

## Short Review

### Clinical Experience of Professor Bai Changchuan in Traditional Chinese Medicine

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#### Abstract

Professor Bai Changchuan is a nationally renowned traditional Chinese medicine (TCM) expert and a mentor for the national TCM academic experience inheritance program. He has dedicated himself to clinical practice and theoretical innovation in TCM, mastering the Four Classics, inheriting the syndrome differentiation and treatment system, Zhang Zhongjing's theories, and the collective wisdom of famous masters through the ages. Professor Bai has integrated these knowledge systems and applied them in clinical practice, demonstrating exceptional diagnostic and therapeutic skills in various acute, critical, and complex diseases. This article aims to summarize Professor Bai's contributions to the development and extension of TCM theories and his clinical experience in treating various diseases for reference and learning by peers.

#### Elucidation of TCM Theories

"Treatise on Cold Pathogenic and Miscellaneous Diseases" is a significant milestone in the development of TCM in China. Zhang Zhongjing inherited and developed the seven medical classics and eleven prescription classics recorded in the "Han Shu·Yi Wen Zhi," integrating them into the sixteen volumes of "Treatise on Cold Pathogenic and Miscellaneous Diseases," which were later divided into "Treatise on Cold Damage Diseases" and "Essential Prescriptions Worth a Thousand Gold." Professor Bai believes that the syndrome differentiation and treatment system in "Treatise on Cold Damage Diseases" includes six categories: principal formula syndrome

differentiation, similar formula syndrome differentiation, combined formula syndrome differentiation, medicinal syndrome differentiation, similar syndrome differentiation, and syndrome differentiation based on evidence (complicated diseases, possible symptoms, hypothetical symptoms). He has summarized and organized these categories, promoting a systematic understanding of Zhang Zhongjing's thought patterns [1].

"Urgent purgation to preserve Yin" is an important principle in TCM treatment, first used by Zhang Zhongjing in the chapters on Yangming disease and Shaoyin disease in "Treatise on Cold Damage Diseases." In the Yangming disease chapter, when the three signs of urgent purgation in Yangming disease are present, Da Chengqi Tang can be used to purge heat and disperse clumps, urgently preserving Yin. In the Shaoyin disease chapter, the three signs of urgent purgation in Shaoyin disease should also include signs of Yangming disease and Shaoyin Yin injury to meet the criteria for using Da Chengqi Tang to draw out the fire and urgently preserve Yin. "Dispersing what is bound" first appeared in "Suwen·Zhizhen Yao Da Lun," and "Jingyue Quanshu" states, "Everyone knows that dispersing drugs can be used to disperse the muscles, meridians, and collaterals, but few know that they can also be used to disperse the viscera. Those who understand dispersing as dispersing know little; those who understand non-dispersing as dispersing understand the profound mystery." Dispersing what is bound is a method of internal treatment with drugs to regulate the viscera, balance Yin and Yang, unblock Qi and blood, harmonize Yin and Yang, and disperse phlegm, food retention, dry feces, etc. Professor Bai, while using Da Chengqi Tang for urgent purgation to preserve Yin in Yangming disease, applies the method of "dispersing what is bound" from "Huangdi Neijing" to the syndrome of heat binding and collateral flow with visceral fullness. Using Da Chengqi Tang to disperse the clumps in the intestines, urgently preserving Yin to treat Yangming disease, allows the bound to be dispersed, Yin fluid to be restored, and stasis to be unblocked [2].

Lipid turbidity pathogenesis is a TCM differential diagnosis theory for hyperlipidemia proposed by Professor Bai. Traditional physicians have always classified lipid turbidity within the category of phlegm turbidity. However, the broad concept of phlegm, with the changing disease spectrum, including hyperlipidemia and coronary atherosclerosis, often lacks the scientific strength to analyze lipid-related diseases using phlegm turbidity theory, directly affecting the improvement of clinical efficacy. Therefore, it is necessary to separate the concept of lipid turbidity from the broad concept of phlegm turbidity, to differentiate the relationship between the two, and to comprehensively analyze the causes, nature, and pathogenic characteristics of lipid turbidity, as well as the relationship between lipid turbidity pathogenesis and the viscera. Professor Bai's proposal of lipid turbidity pathogenesis and its differential treatment is of great practical significance for enriching the etiology of TCM, preventing and treating modern diseases such as hyperlipidemia, diabetes, and arteriosclerosis, and improving people's quality of life. Lipid turbidity refers to the pathological product formed when the body cannot properly distribute or excrete excess lipids due to overindulgence in

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**Citation:** Dapeng W, Jianing Z, Chao Y, Changchuan B (2024) Clinical Experience of Professor Bai Changchuan in Traditional Chinese Medicine. J Altern Complement Integr Med 10: 536.

