

New Article on coronavirus infection

Herbal Prescription for COVID-19

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Notes: Dear patients : we supply the remote diagnosis through Wechat , em-mails, and phone ; and then send the herbal medicines to your address by special delivery in the UK, ups ,DHL to the European countries.

Abstract: The clinical studies from China have proved that the use of herbal medicine has played a significant role in the prevention and treatment of COVID-19. However in the UK it has not accepted in NHS hospitals. This article aims to introduce the six most effective herbal prescriptions in Traditional Chinese Medicine (TCM) for treating the coronavirus (COVID-19), each formula has been described in detail including the name , source ,indication ,ingredients (Chinese Pinyin , English and Latin names),usage and discussion ,etc . The first chief formula introduced in this article is the most popular prescription published by The National Health Commission of People's Republic of China on 3/3 2020 for the treatment and prevention of coronavirus infection and pneumonia; and subsequent formulas are the modified classical herbal prescriptions and my experienced herbal formula I often use in the UK.

Introduction

The coronavirus (COVID-19) is highly contagious with a characteristic tendency to severely affect the respiratory tract and the lung in certain individuals .TCM classifies COVID-19 as an epidemic disease termed 'Wen Yi' and considers both external and internal factors contributing to pathogenesis and development of the disease. The external factor is that the pathogen (COVID-19) invasion of the body while the internal factor is that in same case the immunity system is too weak to fight the coronavirus infection hence the higher fatality rates amongst the medically vulnerable and elderly .The clinical studies in China have showed that some herbal medicines have a direct antiviral effect, while some herbs can improve the body's immune function.The clinical reports from Chinese hospitals have proved that traditional Chinese medicine has played a significant role in the prevention and treatment of coronavirus infection . The data released by the State Council Joint Prevention and Control Mechanism Press Conference held on February 17, 2020 showed that there were 60,107 confirmed cases of coronavirus pneumonia treated by Chinese herbal medicine in the country including mild ,moderate,severe, critical conditions . The most of the patients had good results.

This article may provide a new idea to the British medical and pharmaceutical communities to understand the method of herbal formulas, and then they could carry on further laboratory research through modern pharmacological experimental studies to reveal the effective ingredient and mechanism of action, so that in the future herbal medicine will become a complementary therapy for the patients infected by COVID -19 in the UK. This is why I choose to write this article.

Key words: COVID-19, herbal formulas ,ingredients , indications,usage,discussion.

Methods : Here is a detailed information on the anti-coronavirus herbal formulas.The first chief formula introduced below is the most popular prescription published by The National Health Commission of People’s Republic of China on 3/3 2020 for the treatment and prevention of coronavirus infection and pneumonia; and other formulas are the modified classical herbal prescriptions and experienced formula I use in the UK. Now I will introduce the name ,source , indication ,ingredients (including Chinese Pinyin , English and Latin names),usage and discussion of each herbal formula as following:

1. The chief herbal prescription from China :

“ Qing Fei Pai Du Tang” (the Lung-clearing & Detox Decoction)

Indications : Applicable to patients with mild, moderate and severe coronavirus infection symptoms and pneumonia.

Source : [Diagnosis and Treatment Protocol for COVID](Trial Version 7),The National Health Commission of People Republic of China .①

The ingredients :9 grams of Mahuang (Ephedra / Herba Ephedra), 6 grams of Zhi Gancao (Prepared Licorice Root/Radix Glycyrrhizae Praeparata) 9 grams of Xingren (Better Apricot Kernel /Semen Armeniacae Amarum) , 15-30 grams of Sheng Shigao (Raw Gypsum/Gypsum Fibrosum) , to be boiled earlier than other herbs , 9 grams of Guizhi (Cinnamon Twigs/Ramulus Cinnamomi) , 9 grams of Zexie (Oriental Water Plantain Rhizome/Rhizoma Alismatis) , 9 grams of Zhuling (Umbrella Pore-fungus/ Polyporus) , 9 grams of Baizhu (White Atractylodes Rhizome/Rhizoma Atractylodis Macrocephalae) , 15 grams of Fuling (Poria/Poria) , 16 grams of Chaihu (Bupleurum Root/Radix Bupleuri) , 6 grams of Huangqin (Scutellaria Root/Radix Scutellariae) , 9 grams of Jiang Banxia (Pinellia Tube prepared with ginger/Rhizoma Pinelliae) ,9 grams of Shengjiang (Fresh Ginger/ Rhizoma Zingiberis Recens), 9 grams of Zhiwan (Aster Root / Radix Asteris) , 9 grams of Kuandonghua (Coltsfoot Flower / Flos Farfarae) , 9 grams of Shegan (Belamcanda Rhizome / Rhizoma Belamcandae) , 6 grams of Xixin (Asarum Herb/ Herba Asari), 12 grams of Shanyao (Chinese Yam/ Rhizoma Dioscoreae) , 6 grams of Zhishi (Immature Bitter Orange /Fructus Aurantii Immaturus) , 6 grams of Chenpi (Tangerine Peel/Pericarpium Citri Reticulatae) , 9 grams of Huoxiang (Agastache / Herba Agastachis) .

