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Exploration of pathogenesis and treatment with TCM for Novel Coronary virus pneumonia

**Toevoeging aan de cursus Chinese Fytotherapie
Addition to the course Chinese Herbs**

**Voor gediplomeerde therapeuten
For qualified therapists**

<https://www.iczo.be/nl/opleidingen/chinese-fytotherapie>



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INTRODUCTION

Coronavirus outbreak was confirmed to have spread to Italy on 31 January 2020. A cluster of cases were later detected starting with 16 confirmed cases in Lombardy on 21 February with an additional 60 cases on 22 February and Italy's first deaths reported on the same day. The new coronavirus may have circulated in northern Italy for weeks before it was detected, seriously complicating efforts to track and control its rapid spread across Europe. Since then new coronavirus cases jump sharply in Europe, with Italy worst hit

Till 01 March. 2020, 5 new Member States (Azerbaijan, Ecuador, Ireland, Monaco and Qatar) reported cases of novel COVID-19 in the past 24 hours, in total 58 countries. Globally 87,137 confirmed (1739 new), among which in China: 79,968 confirmed (579 new), 2873 deaths (35 new), outside of China: 7169 confirmed (1160 new), 104 deaths (18 new). WHO risk assessment: China Very High, regional level Very High, Global level Very High¹.

A majority of patients with novel COVID-19 are adults. Among 44672 patients in China with confirmed infection, 2.1% were below the age of 20. The most reported symptoms included fever, dry cough, and shortness of breath, and most patients (80%) experienced mild illness. Approximately 14% experienced severe disease and 5% were critically ill. Early reports suggest that illness severity is associated with age (>60 years old) and co-morbid disease².

Currently there is no known effective antiviral therapy for novel COVID-19. Mortality in those with critical illness has been reported as over 50%³.

At present, the epidemiological curve of novel coronavirus infection in Wuhan and China has started to decline and stabilized after reaching its peak. However, the epidemic of novel COVID-19 pneumonia in many countries such as South Korea, Italy, and Iran has intensified and continues to spread globally. As of 4:00 pm local time on March 2nd, the number of confirmed cases in South Korea has increased to 4,335; as of noon on March 2nd local time, the cumulative number of confirmed cases in Iran has reached 1501; as of 24:00 local time on March 1, the number of deaths from the epidemic novel coronavirus pneumonia in Italy increased by another 12 and the cumulative death reached 41, with 1,713 confirmed cases nationwide.

In February 2020, in order to respond to the new coronavirus epidemic in Wuhan, the National Health and Medical Commission and related units established Wuhan 16 mobile cabin hospitals in Wuhan. As of February 15, 2020, 9 mobile cabin hospitals have been opened⁴.

¹ https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200301-sitrep-41-covid-19.pdf?sfvrsn=6768306d_2

² https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200301-sitrep-41-covid-19.pdf?sfvrsn=6768306d_2

³ https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200301-sitrep-41-covid-19.pdf?sfvrsn=6768306d_2

⁴ <https://baike.baidu.com/item/%E6%96%B9%E8%88%B1%E5%8C%BB%E9%99%A2>

Medical staff will be dispatched to these hospitals to take care of patients who test positive for the virus — but show no severe symptoms. Once a patient's symptoms worsen, he or she will be transferred to one of the city's designated hospitals, such as Jinyintan Hospital, to admit patients in a timely manner.

It is reported on 02 March 2020 that the last batch of patients infected with the new coronavirus in Wuhan Qiaokou sports stadium of mobile cabin hospital recovered and was discharged. Medical staff was preparing to close this cabin hospital⁵.



Wuhan city's sports stadium of mobile cabin hospital



Cabin hospital in Wuhan

⁵ <https://cfcnews.com/280414/%E6%AD%A6%E6%B1%89%E4%B8%80%E6%96%B9%E8%88%B1%E5%8C%BB%E9%99%A2%E5%85%B3%E8%88%B1-%E6%96%B0%E5%86%A0%E7%97%85%E6%AF%92%E7%96%AB%E6%83%85%E5%85%A8%E7%90%83%E8%94%93%E5%BB%B6/>

Official reports on 02 March, 2020 said that 196 new cases were reported in Hubei Province. This is the first time since January that the number of cases has fallen below 200. Compared with 570 cases a day ago, it has fallen sharply. This sharp decline in the number of cases in Hubei was mainly due to the decrease in new cases in Wuhan. On Monday, there were only 193 new cases in Wuhan. On the same day, there are only 202 new cases in mainland China, the lowest level since January 22. Excluding Hubei, there were only 6 new cases nationwide. The cumulative number of confirmed cases in China is 80026. The death toll increased by 42 on Monday to a total of 2912. China's official CCTV reported that the first cabin hospital - sports stadium of mobile cabin hospital, built in Wuhan has been closed due to a significant reduction in the number of patients. At the height of the epidemic, a total of 16 mobile cabin hospitals in China has built 13,000 beds and 12,000 patients have been admitted⁶.