**Received:** December 04, 2024; **Accepted:** December 25, 2024; **Published:** December 31, 2024

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fatty and sweet foods or dysfunction of the viscera, leading to lipids accumulating in the blood vessels, subcutaneous tissue, or between the muscles (flesh, fat membrane, and skin). Lipid turbidity is considered “phlegm in the blood” and belongs to the category of phlegm turbidity. Lipid turbidity only manifests as phlegm turbidity and blood stasis symptoms at a certain stage. Before lipid turbidity accumulates to a certain extent, phlegm turbidity and blood stasis cannot reflect the essence of the disease, and lipid turbidity should not be equated with “phlegm turbidity.” Professor Bai points out the characteristics of lipid turbidity pathogenesis: 1. Phlegm in the blood is intangible phlegm, which is lipid turbidity adhering to blood vessels; 2. Lipid turbidity is a Yin pathogen with a heavy, turbid, and sticky nature; 3. The disease starts slowly, and over time, phlegm and blood stasis intermingle; 4. It easily obstructs the flow of Qi and blood; 5. It causes a wide range of diseases with various changes and manifestations; 6. The disease is protracted with a long course; 7. It is more common in obese individuals with a greasy tongue coating. The key to the pathogenesis of lipid turbidity is the dysfunction of the spleen’s transportation and transformation, the main link is the liver’s failure to disperse and store, and an important factor is the deficiency of kidney Qi. The differential diagnosis mainly includes: 1. Lipid and blood stasis obstruction type; 2. Lipid turbidity obstruction type; 3. Spleen deficiency and lipid turbidity type; 4. Liver stagnation and lipid obstruction type; 5. Liver and kidney yin deficiency type; 6. Kidney yang deficiency decline type. Treatment should focus on the spleen and stomach, with the therapeutic principle of ascending the clear and descending the turbid. Turbidity is not evil in excess, but when it lingers in the blood vessels, treatment should focus on the spleen and stomach, taking into account the liver and kidneys, and achieving harmony through the ascending of the clear and the descending of the turbid [3-4].

Shaoyang water qi disease is seen in “Treatise on Cold Damage Diseases” in article 147: “In cold damage for five or six days, after sweating and then purging, with fullness in the chest and hypochondria, slight binding, difficult urination, thirst without vomiting, but with head sweating, alternating chills and fever, and restlessness, this indicates that the disease has not been resolved, and Chaihu Guizhi Ganjiang Tang is the main treatment.” “Head sweating” is an upper jiao water qi sign, “thirst without vomiting” is a middle jiao water qi sign, “difficult urination” is a lower jiao water qi sign, and “fullness in the chest and hypochondria” and “alternating chills and fever” are signs of Shaoyang disease. Professor Bai refers to this article as Shaoyang water qi disease, which is cold in nature. Professor Bai believes that regardless of cold damage, wind damage, warm disease, or damp-warm disease, when they transform to Shaoyang, they all show the typical characteristics of Qi mechanism being obstructed due to the struggle between the “Zheng Qi” and evil. If Shaoyang’s Qi is sufficient, it can cut off the disease here; if Shaoyang is lost, the pathogen enters the interior. This is what Professor Bai often refers to as the “cutting-off therapy.” He often combines Chaihu Guizhi Ganjiang Tang with Sanren Tang (to resolve Shaoyang damp-heat). On this narrow path of Shaoyang, various pathogens all show the typical characteristics of Qi mechanism being obstructed; moreover, because the hand Shaoyang Sanjiao governs the water passages and is often associated with dampness, grasping Shaoyang can grasp the common pathway of the transmission of cold damage and warm diseases, and the same treatment and prescription can be used for both cold damage and warm diseases. When cold damage and warm diseases both transform to Shaoyang, the same pathogenesis makes the same treatment for cold and warm diseases possible [5,6].