Usage: In China, the decoction (herbal tea) is mostly acceptable : all the above herbs are to be boiled in water in a casserole about 20-30 minutes for oral use . In the UK, we mainly use concentrated granules. Each herb is 1 gram per day. Mix and dissolve all ingredients in the formula in a glass of boiling water. Take half a dose in the morning and half a dose in the evening.

For children aged 6 to12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

Usually, the symptoms are obviously relieved after taking the above formula for 3-5 days, and the symptoms disappear after two weeks. In some serious cases, it takes about 3 to 4 weeks of continuous herbal treatment to fully recover, but the formula will need to be modified according to the patient's condition at the time.

Discussion : This formula is actually a combination of four herbal formulas including “ **Ma Xing Shi Gan Tang** ” (Decoction of Ephedra, Apricot Kernel, Gypsum and Licorice) ②, “**Shegan Ma Huang Tang** ” (Belamcanda and Ephedra Decoction) ③,

“ **Xiao Chai Hu Tang** ” (Minor Decoction of Bupleurum) ④and “ **Wuling San** ” (Powder of Five Ingredients including Poria) ⑤ from a famous Dr Zhang Zhongjing’s book [On

Febrile and Miscellaneous Diseases] in the Eastern Han dynasty. Clinical observations in 10 provinces of China confirm that the formula has demonstrated effective clinical result. However, the amount of Mahuang (Ephedra / Herba Ephedra) in this prescription is 9 grams, which exceeds the British Herbal Administration's regulations that the amount of Mahuang (Ephedra / Herba Ephedra) should not exceed 600 mg each time. According to my research, the Ephedrine contained in Mahuang (Ephedra / Herba Ephedra) stimulates the sympathetic nerves and cerebral cortex, which can cause faster heart rate, high blood pressure, irritability, and even insomnia. The amount should be controlled in 3-6 grams for raw herb or 0.3-0.5grams in concentrated herbal granules ; or replaced with other herbs, such as Suye (Perilla Leaf/ Folium Perillae) , Jingjie (Schizonepeta/Herba Schizonepetae), Qianghuo (Notopterygium/ Rhizoma seu Radix Notopterygii) , and so on.

My second concern is: the formula contains the ingredients of ‘**Wuling San**’, including 9 grams of Guizhi (Cinnamon Twigs/ Ramulus Cinnamomi), 9 grams of Zexie(Oriental Water Plantain Rhizome / Rhizoma Alismatis), 9 grams of Zhuling (Umbellate Pore-fungus/Polyporus), 9 grams of Baizhu (White Atractylodes Rhizome/ Rhizoma Atractylodis Macrocephalae) and 15 grams of Fuling (Poria/Poria) which are diuretic . If the patient has high fever and dehydration, these herbs are not suitable for use , we may consider using the yin-increasing herbal decoction (Rehydration herbal formula) instead of the ingredients of ‘ Wuling San’

In short, I believe that sticking to the above formula and using it without professional advice does not meet the therapeutic principles of traditional Chinese medicine.

2. The modified classical prescriptions and my experienced formula I use in the United Kingdom :

(1) Sang Ju Yin (Decoction of Mulberry Leaf and Chrysanthemum)

Indication : For the prevention and treatment of early symptoms in mild cases of coronavirus infection.

Source: See my book [Prescription of Traditional Chinese Medicine] ⑥ ; this formula was originally from the book [Wenbing Tiaobian /Treatise on Differentiation & Treatments of Epidemic Diseases]Volume 1, by Dr Wu Tang who lived in 1758-1836 AC in the Qing dynasty.

Ingredients : 10 grams of Sangye (Mulberry Leaves/Folium Mori) , 10 grams of Juhua (Chrysanthemums / Flos Chrysanthemi) , 10 grams of Xingren (Almonds / Semen Armeniacae Amarum) , 10 grams of Lianqiao (Forsythia /Fructus Forsythiae) , 10 grams of Bohe (Peppermint/Herba Menthae) , 10 grams of Jiegeng (Lisianthus/Radix Platycodi) , 10 grams of Gancao (Licorice Root /Radix Glycyrrhizae) , 10 grams of Weigen (Reed Root/Rhizoma Phragmitis) .

Usage : In China , the people are used to boiling herbs for oral use, namely producing a decoction (herbal tea); However, In the United Kingdom, we mainly use concentrated granules. Each herb is 1 gram per day. Mix and dissolve all ingredients in the formula in a glass of boiling water. Taking half a dose in the morning and half a dose in the evening, continue for 2 weeks.

For children aged 6 to 12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

Additionally, some anti-virus herbs such as Chenpi (Tangerine Peel/ Pericarpium Citri Reticulatae), Mahuang (Ephedra/Herba Ephedra), Daqingye (IsatisLeaf/ Folium Isatidis) and Longdancao(Gentian Root/Radix Gentianae) may be added.

Generally speaking , the symptoms are obviously relieved after taking the above formula for 3-5 days, and the symptoms disappear after two weeks.

Discussion: Previously the above formula has been prescribed for treatment of the early stage of common cold, influenza, and febrile disease with symptoms such as chills, slight fever , cough , and sore throat, thirst ,etc; today we are applying for prevention and treatment of mild cases with coronavirus infection.