Aetiology

Invasion of **Cold-Damp with Toxin** to the Lung and Spleen is the chief cause of coronavirus pneumonia this time.

1. At that time, the climate of Wuhan was rainy, wet and cold. Although the temperature is higher than in previous winters, there is no sunlight.
2. Tongue images of new coronavirus pneumonia, especially in critically ill patients, including young patients, are usually thick and greasy.
3. The patient came to the clinic with fever, but the temperature was not high, and some patients did not have fever symptoms, and more manifested as fatigue, burnout, poor appetite, and even some nausea, chest tightness, and diarrhea. Most patients have the symptoms of dry throat and sore throat, and some patients also have dry cough without phlegm. This process usually lasts 5 to 7 days, during which the patient does not have fever or only low fever, and the body temperature is more than 37 ° C, and rarely exceeds 38.5 ° C.
4. But if within two or three days of this period, the patient's body temperature suddenly rises above 39 ° C, the condition will often enter a critical condition at once, wheezing, shortness of breath, poor oxygenation, and a large amount of exudation on CT examination of the lungs.
5. If the patient's body temperature continues at 37 ° C ~ 38 ° C during this period, after six or seven days, after treatment, the patient will generally gradually enter the recovery period.

⁶ <https://cfcnews.com/280414/%E6%AD%A6%E6%B1%89%E4%B8%80%E6%96%B9%E8%88%B1%E5%8C%BB%E9%99%A2%E5%85%B3%E8%88%B1-%E6%96%B0%E5%86%A0%E7%97%85%E6%AF%92%E7%96%AB%E6%83%85%E5%85%A8%E7%90%83%E8%94%93%E5%BB%B6/>

Transmission

Mainly from the nose, mouth and some skin contact. But can be through Aerosol, which is not the chief way of transmission.

Invasion of this Cold-Damp is not a usual one, but if it would be a usual one, then it would not be able to cause epidemic. In TCM, it is called Han Shi Li (寒湿疫). Li or Li-qi means something strange and unpredictable, difficult to control with a lot of death. Li-qi means that this acute and severe infectious disease is epidemic and has the following characteristics:

- 1) The infected groups have similar onset and are contagious.
- 2) It is strong violent and has strong pathogenicity.
- 3) It is highly contagious and easy to spread.
- 4) It usually invades the body via the nose, throat and skin, with specific lesion location.
- 5) Serious illness and dangerous conditions.
- 6) Most have certain seasonality and regionality.

The path of invasion of exogenous diseases is usually transmitted through the six channels. However, under special circumstances, for instance, in epidemic conditions, it can be spread very fast, penetrating different channels with serious complications. Moreover, the aetiology is mixed, often containing toxin.

Once the patients with infection of coronavirus are cured, the patients start to produce antibody, which is formed within about 2 weeks. It means that the patients have the immune capacity to this virus. However, there are some reports, saying some discharged patients received positive tests of viral nucleic acid. At the Guangdong province epidemic briefing on 25 February 2020 Song Tie, deputy director of the Guangdong Provincial Center for Disease Control and Prevention, said that 14% of discharged patients in the province had rejuvenation. Similar situations have occurred in other provinces. The Hainan Provincial Health and Health Commission released news that individual patients were regularly reviewed after discharge, and the nucleic acid test was positive⁷.

Detection of the virus can be obtained from the nose, throat, mouth, stool, urine, and tears, etc. but mostly is done from the nose and throat.