## Clinical Treatment Experience in Internal Diseases (Gastric and Duodenal Ulcers)

When treating gastric and duodenal ulcers with a long duration, Professor Bai often employs blood-activating and stasis-removing herbs such as Red Peony Root (Sháo Yào) and Myrrh (Mò Yào). Concurrently, he pairs these with Qi-lifting herbs like Platycodon Root (Jí Gěng), Thorowax Root (Chái Hú), and Astragalus Root (Huáng Qí) to protect the spleen’s ascending function. Over-nourishing the stomach’s Yin can lead to stagnation of the spleen’s Qi, resulting in symptoms like abdominal bloating and poor appetite. Therefore, Professor Bai advises caution with some Yin-nourishing herbs (such as Polygonatum Root, Huang Jing) and the prolonged use of Rehmannia Root (Shu Di Huang) and Donkey-hide Gelatin (E Jiao), which can cause stagnation and Qi obstruction [7].

## The Concept of “Internal Injury to the Spleen and Stomach”

Professor Bai posits that “internal injury to the spleen and stomach” is not solely due to deficiency but often stems from stagnation caused by various factors such as the natural environment, diet, emotions, and overwork. He summarizes the pathogenesis of stagnation-induced injury to the spleen and stomach, emphasizing that the disease is primarily based on deficiency with secondary excess, where deficiency leads to stagnation or stagnation leads to deficiency. The main mechanisms involve the spleen’s failure to transform and transport, the stomach’s loss of digestion and reception, and the disruption of the ascending and descending functions [8].

## Specific Pathological Mechanisms of Stagnation-Induced Injury to the Spleen and Stomach

- Wind stagnation in the spleen and stomach: External wind pathogen directly affects the spleen, leading to symptoms such as reduced appetite, fatigue, abdominal bloating, and pain.
- Cold stagnation in the spleen and stomach: Cold pathogen congeals and contracts, affecting the spleen and stomach, causing Qi and blood to stagnate, leading to abdominal bloating and pain, and diarrhea.
- Heat (fire) stagnation in the spleen and stomach: Heat pathogen stagnates in the spleen and stomach, causing abdominal pain, diarrhea with mucus and blood, increased hunger, or spleen and stomach deficiency with the emergence of pathogenic fire.
- Dampness stagnation in the spleen and stomach: Toxins and turbid pathogens transform into dampness, stagnating the spleen and stomach, leading to fullness, abdominal pain, and constipation.
- Dryness stagnation in the spleen and stomach: Dryness pathogen consumes stomach Qi and injures spleen Yin, leading to a lack of moistening and nourishment, and various symptoms.
- Food stagnation in the spleen and stomach: Food accumulates in the stomach due to overeating or disharmony between the spleen and stomach, leading to stagnation and various diseases.
- Fluid stagnation in the spleen and stomach: The spleen and stomach are the hub of fluid metabolism. Excess fluid remaining, or the transformation of fluid into dampness or phlegm, can lead to disease.

- Qi stagnation in the spleen and stomach: Qi mechanism is obstructed, leading to wood stagnating and earth being congested, injuring the spleen and stomach [9].

## Treatment Principles for Stagnation-Induced Injury to the Spleen and Stomach

- **Nourishing and Lifting Method:** This method focuses on nourishing the spleen Yin to restore the spleen's function constrained by a strong stomach, using sweet, cold, or neutral substances to nourish the spleen and stomach.
- **Dredging and Lifting Method:** This method treats the spleen and stomach's pivot mechanism's dysfunction or disharmony between the liver and spleen, adjusting the three burners' mechanism to achieve the goal of dredging and lifting the spleen and stomach.
- **Ascending and Descending Method:** This pair of methods treats the spleen's ascending and the stomach's descending functions, using formulas such as Bu Zhong Yi Qi Tang and Hou Po San Wu Tang.
- **Harmonizing Method:** This method treats the spleen and stomach's own disharmony, cold and heat complexity, and mixed deficiency and excess.
- **Strengthening Method:** This method uses spleen-strengthening and stomach-nourishing Chinese medicine formulas to assist in transformation and transportation, and to nourish the stomach to ensure digestion and reception.
- **Warming Method:** This method uses warm or sweet-warm drugs to expel the cold pathogen lingering in the spleen and stomach, achieving the goal of dispersing cold and restoring yang.
- **Elimination Method:** This method uses Chinese medicine to gradually dissolve and disperse the accumulation of Qi, blood, phlegm, food, water, worms, fat, and stasis.
- **Transformation Method:** This method uses formulas like Bao He Wan to transform and digest the accumulation of food and drink, protecting Yin fluid [10].