(2) Baidu San (Detoxing Powder)

Indication: For prevention and treatment of moderate case of coronavirus infection marked by frail condition and weaker immune symptoms such as fatigue, shortness of breath, etc.

Source: See my book [Prescriptions of Traditional Chinese Medicine] ⑦ ; originally the formula was recorded in the book [Key to Therapeutics of Children's Diseases] by Dr

Qian Yi in the Song Dynasty , he lived around in 1032~1113 Ac).

Ingredients : 10 grams of Chaihu (Bupleurum Root / Radix Bupleuri) , 10 grams of Qianhu (Hogfennel Root/Radix Peucedani) , 10 grams of Chuanxiong (Chuanxiong Rhizome/ Rhizoma Ligustici Chuanxiong) , 10 grams of Zhiqiao (Fruit of Citron/Fructus Aurantii) , 10 grams of Qianghuo (Notopterygium Root/Rhizoma seu Radix Notopterygii) , 10 grams of Duhuo (Pubescent Angelica Root/Radix Angelicae Pubscentis) , 6 grams of Fuling (Poria/Poria) , 10 grams of Jiegeng (Platycodon Root/Radix Platycodi) , 10 grams of Renshen (Ginseng/Radix Ginseng). 10 grams of Gancao (Licorice Root/Radix Glycyrrhizae) .

Usage : Traditionally , all the above herbs along with Shengjiang (Fresh Ginger) and Bohe (Peppermint) to be boiled for oral use .However, In the United Kingdom, we are mostly using concentrated granules, 1 gram per herb for daily use, mix all the ingredients in the formula and to be dissolved in boiling water in a cup, take half of it in the morning and another half in evening , continue for 2 weeks.

For children aged 6 to12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

Generally , the symptoms are obviously relieved after taking the above formula for 3-5 days, and the symptoms disappear after two weeks. In some serious cases, it takes about 3 to 6 weeks of continuous herbal treatment to fully recover, but the formula will need to be modified according to the patient's condition at the time.

Discussion : This formula is usually used to treat the common cold, influenza and febrile disease with ‘Qi Insufficiency’ , today we apply for coronavirus infection along with fatigue and physical weakness.

If patient has no sign of physical weakness only manifests chills, high fever , headache , body aches, cough with profuse whitish phlegm , chest tightness , we can remove Renshen (Ginseng/Radix Ginseng) , Bohe (Peppermint/Herba Menthae) and Shengjiang (Fresh Ginger/Rhizoma Zingiberis Recens) from the above formula and add Jingjie (Schizonepeta/Herba Schizonepetae) and Fangfeng (Ledebouriella Root / Radix Ledebouriellae) to form another formula termed ‘ **Jing Fang Baidu San (Schizonepeta and Ledebouriella Detoxing Powder)**

(3) Shegan Mahuang Tang (Decoction of Belamcanda & Ephedra)

Indication: Apply for moderate and severe cases of coronavirus infection or pneumonia with severe cough , sticky and white phlegm , breathing difficulty and chest tightness.

Source: See Chaper 7 of the book [Jin Kui Yao Lue/Synopsis of the Golden Chamber]

⑧ by Dr Zhang Zhongjing in the Eastern Han dynasty , he lived around 150-219 AC.

Ingredient : 9grams of Shegan (Belamcanda /Rhizoma Belamcandae) , 3-6grams of Mahuang (Ephedra/Herba Ephedrae), 12grams of Shengjiang (Fresh Ginger/Rhizoma

Zingiberis Recens, 3grams of Xixin (Asarum /Herba Asari), 9grams of Ziwan (Tartarian Aster Root/ Radix Asteris), 9 grams of Kuandonghua (Coltsfoot Flower/Flos Farfarae) , 12grams of Weiweizi (Schisandra Fruit/Fructus Schisandrae) , 7 of Dazao (Chinese Dates /Fructus ZiziphiJujubae) , 12grams of Banxia (Pinellia Tube/Rhizoma Pinelliae).

Usage: In China the decoction is widely used ; while in the United Kingdom, we mainly use concentrated granules . Each herb is 1 gram per day ; but the amount of Mahuang (Ephedra /Herba Ephedrae) and Xixin (Asarum /Herba Asri) should not exceed 0.3-0.5 grams. Mix and dissolve all ingredients in the formula in a glass of boiling water. Take half a dose in the morning and half a dose in the evening. Continue for 2 weeks.

For children aged 6 to12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

Generally , the symptoms are obviously relieved after taking the above herbal medicines for 5-7 days, and the symptoms disappear after two weeks. In some serious cases, it takes about 3 to 5 weeks of continuous herbal treatment to fully recover, but the formula will need to be modified according to the patient's condition at the time.

Discussion : This formula originally was for bronchitis and asthma due to the phlegm stagnation in the throat , bronchi and the lungs manifesting as cough, breathing difficulty , wheeze or chest tightness, or spitting saliva, white or greasy fur of the tongue , tight pulse . In the UK, we may use Jiegeng (Plantycodon Root / Radix Platycody) instead of Xixin (Asarum /Herba Asari). Now I prescribe this formula for coronavirus infection and pneumonia marked by severe cough, breathing difficulty , sputum sticking to throat and bronchus, chills and fever.

