfortable posture and has strong endurance.

The third section of the Guide discusses the self-directed use of acupuncture and moxibustion at home under the guidance of a physician.

Moxibustion therapy: moxibustion is applied by the patient himself at E36, PC6, GI4, VC6, VC4, RP6, etc., about 10 minutes per point. Application therapy: patch, such as warming, is used in E36, PC6, VC6, VC4, V13, V12, V20, GV14, etc.

Various methods of tuina are used, affecting acupuncture points on the meridians of the lungs, heart, spleen, stomach, mainly on the arms and legs. The main methods of tuina are: finger pressing method, kneading method, pressing method, tapping method. Each manipulation is carried out for 15–20 minutes until pain and redness are felt.

Traditional health systems can be applied at all stages of the disease in accordance with the individual conditions of recovery. Recommended: Yijinjing (exercise to strengthen muscles and tendons, Wu-Xing, Taijiquan, Baduanjin (eight exercises), Wuqinxi (movements of five animals), etc.

#### Preventive measures for different groups of people

##### 1. Contact.

Therapy principles: strengthening Qi, removing heat and toxin.

2. Children under 14 years old. Therapy principles: activation of qi and accumulation, elimination of heat and toxin.

##### 3. Adults with chronic diseases at risk. Factors:

3.1. High blood sugar. Therapy principles: remove heat, promote fluid retention in the body, as well as enrich yin and consolidate excess.

3.2. High blood pressure. Therapy principles: remove heat and nourish yin, calm the liver and fix excess.

##### 3.3. Coronary artery disease and cardiovascular disease.

Therapy principles: remove heat, eliminate toxins in the blood and improve blood circulation to eliminate blood stasis.

4. Pregnant women. Therapy principles: nourishing yin and removing heat, regulating the flow of qi to calm the fetus, strengthening and nourishing qi.

5. Adults, non-contact. Therapy principles: Yin and Wei regulation,

strengthening Qi to consolidate deficits, strengthening Qi and nourishing Yin, strengthening healthy Qi, removing heat and toxins, and eliminating dampness and external factors, including correcting climatic influences.

The presented basic health care methods in TCM play a crucial role in reducing the incidence of COVID-19 and fully embody the idea of "disease prevention": preventing disease before suffering, preventing disease progression after suffering and preventing relapse after healing.

## CONCLUSION

The recommended regimens in the Guide are based on ancient literature and current clinical and experimental research on the effects of acupuncture and moxibustion. The guidelines are consistent with the treatment steps outlined in the 2019 Coronavirus Disease Diagnosis and Treatment Guidelines (Preliminary Seventh Edition) issued by the National Health Commission of the People's Republic of China (NHC), and are specifically tailored to specific acupuncture and moxibustion techniques. The implementation of various therapeutic methods follows the principle of "be convenient, safe and effective". The manual defines a differentiated approach to the application of acupuncture and moxibustion techniques at each stage of the disease, indicates the combination of acupuncture with Western drugs and Chinese traditional pharmacotherapy, takes into account the cumulative effect of acupuncture and moxibustion and believes that during the recovery stage in COVID-19, the effect of acupuncture and moxibustion is maximum, which significantly inhibits the spread of infection. In regions where TCM treatment methods were widely used, the recovery rate was increased, the number of severe cases decreased.

As we gain more information about COVID-19 and experience in treatment, we gain a deeper understanding of the disease. The experience of China in combating COVID-19 with BMT methods has shown its effectiveness and uniqueness and is supported by the WHO. Thus, Western medicine protocols combined with BMT methods are recognized and effective in the treatment and prevention of COVID-19.

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