## Prescription and Medication Selection

For disorders such as stomach disharmony and gallbladder reversal, Professor Bai uses formulas like Xian Fu Dai Zhe Tang, Ju Pi Zhu Ru Tang, Ding Xiang Shi Di San, and Wen Dan Tang, with common medicines like Inula Flower, Haematite, Clove, Persimmon Calyx, Tangerine Peel, and Bamboo Shavings. For intestinal obstruction, he selects medicines like Rhubarb and Coptidis Rhizoma, combined with moistening intestines medicines like Cannabis Seed and Prunus Seed. For spleen Yin deficiency, he uses sweet and bland medicines like Lentil, Chinese Yam, Atractylodes Macrocephala, Ginseng, Poria, and cold sweet medicines like Dendrobium, Ophiopogon, Polygonatum, and Adenophora to treat spleen and stomach Yin deficiency. He also created the compound "He Wei Tang" (Astragalus, Atractylodes, Tangerine Peel, Aurantium, Magnolia Bark, etc.) to treat clinical symptoms such as epigastric pain, early satiety, and belching in functional dyspepsia and chronic gastritis [11].

## Rectal Cancer Postoperative Constipation and Traditional Chinese Medicine Treatment

Rectal cancer is a common malignant tumor of the digestive tract in China. Postoperative constipation is one of the common complications following surgery for rectal cancer, mainly induced by factors such as intraoperative anesthesia, surgical trauma, and stimulation. Among these, the damp-heat congestion type of constipation is a more common syndrome, with a lingering course and difficulty in radical treatment. In "Treatise on Cold Damage Diseases" (Shang Han Lun), Article 148 states: "In cold damage of five or six days... with hard stools and a thin pulse, this is considered a slight yang constriction, which must have both an exterior and an interior... This is considered half in the interior and half in the exterior. Although the pulse is deep and tight, it should not be considered a Shaoyin disease. The reason is that yin should not have sweating, but now there is sweating on the head, so it is known that it is not a Shaoyin disease, and Xiao Chai Hu Tang can be administered. If the condition is not resolved, a bowel movement will lead to resolution." Professor Bai Chachuan believes that regardless of the type of postoperative constipation in rectal cancer, there is a manifestation of "stagnation of the large intestine's qi mechanism" and a clinical characteristic of "secretion due to stagnation." The modified Xiao Chai Hu San Ren Tang (composed of Bupleurum 10g, Ginger-processed Pinellia 10g, Codonopsis 20g, Scutellaria 10g, Fresh Ginger 10g, Jujube 10g, Magnolia Bark 15g, Aurantium Fruit 15g, Coix Seed 25g, Almond 15g, White Cardamom 5g (added later), Tangerine Peel 25g, Poria 25g, Phellodendron 15g, Cistanche 30g, and Honey-fried Licorice 10g) is used to treat this condition. A clinical randomized controlled trial observed 48 cases of damp-heat congestion type constipation in patients after rectal cancer surgery, and the results showed that compared with the control group treated with Dumila, the modified Xiao Chai Hu San Ren Tang had better therapeutic effects. Hepatocellular carcinoma is one of the most common malignant tumor diseases in clinical practice, with clinical symptoms mainly manifested as liver area pain, fatigue, loss of appetite, abdominal bloating, and weight loss. Hepatocellular carcinoma has a hidden onset, and by the time it is diagnosed, it often has progressed to the middle or late stage, making surgical treatment impossible. Clinically, transarterial chemoembolization (TACE) is generally used for treatment, but the effect is not satisfactory. The Qi-tonifying and Liver-softening formula (composed of Astragalus 30g, Atractylodes 15g, Salvia 10g, Ligusticum 10g, Persica 10g, Soft-shelled Turtle Shell 15g, Fresh Oyster 20g, and Licorice 10g) is an empirical formula summarized by Professor Bai Chachuan after years of clinical practice. A clinical randomized controlled trial was conducted on 60 patients with hepatocellular carcinoma, with the control group treated with TACE, and the experimental group treated with the Qi-tonifying and Liver-softening formula on the basis of the control group. The results showed that the Qi-tonifying and Liver-softening formula significantly improved the treatment of hepatocellular carcinoma, increased the treatment efficiency, reduced the incidence of adverse reactions such as fatigue, poor appetite, and liver area pain, and improved the quality of life of patients. Mycotic esophagitis is an ulcerative pseudomembranous esophagitis caused by the invasion of *Candida albicans* into the esophageal mucosa. The clinical manifestations of patients are often related to the degree of esophageal mucosal damage, including throat pain, difficulty swallowing, and swallowing pain, sometimes accompanied by retrosternal pain, and many patients do not have esophageal-related symptoms but show uncharacteristic upper digestive tract symptoms, which are easily misdiagnosed and