(4) Zhuye Shigao Tang (Lophatherum & Gypsum Decoction)

Indications : For later stage and recovery period of coronavirus infection manifesting as feverish body or low fever , fatigue , lassitude , dry mouth , loss of smell and taste ,nausea, poor appetite , insomnia.

Source : See my book [Shang Han Lun Study Guid/ Infectious Diseases and Herbal Formulas]^⑨. Originally this formula derived from the book [Shang Han Lun / Treatise on Febrile Diseases] by Dr Zhang Zhongjing in the Eastern Han dynasty , he lived around 150-219 AC.

Ingredients : 9grams of Zhuye (Lophatherum/Herba Lophatheris) ,10 grams of Shigao (Gypsum/Gypsum Fibrosum) , 9grams of Banxia (Prepared Pinellia Tube/Rhizoma Pinelliae Praeparata), 18grams of Maimendong (Ophiopogon Root/Radix Ophiopogonis) , 6grams of Reshen (Ginseng/Radix Ginseng),6grams of Zhi Gancao (Prepared Licorice Root/Radix Glycyrrhizae Praeparata),9grams of Jingmi (Polished round-grained nonglutinous rice/Semen Oryzaee Nonglutinosae).

Usage : The original usage involved boiling the ingredients except Jingmi (Polished round-grained nonglutinous rice/Semen Oryzaee Nonglutinosae) in 2000 ml of water to a reduction of 1200 ml ; then remove the herbal dregs and add the rice into the decoction and continue boiling until the rice is well cooked. Finally get the decoction ,

take 200 ml each time , warm, 3 times a day. In the UK I prescribe concentrated herbal granules , all the above ingredients can be used in 1 gram per herb for daily use, to be dissolved in boiling water in a cup , taken orally , half of it in morning , and another half in evening . Continue for 2 weeks.

For children aged 6 to12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

Generally , the symptoms are obviously relieved after taking the above formula for 5-7 days, and the symptoms disappear after two weeks. In some chronic cases, it takes about 3 to 5 weeks of continuous herbal treatment to fully recover, but the formula will need to be modified according to the patient's condition at the time.

Discussion: I have successfully applied this formula for treatment of fatigue syndrome for 20 years; today I use it for later stage and recovery period of coronary infection. It is very simple but really effective.

However , If the patient still presents with alternate spells of chills and fever , chest tightness ,bitter taste in the mouth , low emotion , poor appetite and dry throat , add 9grams of Chaihu(Buleurum Root/Radix Bupleuri), 9grams of Huangqin (Scutellaria Root/ Radix Scutellariae); if loss of smell , add 1 grams of Xinyi (Magnolia Flower /Flos Magnoliae) and 1 grams of Cangerzi (Xanthium / Fructus Xanthii) ; if loss of taste, add 1 grams of Chenpi (Tangerine Peel/ Pericarpium Citri Reticulatae) ,1 gram of Wumei (Schisandra Fruit / Fructus Schisandrae) , 1 gram of Sharen (Amomum Fruit/ Fructus Amomi) and 1 grams of Shanza (Hawthorn Fruit / Fructus Crataegi).

(5) Dr Enqin's Anti-Coronavirus Herbal Granule Mixture

Indications: Apply for most of conditions including mild ,moderate and severe cases manifesting as cough or with white or yellowish phlegm , shortness of breath, or breathing difficulty , chest tightness , low or high fever , fatigue, the nucleic acid test positive ,swollen tongue with white fur , and taught and rapid pulse.

Source: It is from my experiences. **Ingredients** (the dosages below are for concentrated herbal granules) : 1grams of Shegan (Belamcanda /Rhizoma Belamcandae) ,0.3-05 grams of Mahuang (Ephedra/Herba Ephedrae) , 1grams of Ziwan (Tartarian Aster Root/ Rdix Asteris) , 1grams of Kuandonghua (Coltsfoot Flower/Flos Farfarae), 1grams of Gualou (Trichosanthes Fruit/ Fructus Trichosanthis) , 1grams of Xiebai (Macrostem Onion /Bulbus Allii Macrostemi), 1grams of Chaihu (Bupleurum Root / Radix Bupleuri) , 1grams of Huangqin (Scutellaria Root/Radix Scutellariae) , 1grams of Qianghuo (Notopterygium Root/Rhizoma seu Radix Notopterygii) , 1grams of Jingjie (Schizonepeta/Herba Schizonepetae) , 1grams of Fangfeng (Ledebouriella Root / Radix Ledebouriellae) ,1grams of Gancao (Licorice Root/Radix Glycyrrhiizae) ,1grams of Chenpi (Tangerine Peel/ Pericarpium Citri Reticulatae) .

Usage: All the above ingredients are to be mixed and dissolved in boiling water in a cup , taken orally , half in morning , and half in evening. Continue for 2weeks.

For children aged 6 to 12 years old, use half of the above adult dosage ; Children under 6 years, not recommended .

In most cases , the symptoms are obviously relieved after taking the above herbal formula for 3-5 days, and the symptoms disappear after 10-14 days . In some serious cases, it takes about 3 to 5 weeks of continuous herbal treatment to fully recover.