⁷ <http://www.chubun.com/modules/article/view.article.php/c127/186504>

Features

- 1) The median incubation period for Coronary virus pneumonia is 3.0 days, up to 24 days.
- 2) 31.30% of patients have been to Wuhan, 71.80% of patients have been in contact with personnel from Wuhan, and 1.18% of patients have been in direct contact with wildlife.
- 3) Coronary virus pneumonia can occur in all ages, with 0.9% of patients under 15 years of age.
- 4) Fever (87.9%) and cough (67.7%) are the most common symptoms, but less than half (43.8%) of patients have fever symptoms at the time of consultation, and diarrhea (3.7%) and vomiting (5.0%) are rare.
- 5) Of the 840 patients who received a CT scan of the lungs at admission, 76.4% showed pneumonia. Typical features are ground glass-like shadows (50.00%) and bilateral patchy shadows (46.0%)⁸.

Pathogenesis

In the beginning stage there are three organs system could be mainly involved, including:

- Lung system
- Spleen system
- San Jiao system

Lung

- Disorder of the Lung in dispersing function: fever, throat pain, aversion to cold, dry cough, muscle pain, headache, and joint pain.
- Disorder of the Lung in descending function: shortness of breath, difficulty in breathing, pressure in the chest.
- Disorder of the Lung in Upper source of Water: water retention in the lung and body.

Spleen

- Diarrhea (3.7%) and vomiting (5.0%) are rare in 840 patients:
- Extreme tired, which is quite unusual, no strength to walk for a short distance and for a long time.
- Very poor appetite. Therefore, it is extreme important to eat well, such as to eat protein, including fish, meat, cooked food, nutrient soup, avoiding raw and cold material, no greasy food, and sweet, three meals a day.

Triple Burner

- It is the corridor for Yuan-Qi and water, which should not be blocked.

⁸ <https://news.sina.com.cn/o/2020-02-10/doc-iimxyqvz1760875.shtml>

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- Always Keeping easy defecation every day, food, such as pear, apricot, kiwi, Chinese cabbage, are suitable for this function.
 - Keep urination easy. Drink green tea, lemon juice, Fu Ling, Ze Xie and Che Qian Zi. Meanwhile it is necessary to harmonize the Gallbladder, for instance, take Qing Hao and Yin Chen Hao 5g each to make a tea to drink.

The pathogenesis of coronavirus pneumonia could include the following procedures:

1. Early stage

Involvement of exterior and exterior, blockage of the Lungs and Spleen, failure of the Triple Burner in ascending and descending, and Qi transformation.

2. Medium stage

- a. Constitutional Heat accumulation in the body, leading to formation of Heat in the Lung and Stomach with formation of Toxic Heat in the Burner Burner.
- b. Constitutional Yang deficiency of Heart and Kidney, with formation of Qi and Blood and accumulation of Cold-Damp.

3. Recovery stage

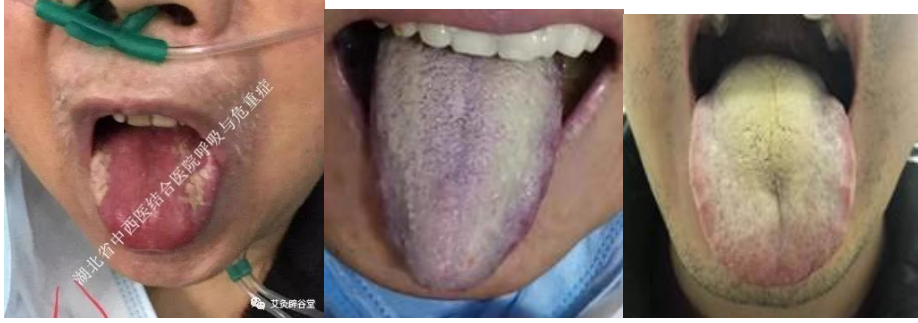
- a. Elimination of Cold-Damp
- b. Deficiency of Yang of the Heart and Kidney.
- c. Deficiency of Yin of the Lung and Kidney