missed. Mycotic esophagitis is a modern medical term, belonging to the categories of “dysphagia,” “chest bi-syndrome,” and “stomach pain” in traditional Chinese medicine. Professor Bai believes that this disease is a mixed “XuShi” disease, with qi deficiency and spleen deficiency as the root, and phlegm dampness and liver depression as the actual factors. The treatment of traditional Chinese medicine should start from both tonifying the body and dispelling the pathogen. “Huangdi Neijing” states: “True qi follows, spirit is guarded internally, where does the disease come from?” “Righteous qi exists inside, evil cannot invade.” In terms of this disease, the fungus as a pathogenic factor and attack factor is the “evil qi” of the disease, and the barrier function and regenerative ability of the esophageal mucosa are the “righteous qi” to resist the disease. Therefore, tonifying the righteous and dispelling the evil should be the principle of treatment for this disease, with the spleen and stomach as the core, adding Bupleurum and Scutellaria, Bupleurum to lift clear yang, and Scutellaria to descend turbid fire. The combination of the two medicines lifts clear and descends turbid, harmonizes the exterior and interior, and resolves Shaoyang. At the same time, pay attention to dispelling dampness and resolving stasis, with Coix seed for diuresis and dampness, and qi-moving medicines that also have the effect of activating blood circulation. After the righteous qi is sufficient, use Curcuma zedoaria to move qi and break stasis, without the drawback of injuring the righteous [12].

Chronic non-atrophic gastritis with erosion is one of the common types of chronic gastritis and a common and frequently occurring disease in clinical practice. Professor Bai believes that the etiology and pathogenesis of this disease are due to stagnation leading to deficiency, and stagnation leading to heat, with the core being “stagnation.” The treatment should focus on eliminating stagnation, with the primary treatment being digestion and guidance, qi regulation and depression resolution, and the auxiliary treatment being spleen strengthening and qi supplementation, as well as heat clearing and dampness transformation, which is the principle of treating both the root and the symptoms. The self-prescribed empirical formula Weimikang (composed of Magnolia Bark 15g, Aurantium Fruit 15g, Codonopsis 15g, Atractylodes 15g, Aucklandia 5g, Corydalis 15g, Sepia 25g, Zhejiang Fritillary 10g, Child Tea (packaged decoction) 5g, Stir-fried Paeonia 15g, and Honey-fried Licorice 10g) has shown significant clinical efficacy.

Barrett’s Esophagus (BE) is a pathological phenomenon where the squamous epithelium of the lower esophagus is replaced by columnar epithelium. If it is accompanied by intestinal metaplasia, it belongs to the precancerous lesion of esophageal adenocarcinoma. It is related to the dysfunction of the esophageal anti-reflux barrier, decreased acid clearance ability of the esophagus, low mucosal defense function, and delayed gastric emptying. Western medicine commonly uses acid suppressants, prokinetic drugs, and mucosal protective agents. Professor Bai believes that the etiology of this disease in traditional Chinese medicine is emotional disorder, excessive alcohol and spicy food, and insufficient constitution. In terms of this disease, the reduction of anti-acid factors is a manifestation of the decline in qi’s defensive function, and the upward flow of stomach acid and turbidity is the attacking factor. Due to qi deficiency and stagnation, qi stagnation and blood stasis, and qi deficiency and phlegm coagulation, it affects the microcirculation level of the esophageal mucosa, leading to qi stagnation, blood stasis, and phlegm coagulation, affecting the normal regeneration of cells and tissues, resulting in atypical hyperplasia, and thus leading to this disease. The root cause is qi deficiency and