Case study: Mr XXX, male , 50 years old, a businessman , visited me on 14/03/2020 through the WeChat , he said in recent 3 day, he had nasal discharge, dry cough, breathing difficulty, chest tightness, fever (38.5 degrees celsius), fatigue, insomnia, the nucleic acid test positive ; swollen tongue with white fur , taught and rapid pulse. Diagnosis : coronavirous infection. Prescription : the above formula, 'Dr Enqin's Anti-Coronavirus Herbal Granule Mixture'. Result: 3 days after taking the above formula ,cough , chest tightness , breathing difficulty and fever were relieved ; after 10 days ,the most of symptoms disappeared. Until now there is no any symptom at all. Furthermore, the nucleic acid test negative.

Conclusion : Clinical observation and experience show that herbal formulas introduced in this article can effectively treat the symptoms of coronavirus (COVID-19). Each herbal formula has different function and scope of application: 'Qing Fei Pai Du Tang (the Lung-clearing & Detox Decoction)' is for the patients presenting with mild, moderate and severe conditions ; 'Sang Ju Yin (Decoction of Mulberry Leaf and Chrysanthemum)' is mainly for prevention and treatment of the early symptoms and mild case with coronavirus ; 'Baidu San (Detoxing Powder)' is used for mild , moderate and severe cases along with fatigue and physical weakness; 'Shegan Mahuang Tang (Decoction of Belamcanda & Ephedra)' is used for moderate or severe cases along with obvious lung symptoms such as severe cough , breathing difficulty and chest tightness; 'Zhuye Shigao Tang (Lophatherum & Gypsum Decoction)' is especially for later stage and recovery period of the disease . The last one is based on my own experience , called 'Dr Enqin's Anti-Coronavirus Herbal Granule Mixture', it can be widely used for various conditions including mild ,moderate and severe cases . Clinically we must choose a right formula that is suitable for individual clinical presentation of each patient. Sometimes it is necessary to select one as a basic formula, and then add additional herbs for complex case based on each patient's symptoms.If the herbal formula is selected correctly, in most cases the symptoms will be relieved after taking 3-5 days, and the symptoms will disappear after 1-2 weeks of herbal treatment. In my experience, in some serious cases, it takes about 3 to 5 weeks of continuous herbal treatment to fully recover, but the formula will need to be modified according to the patient's condition at the time

Additionally, what needs to be emphasized is : these herbal prescriptions require further laboratory research through modern pharmacological experimental studies to reveal their effective ingredient and mechanism of action, so that theses herbal formulas can be understood by British medical pharmaceutical communities and applied in NHS hospitals in the future.

References:

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- (9) Engin Can/Enqin Zhang , [Shang Han Lun Study Guide / Infectious Diseases and Herbal Formulas], page 264, the People's Medical Publishing House, Beijing , 2012.

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(5) Attachments:

The following formulas are selected from the Chinese official publication ,the notes and revisions below the formulas are by me.

The Diagnosis and Treatment Protocol for COVID-19

(Trial Version 7 from the Chinese official publication)

Traditional Chinese medicine (TCM) treatment for COVID-19 Stages

The COVID-19 belongs to “wenyi ” (epidemic diseases including the new coronavirus infection) in TCM with the etiology of epidemic factor exposure. Different regions can refer to the following plans for syndrome differentiation and treatment, according to the disease, local climate characteristics and different constitutions. Herbal medicines which exceed maximum dose according to pharmacopoeia should be used under the guidance of a physician.

(1) Medical observation period

1.1 Clinical manifestation: for coronavirus infection with gastrointestinal discomfort

Recommended Chinese patent medicine: Huoxiang Zhengqi Capsule (Pill, Liquid, Oral liquid)

Notes: in the UK Chinese patent medicine is officially banned to be used) .

1.2 Clinical manifestation: for coronavirus infection with fever

Recommended Chinese patent medicines: Jinhua Qinggan Granule, Lianhua Qingwen Capsule (Granule), Shufeng Jiedu Capsule (Granule).

Notes: in the UK Chinese patent medicine is banned to be used.

(2) Clinical treatment period (confirmed cases)

1) Qingfei Paidu Tang (the lung-clearing & detoxing Decoction

Scope of application: in accordance with the clinical observations of doctors in various locations, it is suitable for mild, moderate and severe cases, and can be used reasonably with the consideration of the actual conditions of critically ill patients.

The basic formula: Ma Huang (Ephedrae Herba) 6 g, Zhi Gan Cao (Glycyrrhizae Radix) 6g, Xing Ren (Armeniaca Semen) 9g, Sheng Shi Gao (Gypsum Fibrosum) (decocted first) 15-30g, Gui Zhi (Cinnamomi Ramulus) 9g, Ze Xie (Alismatis Rhizoma) 9g, Zhu Ling (Polyporus) 9g, Bai Zhu (Atractylodis Macrocephalae Rhizoma) 9g, Fu Ling (Poria) 6 g, Chai Hu (Bupleuri Radix) 16g, Huang Qin (Scutellariae Radix) 6g, Jiang Ban Xia (Pinellinae Rhizoma Praeparatum) 9g, Sheng Jiang (Zingiberis Rhizoma Recens) 9g, Zi Wan (Asteris Radix) 9g, Kuan Dong Hua (Farfarae Flos) 9g, She Gan (Belamcandae Rhizoma) 9g, Xi Xin (Asari Radix et Rhizoma) 6g, Shan Yao (Dioscoreae Rhizoma) 12g, Zhi Shi (Aurantii Fructus immaturus) 6g, Chen Pi (Citri reticulatae Pericarpium) 6g, Huo Xiang (Pogostemonis Herba) 9g.