Manifestations

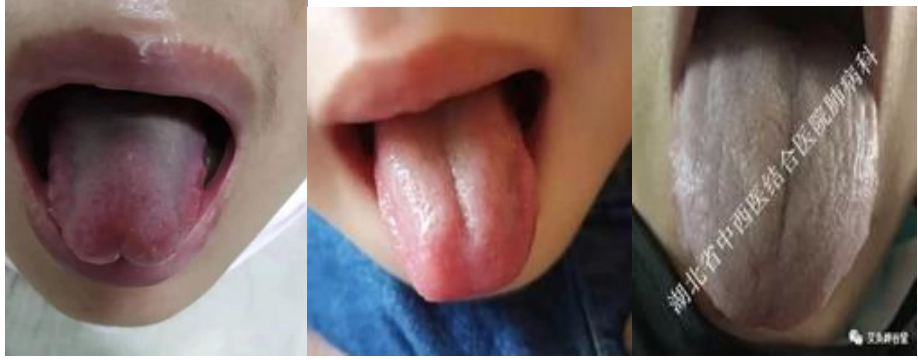
By analysing and categorizing, the common clinical symptoms could include:

- Fever, mostly high fever > 38 °C, a few low fever > 37.5 °C, some individual cases do not have fever.
- Dry cough, and a little white sputum or yellow sputum may be coughed in the later stage, and there is no cough in some cases.
- A few patients have symptoms of nasal congestion and runny nose.
- Sore throat.
- Tiredness.
- Mild chest tightness, severe shortness of breath, exacerbation after activity.
- Sore body muscles or limbs.
- Nausea and vomiting.

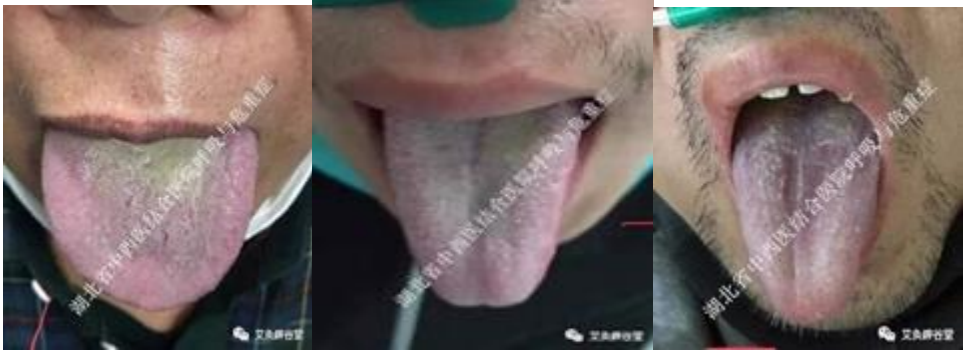
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- Diarrhea.
 - Headache.
 - Redness of eyes.
 - Bitter taste in the mouth.
 - Dry mouth and thirst.
 - Poor appetite.
 - The tongue is pale, or purple colour with greasy coating and teeth marks. The middle tongue has a thick and greasy coating, or there is greyish and yellow coating.



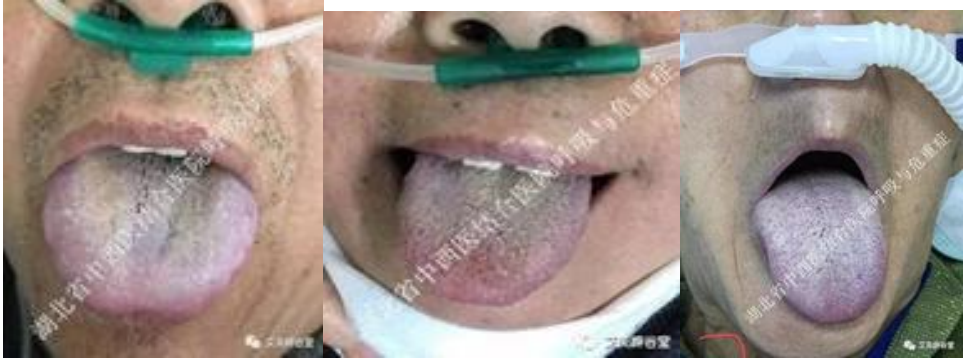
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TCM management

From January 27th, the State Administration of Traditional Chinese Medicine, with its clinical "emergency, practicality, and effectiveness" as the guide, launched the "Screening Study of Effective Prescriptions of Traditional Chinese Medicine for the Prevention and Treatment of New Coronavirus Infected Pneumonia" in Shanxi, Hebei, Heilongjiang, and Shaanxi. Four provinces conducted a trial of "Qing Fei Pai Du Decoction" to treat patients with novel coronavirus pneumonia. As of February 5, 4 pilot provinces used "Qing Fei Pai Du Tang" to treat 214 confirmed cases, with 3 days as a course of treatment, the effective rate was over 90%. Among them, the symptoms and imaging performance of 60% of the patients improved significantly, and 30% of the patients had stable symptoms without exacerbation.