acid turbidity. The pathological products and pathological basis are qi stagnation, blood stasis, and phlegm coagulation. The nature of the disease is deficiency in the root and excess in the branches, with qi deficiency and acid turbidity upward flow as the root, and qi stagnation, blood stasis, and phlegm coagulation as the branches. The summary of treatment methods is to tonify qi and lift clear yang, regulate qi and resolve stasis, and dispel dampness and descend turbidity [13,14].

## Clinical Experience in the Treatment of Externally Contracted Diseases

The traditional Chinese medicine’s approach to externally contracted febrile diseases has evolved from the combined discussion of cold and warmth in the “Huangdi Neijing” and “Nan Jing” to the detailed differentiation of cold with less emphasis on warmth in “Shang Han Lun”. The formal establishment of the Warm Disease School during the Ming and Qing dynasties marked a shift from a combined discussion to separate discussions of “Shang Han” and “Wen Bing”, with the addition of Wei Qi Ying Xue and San Jiao diagnostic methods. In clinical practice, these three diagnostic systems can be challenging for beginners to grasp. Professor Bai Changchuan, with over 50 years of dedication to clinical teaching and research, has integrated and mastered both “Shang Han” and “Wen Bing”. Building upon the understanding of the characteristics and transmission patterns of externally contracted febrile diseases, he has innovated by proposing a new diagnostic and treatment approach: “Three Outlines and Visceral Localization, Two Transformations and Qi-Blood Characterization”. This framework integrates cold and warmth within a diagnostic system that is both localized and characterized, aiming to perfect the differentiation system of externally contracted febrile diseases [15].

The three outlines refer to the exterior, interior, and half-exterior half-interior. The “exterior” includes the meridians, skin, muscles, orifices, fascia, and bones, while the “interior” refers to the viscera, and the “half-exterior half-interior” pertains to Shao Yang, membrane origin, and San Jiao. The two transformations of Qi and blood involve cold transformation, heat transformation, Qi division, and blood division. Clinical diagnostic and treatment approaches include:

### Exterior syndrome treatment

For cold transformation in the exterior, one may use Mahjong Tang, Gui Zhi Tang, or Da Qing Long Tang, referred to by Yu Jiayan as the “three pillars” of treatment; for heat transformation in the exterior, one may use Yin Qiao San, Sang Ju Yin, or Bai Hu Tang, the three mild-cooling formulas. For Qi division in the exterior, Bai Hu Tang may be used; for blood division in the exterior, Xi Jiao Di Huang Tang combined with Yin Qiao San or Hua Ban Tang, etc.

### Half-exterior half-interior syndrome treatment

For cold transformation in the half-exterior half-interior, Xiao Chai Hu Tang, Chai Hu Gui Zhi Tang, or Chai Hu Gui Zhi Gan Jiang Tang may be used; for heat transformation, Da Chai Hu Tang, Chai Hu Jia Mang Xiao Tang, Wen Dan Tang, San Ren Tang, Hao Qin Qing Dan Tang, Da Yuan Yin, Lei Shi Xuan Tou Mo Yuan Fa, San Shi Tang, Xing Ren Shi Gao Tang, Chai Hu Jie Nue Yin, and Wang Shi Lian Po Yin, etc.

### Visceral syndrome treatment

For heart cold transformation, Gui Zhi Gan Cao Tang may be used; for heart heat transformation, Qing Gong Tang, Qing Ying Tang, or