Administration: traditional Chinese herbal pieces in decoction. One package per day. Take warm twice (40 minutes after meal in the morning and evening). One course of treatment is for 14 packages.

If possible, half bowl of rice soup after taking the decoction is advised. For the patients with dry tongue due to fluid depletion, one bowl of rice soup is suggested. (Note: If no fever, the dosage of gypsum should be reduced. In case with fever or high fever, the amount of gypsum can be increased. If the symptoms improve but not totally recovered, continue the second course of treatment. If the patient has a special condition or other underlying diseases, the formula can be modified according to the actual situation in the second course. If the symptoms disappear, the herbs should be discontinued.

Reference: The General Office of the National Health Commission of the People's Republic of China & The Office of the National Administration of Traditional Chinese Medicine "s Notice on Recommending the Use of Qingfei Paidu Tang (Lung -clearing & Deroxing Decoction in Coronavirus Pneumonia Treated with Integrated Chinese and Western Medicine for the COVID-19 Infection" (National Administration of Traditional Chinese Medicine Office Medical Letter [2020] No.22)

2) Mild case

① the pattern of " Cold-damp constraint in the lung" in traditional Chinese medicine

Clinical manifestation: fever, fatigue, generalized body aches, cough, expectoration, chest tightness and labored breathing, poor appetite, nausea, vomiting and sticky stool,

pale enlarged tongue with tooth marks or light red tongue and coating which is white, thick, curd-like, and greasy or white and greasy, and soggy of slippery pulse.

Recommended formula: Sheng Ma Huang (Ephedrae Herba) 6g, Sheng Shi Gao (Gypsum Fibrosum) 15g, Xing Ren (Armeniaca Semen) 9g, Qiang Huo (Notopterygii Rhizoma Seu Radix) 15g, Ting Li Zi (Lepidii/Descurainiae Semen) 6 g, Guan Zhong (Cyrtomii Rhizoma) 9g, Di Long (Pheretima) 15g(the animal's medicine is illegal in the UK), Xu Chang Qing (Cynanchi Paniculati Radix) 15g, Huo Xiang (Pogostemonis Herba) 15g, Pei Lan (Eupatorii Herba) 9g, Cang Zhu (Atractylodis Rhizoma) 15g, Yun Ling (Poria) 45g, Sheng Bai Zhu (Atractylodis Macrocephalae Rhizoma) 30g, Jiao San Xian (Jiao Shan Zha (Crataegi Fructus), Jiao Shen Qu (Massa Medicate Fermentata), and Jiao Mai Ya (Hordei Fructus Germinatus)) 9g each, Hou Po (Magnoliae Officinalis Cortex) 15g, Jiao Bing Lang (Arecae Semen) 9g(it is not allowed in the UK) , Wei Cao Guo (Tsaoko Fructus) 9g, Sheng Jiang (Zingiberis Rhizoma Recens) 15g.

Administration: one package daily, 600ml after decocting, divide into three times, equally in the morning, afternoon and evening, take before meal.

② the pattern of “ Damp-heat accumulation” in traditional Chinese medicine

Clinical manifestation: low-grade fever or absence of fever, slight aversion to cold, fatigue, heavy sensation in the head and body, muscle soreness, dry cough with little sputum, sore throat, thirst without desire to drink, or accompanied with chest tightness and epigastric fullness, absence of sweating or disturbed hidrosis, or vomiting with anorexia, loose stool or sticky stool. The tongue is light red and coating is white, thick and greasy or thin and yellow. The pulse is slippery and rapid or soggy.

Recommended formula: Bing Lang (Arecae Semen) 10g(banned in the UK), Cao Guo (Tsaoko Fructus) 10g, Hou Po (Magnoliae Officinalis Cortex) 10g, Zhi Mu (Anemarrhenae Rhizoma) 10g, Huang Qin (Scutellariae Radix) 10g, Chai Hu (Bupleuri Radix) 10g, Chi Shao (Paeoniae Radix rubra) 10g, Lian Qiao (Forsythiae Fructus) 15g, Qing Hao (Artemisiae annuae Herba) (added later) 10g, Cang Zhu (Atractylodis Rhizoma) 10g, Da Qjng Ye (Isatidis Folium) 10g, Sheng Gan Cao (Glycyrrhizae Radix) 5g.

Administration: one pack daily, 400ml after decocting, divide into twice, and half in the morning and half in the evening.

3) Moderate case

① the pattern of “ Damp-toxin constraint in the lung ” in traditional Chinese medicine

Clinical manifestation: fever, cough with little sputum or yellow sputum, chest

tightness and shortness of breath, abdominal distension, and constipation with difficult defecation. The tongue body is dark-red, and tongue shape is enlarged. The fur of tongue is yellow greasy or yellow dry. The pulse is slippery and rapid or wiry and slippery.