Since February 14th, "Qing Fei Pai Du Tang" has been promoted and used in four mobile cabin hospitals in Wuhan. On February 25th, reporters at the front line in Wuhan have successively received transcripts of "Qing Fei Pai Du Tang" for participating in the treatment of the mobile cabin hospitals:

- 1) Jiangxia Fangcang Hospital, Tianjin Medical Team Ward and Henan Medical Team Ward admitted a total of 182 patients and took this formula. Among them, the Tianjin Medical Team ward totally treated 96 patients, in which 96 patients disappeared fever in three days, with fever remission rate of 100%. The total number of patients in the ward of the Henan Medical Team was 86. There were 85 people without fever in three days, and the fever remission rate was 99%.
- 2) Jiangnan Fangcang Hospital treated a total of 1874 patients and fully achieved treatment by using this formula of "Qing Fei Pai Du Tang". The overall effective rate of integrated Chinese and Western medicine treatment was over 89.28%.
- 3) A total of 312 patients were admitted to Tongkou Fangcang Hospital. Except for 5 patients under 18 years of age, the other 307 patients took the "Qing Fei Pai Du Tang". As of February 25, a total of 117 patients have been discharged from hospital.
- 4) Jingkai (Sports Center) Fangcang Hospital admitted a total of 1,040 patients, all taking "Qing Fei Pai Du Tang" and certain western medicine treatment. The patient's fever, fatigue, and cough symptoms were significantly improved. The patients currently in the hospital are in good condition.

Qing Fei Pai Du Tang - Clear the Lung and remove the Toxin Decoction

Ma Huang 9g	Xing Ren 9g	Shi Gao 30g	Zhi Gan Cao 6g
Gui Zhi 9g	Ze Xie 9g	Zhu Ling 9g	Bai Zhu 9g
Fu Ling 15g			
Chai Hu 16g	Huang Qin 6g	Ban Xia 9g	Sheng Jiang 9g
Zi Wan 9g	Kuan Dong Hua 9g	She Gan 9g	Xi Xin 6g
Huo Xiang 9g	Shan Yao 12g	Zhi Shi 6g	Chen Pi 6g

Be sure to use herbal decoction form. One package of above herbs for one day. Decoct it once a day, and take the decoction twice a day, once in the morning and once in the evening (40 minutes after a meal).

If conditions permit, take half a bowl of rice soup after taking decoction.

3 days of taking the herbal prescription is one course of treatment.

If the patient does not have a high fever, the amount of Shi Gao should be smaller and if fever is too high, increase the amount of Shi Gao.

Analysis

This formula is consisting of following prescriptions:

- Ma Xing Shi Gan Tang, indicating for cough, shortness of breath.
- Wu Ling San, indicating for water retention, protect the Lower Burner and Kidney.
- Shen Gan Ma Huang Tang, indicating for Phlegm and water in the Lung.
- Xiao Chai Hu Tang, indicating for Shaoyang syndrome and Triple Burner disorders.
- Plus, the herbs: Huo Xiang 9g, Shan Yao 12g, Zhi Shi 6g, Chen Pi 6g to remove the toxin, regulate the Spleen and Stomach and promote the defecation.

In this way, the Lung, Spleen, Stomach, Gallbladder, Triple Burner, Bladder, Kidney and Large Intestine are considered and protected.

Features

- Usually a personalized prescription is given to a patient, but during the epidemic condition it could be possible that only one cocktail of herbal prescription is given to cover a general and emergent situation.
- A too big prescription is possible for form in order to cover different syndromes.
- Xi Xin, one toxic one usually is forbidden, but it is used in the prescription with a high dosage. Usually it is in 3g. In special condition it can be higher (article 27 from Chinese Pharmacopoeia).

- Ma Huang is still forbidden in many countries out China, so it could be replaced by Zi Su Zi 10g and Sang Bai Pi 10g; Xi Xin could be replaced by Gan Jiang 10g.

According to the announcement from the state administration of TCM on 28. Feb. 2020, that "Qing Fei Pai Du Tang" is a brand-new compound composed of four classic prescriptions, containing pungent and warm, pungent and cold, light and fragrant. It can be used in many ways to deal with Cold, Heat, Damp, toxin and deficiency to offer the effects of dispersing the Lung, stopping cough, clearing Heat, resolving Damp, removing toxin. On February 24, Zhang Boli, an academican of the Chinese Academy of Engineering, pointed out in an interview with CCTV reporters that the efficacy of Chinese medicine is to discharge toxin but not detoxification. According to Sun Guangrong, a State master of Chinese medicine, the focus of "Qing Fei Pai Du Tang" is to avoid obstruction and highlight the way out for pathogens, instead of confining, confronting, and killing poisonous pathogens through sweating, and urination⁹.

Modifications

I personally could suggest that some modifications should be made accordingly as follows:

- If there is severe aversion to Cold, remove Shi Gao, add Zhi Fu Zi 10g and Gan Jiang 10g to warm the body and dispel the Cold.
- If there is high fever, remove Xi Xin, add Shi Gao till 60g to clear the Heat and reduce the fever.
- If there is a lot of phlegm, add Jie Geng 10g and Zhe Bei Mu 10g to resolve the phlegm.
- If there is formation of water in the Lung, add Ting Li Zi 10g and Che Qian Zi 10g to discharge the water in the Lung.
- If there is severe constipation, add Da Huang 10g and Mang Xiao 10g to promote the defecation.
- If there is obvious vomiting, add Sha Ren 5g and Sheng Jiang 10g to descend the Stomach-Qi and relieve the vomiting.

Syndrome differentiation

- Even if the observation period is short, it is the important issues to know that this coronavirus infection cannot be treated slowly. It is recommended not to use a patent pill or tablet, but herbal decoctions. If it is not possible, then use the herbal granulates or powders.

⁹ <http://www.satcm.gov.cn/hudongjiaoliu/guanfangweixin/2020-02-28/13470.html>
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- Because the main aetiology is Cold-Damp and toxin, the Cold and cool herbs should be used carefully in the early and middle stages, except for the conditions of Damp-Heat and toxin. One expert, the academician Dr. Tong Xiaolin believes that reducing unnecessary infusions to those who have Cold-Damp with a thick and greasy tongue, tooth marks. Such patients should try to use Chinese herbs as early as possible. Meanwhile avoid abuse of antibiotics, as they are viral infections, and antibiotics should not be used routinely unless they are complicated by bacterial infections. From the perspective of traditional Chinese medicine, antibiotics are mostly Cold products, which are could impair the Spleen and Stomach easily¹⁰.
- During hospitalization, the most common complication was pneumonia (79.1%), followed by acute respiratory diseases (3.37%) and shock (1.00%)¹¹.
- Due to the heavy pathogenesis of the disease, the rapid onset of disease, and factors such as age, physique, nutrition, emotional states, constitutions, and other personality differences, different pathogenesis will occur.
- The following TCM treatment is based upon China's Novel Coronavirus Pneumonia Diagnosis and Treatment Plan (Provisional 6th Edition) by State Chinese Medicine administration bureau from National Health Commission¹².

1. Medical observation period

1). Early stage of exogenous symptoms

Fever, aversion to cold, joint and muscle pain, and fatigue are the main manifestations. May also be accompanied by sore throat, bitter taste in the mouth, dry throat, etc.

Principle of treatment

Dispel Cold, resolve the Damp and relieve the external symptoms

Herbal formula

Qiang Huo Sheng Shi Tang, plus: Xiao Chai Hu Tang

Prescription

Qiang Huo 10g	Fang Feng 10g	Man Jing Zi 10g	Ma Huang 10g
Chuan Xiong 10g	Cang Zhu 10f	Qing Hao 10g	Huo Xiang 10g
Chai Hu 10g	Huang Qin 10g	Zhi Ban Xia 10g	Sheng Jiang 5g

2). Invasion of Cold-Damp to the Taiyin

Fever, or no fever, joint and muscle pain, fatigue, nausea, vomiting, loose stool or diarrhea, white, and greasy coating.