Recommended formula: Sheng Ma Huang (Ephedrae Herba) 6g, Ku Xing Ren (Armeniaca Semen) 15g, Sheng Shi Gao (Gypsum Fibrosum) 30g, Sheng Yi Yi Ren (Coicis Semen) 30g, Mao Cang Zhu (Atractylodis Rhizoma) 10g, Guang Huo Xiang (Pogostemonis Herba) 15g, Qing Hao Cao (Artemisiae Annuae Herba) 12g, Hu Zhang (Polygoni Cuspidati Rhizoma) 20g, Ma Bian Cao (Verbenae Herba) 30g, Gan Lu Gen (Phragmitis Rhizoma) 30g, Ting Li Zi (Lepidii/Descurainiae Semen) 15g, Hua Ju Hong (Citri grandis Exocarpium rubrum) 15g, Sheng Gan Cao (Glycyrrhizae Radix) 10g.

Administration: one pack daily, 400ml after decocting, and equally divide into twice, in the morning and evening.

② the pattern of “ Cold-damp obstructing the lung” in traditional Chinese medicine

Clinical manifestation: low-grade fever, unsurfaced fever or no fever, dry cough with little sputum, lassitude and fatigue, chest tightness, stomach discomfort, or nausea, and loose stool. The tongue is pale or light red and coating is white or white greasy. The pulse is soggy.

Recommended formula: Cang Zhu (Atractylodis Rhizoma) 15g, Chen Pi (Citri reticulatae Pericarpium) 10g, Hou Po (Magnoliae officinalis Cortex) 10g, Huo Xiang (Pogostemonis Herba) 10g, Cao Guo (Tsaoko Fructus) 6g, Sheng Ma Huang (Ephedrae Herba) 6g, Qiang Huo (Notopterygii Rhizoma Seu Radix) 10g, Sheng Jiang (Zingiberis Rhizoma Recens) 10g, Bing Lang (Arecae Semen) 10g.

Administration: one package daily, 400ml after decocting, and equally divide into twice, in the morning and evening.

4) Severe case

① the patient of “ Epidemic toxin blocking the lung” in traditional Chinese medicine

Clinical manifestation: fever with red face, cough with little yellow and sticky sputum, or blood-stained sputum, chest tightness and short of breath, lassitude, dryness, bitterness and stickiness in the mouth, nausea and loss of appetite, difficult defecation, and scanty dark urine. The tongue is red with yellow greasy coating. The pulse is

slippery and rapid.

Recommended formula: Huashi Baidu Fang (the dampness-removing & detoxification formula)

The basic formula: Sheng Ma Huang (Ephedrae Herba) 6g, Xing Ren (Armeniacae Semen) 9g, Sheng Shi Gao (Gypsum Fibrosum) 15g, Gan Cao (Glycyrrhizae Radix) 3g, Huo Xiang (Pogostemonis Herba) (added later) 10g, Hou Po (Magnoliae Officinalis Cortex) 10g, Cang Zhu (Atractylodis Rhizoma) 15g, Cao Guo (Tsaoko Fructus) 10g, Fa Ban Xia (Pinellinae Rhizoma Praeparatum) 9g, Fu Ling (Poria) 15g, Sheng Da Huang (Rhei Radix et Rhizoma) (added later) 5g, Sheng Huang Qi (Astragali Radix) 10g, Ting Li Zi (Lepidii/Descurainiae Semen) 10g, Chi Shao (Paeoniae Radix Rubra) 10g.

Administration: 1-2 packages daily, decoction, 100-200ml each time, 2-4 times per day, oral administration or nasal feeding.

② the pattern of “ Blazing of both qi and ying ” in traditional Chinese medicine

Clinical manifestation: high fever with polydipsia, tachypnoea and shortness of breath, delirium and unconsciousness, blurred vision or accompanied with macules and papules, or hematemesis, epistaxis or convulsion of the four limbs. The tongue is crimson with little or no coating. The pulse is deep, thready and rapid, or floating, large and rapid pulse.

Recommended formula: Sheng Shi Gao (Gypsum Fibrosum) (decocted first) 30-60g, Zhi Mu (Anemarrhenae Rhizoma) 30g, Sheng Di (Rehmanniae Radix) 30-60g, Shui Niu Jiao (Bubali Cornu) (decocted first) 30g, Chi Shao (Paeoniae Radix Rubra) 30g, Xuan Shen (Scrophulariae Radix) 30g, Lian Qiao (Forsythiae Fructus) 15g, Dan Pi (Moutan Cortex) 15g, Huang Lian (Coptidis Rhizoma) 6g, Zhu Ye (Phyllostachys Nigrae Folium) 12g, Ting Li Zi (Lepidii/Descurainiae Semen) 15g, Sheng Gan Cao (Glycyrrhizae Radix) 6g.

Administration: one pack daily, decoction, Shi Gao and Shui Niu Jiao should be decocted first, 100-200 ml each time, 2-4 times per day, oral administration or nasal feeding.