Principle of treatment

Dispel Cold, resolve the Damp, harmonize the Middle Burner and relieve the external symptoms

¹⁰ <http://www.jkb.com.cn/hotTopics/fyfk/zjlx/2020/0127/469134.html>

¹¹ <http://news.sciencenet.cn/htmlnews/2020/2/435624.shtm>

¹² http://www.gov.cn/zhengce/zhengceku/2020-02/19/content_5480948.htm

Herbal formula

Huo Xiang Zheng Qi San

Prescription

Huo Xiang 10g	Pei Lan 10g	Qiang Huo 10g	Zhi Ban Xia 10g
Zi Su Ye 10g	Hou Po 10g	Da Fu Pi 10g	Yi Yi Ren 10g
Qing Hao 10g	Chen Pi 5g	Bai Kou Ren 5g (to be decocted later)	

2. Clinic treatment period

1). Initiative stage

Invasion of Cold-Damp to the Lung with disharmony of the Shaoyang

Aversion to cold, fever or no fever, dry cough, bitter taste in the mouth, dryness of the throat, tiredness, heaviness of the body, fullness of the chest and abdomen, nausea, loose stool, pale tongue, or slight red tongue, thin, white and greasy coating, soft pulse.

Principle of treatment

Dispel Cold, resolve the Damp and relieve the external symptoms

Herbal formula

San Ao Tang, Plus: Xiao Chai Hu Tang, Huo Xiang Zheng Qi San

Prescription

Ma Huang 10g	Xing Ren 10g	Qiang Huo 10g	Zhi Ban Xia 10g
Chai Hu 10g	Huang Qin 10g	Huo Xiang 10g	She Gan 10g
Lu Gen 12g	Cang Zhu 10g	Zi Su Ye 10g	Hou Po 10g
Da Fu Pi 10g	Yi Yi Ren 10g	Bai Kou Ren 5g (to be decocted later)	

2). Medium stage

Accumulation of Damp in the Upper and Middle Burner with blockage of the Qi

Fever, cough with white or yellow phlegm, difficulty in expectoration of the phlegm, fullness in the chest, shortness of breath, heaviness of the body, nausea, vomiting, fullness of the abdomen, poor appetite, loose stool, light tongue, or slight red tongue, white and greasy coating, soft and weak pulse.

Principle of treatment

Clear Heat, reduce fever, resolve Damp, descend the Qi of the Lung and Stomach and harmonize the Triple Burner.

Herbal formula

San Ren Tang, plus: Xiao Chai Hu Tang

Prescription

Xing Ren 10g	Gua Lou Pi 12g	Ma Huang 10g	Sang Bai Pi 10g
Zhe Bei Mu 10g	Yi Yi Ren 10g	Hou Po 10g	Cang Zhu 10g
Zhi Ban Xia 10g	Tong Cao 5g	Chai Hu 10g	Huang Qin 10g
Bai Kou Ren 5g (to be decocted later)		Lu Gen 12g	
Bi Yu San 20g (packed with gauze)			

Blockage of the Lung by Toxin with accumulation of Heat in Yangming

High fever, expectoration of yellow phlegm, fullness of the chest, shortness of breath, suffocation feeling in the chest, abdominal distention in the abdomen, constipation, red tongue, yellow and greasy coating, or yellow and dry coating, slippery and rapid pulse.

Principle of treatment

Clear Heat, descend Lung-Qi and promote the defecation

Herbal formula

Ma Xing Gan Shi Tang, plus: Ding Chuan Tang, Xiao Cheng Qi Tang

Prescription

Ma Huang 10g	Xing Ren 10g	Shi Gao 30g	Quan Gua Lou 20g
Ting Li Zi 10g	Sang Bai Pi 10g	Kuan Dong Hua 10g	Zhi Zi 10g
Zhe Bei Mu 10g	Hou Po 10g	Da Huang 12g	Tao Ren 10g
Zhi Shi 10g	Cang Zhu 10g		

3. **Critical period****Failure of communication of Interior and Exterior with separation of Yin and Yang**

Difficulty breathing, dyspnoea or asthma by slight exertion, accompanied by fainting, restlessness, cold and clammy hand, cold sweating, pale tongue, or purplish tongue, thick, greasy and white coating, superficial and empty pulse.

Principle of treatment

Restore the Yang and rescue patient from collapse

Herbal formula

Du Shen Tang, plus: Si Ni Tang

Prescription

Ren Shen 20g	Zhi Fu Zi 10g	Shan Zhu Yu 15g	Gan Jiang 15g
Zhi Gan Cao 6g			

One pill of Su He Xiang Wan is used when drinking the decoction.

If it is Heat blockage, then use one pill of An Gong Niu Huang Wan instead of Su He Xiang Wan.

4. **Recovery period****Deficiency of Qi of the Lung and Spleen with weakness of Yuan-Qi**

Shortness of breath, fatigue, poor appetite, fullness of the abdomen, weakness, pale complexion, loose stool, pale tongue, thin, white and greasy coating, slippery and weak pulse.

Principle of treatment

Tonify the Qi of the Lung and Spleen and restore the Yuan-Qi

Herbal formula

Bu Fei Tang, plus: Shen Ling Bai Zhu San

Prescription

Ren Shen 10g	Shu Di Huang 10g	Zhi Huang Qi 12g	Wu Wei Zi 10g
Zi Wan 10g	Ku Gen 12g	Sang Bai Pi 10g	Jiao Bai Zhu 10g
Fu Ling 12g	Huo Xiang 10g	Zhi Ban Xia 10g	Chen Pi 5g
Sha Ren 3g (to be decocted later)			

Deficiency of Qi and Yin with weakness of Liver and Kidney

Shortness of breath, fatigue, poor appetite, insomnia, weak defecation, hot flush, night sweats, dry mouth, restlessness, dizziness, weakness of the lower back and knee, light red tongue, thin, dry and peeled coating, rapid and weak pulses.

Principle of treatment

Nourish the Yin, clear the deficient Heat, and tonify the Liver and Kidney

Herbal formula

Sheng Mai San, plus Yi Guan Jian, Qin Hao Bie Jia Tang

Prescription

Ren Shen 10g	Mai Men Dong 12g	Wu Wei Zi 10g	Bei Sha Shen 10g
Dang Gui 10g	Sheng Di Huang 20g	Gou Qi Zi 10g	Zi Wan 10g
Chuan Bei Mu 10g	Chuan Lian Zi 10g	Qing Hao 10g	Bie Jia 20g
Mu Dan Pi 10g	Zhi Mu 10g		

Responsibility

Advising and using the formulas discussed is the responsibility of the prescribing therapist.

Het adviseren en gebruik van de bovenstaande formules behoort tot de verantwoordelijkheid van de voorschrijver.

Curriculum Vitae

Professor Sun Peilin, has been engaged in TCM clinical practice and teaching for more than thirty years, which he began at the International Acupuncture Training Center, Nanjing University of Traditional Chinese Medicine after his graduation from his Masters study in 1988. In September 1989, he was invited by the Belgian doctors' Acupuncture Association to give a number of seminars and lectures. By the end of 1990 he was once again invited to Belgium to conduct the lectures. He has since been settled in Belgium. In October 1990 he was invited by the Princess of Monaco to participate and give a seminar at an International Conference in Monaco.

Currently Prof. Sun teaches at the Institute for Complementary Health Care ICZO vzw (www.ICZO.be), and other European countries, such as the Netherlands, Germany, France, Austria, Switzerland, Norway, Turkey and Poland, as well as Canada and other countries. Meanwhile he is a visiting professor at several China Universities of Traditional Chinese Medicine and tutor on the master's PhD degree programme at Nanjing University of TCM and Shulan College of Chinese Medicine, UK.

While working in China, Prof. Sun published more than twenty articles. After moving to Belgium, he has published more than thirty articles in different international medical journals. He also serves as editor for several international medical journals and has made a keynote lecture at the International Congress of Traditional Chinese Medicine.

Some of his published books include:

- Bi syndrome or rheumatic diseases treated by TCM
- The treatment of pain with Chinese herbs and acupuncture
- The management of postoperative pain with acupuncture
- Sport medicine in TCM
- Traditionele Chinese Fytotherapie-Courante Remedies
- Der altere Patient in der Chinesischen Medizin - Gesund alt werden, Alterserkrankungen vorbeugen und Behandeln

Since moving to Europe, Prof. Sun has never stopped teaching on TCM. Most of his teachings are seminars on different topics, intended to provide high theoretical and practical lectures, which promoted him to receive and enjoy a high reputation within the field of TCM in Europe. Prof. Sun has worked very hard to promote TCM in Europe, and at the same time mentors young teachers of TCM so as to spread Chinese culture and TCM knowledge as wide as possible.

During his busy teaching and compiling schedules, Prof. Sun has never forgotten his doctor's responsibility in treating patients, and has been practicing TCM on the front line in the clinic to

show the unique evidence of actual effect of TCM and knowledge of Chinese culture in the provision of health services for the people.