Recommended Chinese patent medicines: Xiyanping injection, Xuebijing injection, Reduning injection, Tanreqing injection, and Xingnaojing injection. Drugs with similar effects can be selected according to individual conditions, or can be used in combination according to clinical symptoms. Traditional Chinese medicine injection can be used together with TCM decoction.

Notes : The herbal injection is illegal in the UK!

5) Critical case

① the pattern of “ Internal blockage and external desertion” in traditional Chinese medicine

Clinical manifestation: Dyspnea, panting on exertion or mechanical ventilation required, accompanied with unconsciousness and dysphoria, sweating, cold extremities. The tongue is dark and purple with thick greasy or dry coating. The pulse is floating and large without root.

Recommended formula: Take Su He Xiang Wan or Angong Niu Huang Wan with the following decoction composed of Ren Shen (Ginseng Radix) 15g, Hei Shun Pian (Aconiti Radix Lateralis Praeparata) (decocted first) 10g, Shan Zhu Yu (Corni Fructus) 15g.

Notes : In case in the UK , send the patient to local hospital best)

If there is mechanical ventilation with abdominal distension, constipation or difficult defecation, 5-10g of Sheng Da Huang (Rhei Radix et Rhizoma) can be considered. If patient-ventilator asynchrony occurs, 5-10g of Sheng Da Huang and 5-10g of Mang Xiao (Natrii Sulfas) can be used together with sedation and muscle relaxant.

Recommended Chinese patent medicines: Xuebijing injection, Reduning injection, Tanreqing injection, Xingnaojing injection, Shenfu injection, Shengmai injection, and Shenmai injection. Drugs with similar effects can be selected according to individual conditions, or can be used in combination according to clinical symptoms. Traditional Chinese medicine injection can be used together with herbal decoction.

Caution: Recommended usage of herbal injections was for severe and critical cases in China, but in UK herbal patent medicine and herbal injection are illegal.

The use of herbal injections follows the principle of starting from a small dosage and modifying based on pattern identification in the instructions. The recommended usage is as follows:

Viral infection or combined with mild bacterial infection: 0.9% sodium chloride injection 250ml with Xiyanning injection 100mg (bid), or 0.9% sodium chloride injection 250ml with Reduning injection 20ml, or 0.9% sodium chloride injection 250ml with Tanreqing injection 40ml (bid).

High fever with disturbance of consciousness: 0.9% sodium chloride injection 250ml with Xingnaojing injection 20ml (bid).

Systemic inflammatory response syndrome (SIRS) or / and multiple organ failure (MOF): 0.9% sodium chloride injection 250ml with Xuebijing injection 100ml (bid).

Immunosuppression: glucose injection 250ml with Shenmai injection 100ml or Shengmai injection 20-60ml (bid).

6) Convalescence

① the pattern of “ Lung-spleen qi deficiency ” in traditional Chinese medicine

Clinical manifestation: shortness of breath, lassitude and fatigue, poor appetite with nausea and vomiting, abdominal fullness, a sense of incomplete evacuation, and sticky loose stool. The tongue is pale and enlarged with white greasy coating.

Recommended formula: Fa Ban Xia (Pinellinae Rhizoma Praeparatum) 9g, Chen Pi (Citri Reticulatae Pericarpium) 10g, Dang Shen (Codonopsis Radix) 15g, Zhi Huang Qi (Astragali Radix) 30g, Chao Bai Zhu (Atractylodis Macrocephalae Rhizoma) 10g, Fu Ling (Poria) 15g, Huo Xiang (Pogostemonis Herba) 10g, Sha Ren (AmomiFructus) (added later) 6g, Gan Cao (Glycyrrhizae Radix) 6g.

Administration: one package daily, 400ml after decocting, and equally divide into twice in the morning and evening.

② the pattern of “ Deficiency of both qi and yin ” in traditional Chinese medicine

Clinical manifestation: fatigue, shortness of breath, dry mouth, thirst, heart palpitation, profuse sweating, poor appetite, low-grade fever or no fever, dry cough with little sputum. The tongue is dry tongue with scanty fluid. The pulse is thready or weak and forceless.

Recommended formula: Nan Sha Shen (Adenophorae Radix) 10g, Bei Sha Shen (Glehniae Radix) 10g, Mai Dong (Ophiopogonis Radix) 15g, Xi Yang Shen (Panacis Quinquefolii Radix) 6g, Wu Wei Zi (Schisandrae Fructus) 6g, Sheng Shi Gao (Gypsum Fibrosum) 15g, Dan Zhu Ye (Lophatheri Herba) 10g, Sang Ye (Mori Folium) 10g, Lu Gen (Phragmitis Rhizoma) 15g, Dan Shen (Salviae Miltiorrhizae Radix) 15g, Sheng Gan Cao (Glycyrrhizae Radix) 6g.

Administration: one package daily, 400ml after decocting, and equally divide into twice in the morning and evening.

Caution : In the UK , according to the regulations of Herbal Administration , some of herbal medicines in the above formulas are restricted; and the herbal injection and

Chinese patent medicines are completely banned. Please read my new book [Shanghanlu Study Guid] on pages 271-274 ' Herbs that are restricted in the UK' published by People's Medical Publishing House in 2012.