Liang Kai San Bao, etc.; for heart Qi division, Lian Mei Tang; for heart blood division, Qing Gong Tang with An Gong Niu Huang Wan or Zhi Bao Dan, Zi Xue Dan, Niu Huang Cheng Qi Tang, Xi Jiao Di Huang Tang, etc. For chest diaphragm cold transformation, Gua Di San; for chest diaphragm heat transformation, Zhi Zi Dou Tang, Liang Ge San; for chest diaphragm Qi division, Zhi Zi Dou Tang, etc. For stomach cold transformation, Li Zhong Tang, Xiao Jian Zhong Tang, etc.; for stomach heat transformation, Hua Ban Tang, Cheng Qi Tang, and Yu Nu Jian Qu Ni Xi, Shu Di Jia Xi Sheng Di, Yuan Shen Fang. For stomach Qi division, Bai Hu Tang; for stomach blood division, Cheng Qi Tang, Xi Jiao Di Huang Tang, Xie Xin Tang, Hua Ban Tang, Qing Wen Bai Du Yin, and Yu Nu Jian Qu Ni Xi, Shu Di Jia Xi Sheng Di, Yuan Shen Fang, etc. For spleen cold transformation, Li Zhong Tang; for spleen heat transformation, Cheng Qi Tang, etc. For gallbladder cold transformation, Yin Chen Shu Fu Tang; for gallbladder heat transformation, Xiao Chai Hu Tang, Yin Chen Hao Tang, Hao Qin Qing Dan Tang; for gallbladder Qi division, Xiao Chai Hu Tang, etc. For large intestine cold transformation, Huang Tu Tang; for large intestine heat transformation, Bai Tou Weng Tang, Chi Xiao Dou Dang Gui San, Di Yu San, etc.; for large intestine Qi division, Huang Qin Tang, and for large intestine blood division, Bai Tou Weng Tang, etc. For bladder cold transformation, Wu Ling San; for bladder heat transformation, Zhu Ling Tang; for bladder blood division, Tao Hu Cheng Qi Tang, Tao Ren Cheng Qi Tang, Di Dang Tang, Xiao Ji Yin Zi, etc. For kidney cold transformation, Si Ni Tang, Tong Mai Si Ni Tang, Zhen Wu Tang, Fu Zi Gan Cao Tang, etc.; for kidney heat transformation, Huang Lian E Jiao Tang. For kidney Qi division, Huang Lian E Jiao Tang, Jia Jian Fu Mai Tang, etc.; for kidney blood division, Xi Jiao Di Huang Tang, etc. For liver cold transformation, Dang Gui Si Ni Tang, Wu Zhu Yu Tang, etc.; for liver heat transformation, Ling Jiao Gou Teng Tang; for liver Qi division, Xiao Yao San, Long Dan Xie Gan Tang, etc.; for liver blood division, Xi Jiao Di Huang Tang.

Externally contracted febrile diseases refer to a category of diseases characterized by fever due to the influence of the six exogenous factors or epidemic toxins. Professor Bai Changchuan integrates the theories of “Wen Re Lun” and “Shang Han Lun” for the treatment of externally contracted febrile diseases, proposing the four methods of “sweating”, “penetrating”, “draining”, and “cutting”. Sweating method is used for fever reduction, applicable to both cold and warm diseases, with the proficient use of Ephedra; penetrating method is used to disperse stagnated heat, applicable to both cold and warm diseases, with the ingenious use of Gypsum and Ephedra; draining method is used to provide an outlet for pathogens; cutting method is used to prevent the spread of diseases, with warm diseases being cut in the Qi division and cold diseases in the Shao Yang. 1. Sweating method: Both cold and warm diseases can use Ephedra, regardless of the presence or absence of sweat. The key pathogenesis of fever is the stagnation of Yang Qi, and the important way to reduce fever is to open up the stagnation. For fever due to cold attack or early warm disease without fluid damage, the sweating method is the first choice, allowing heat to be resolved with sweat. Cold disease fever uses acrid and warm substances to induce sweating and resolve the exterior, such as Ephedra and Cinnamon Twig; warm disease fever uses acrid and cool drugs to induce sweating, such as Mint and Gypsum, or a small amount of Ephedra to enhance the dispersing power. 2. Penetrating method: To regulate the Qi mechanism, fever in both cold and warm diseases is actually caused by stagnated heat, so it is crucial to open up the stagnation, allow heat to be expelled, provide an outlet for

pathogens, and prevent diseases from entering the interior. The sweating method mainly uses drugs like Ephedra, Cinnamon Twig, and Mint to induce sweating and resolve heat from the skin, mainly for exterior syndromes; the penetrating method mainly uses Houttuynia, Forsythia, Gypsum, and other acrid and cool penetrating drugs to regulate the Qi mechanism, unblock the interior and exterior, allowing pathogens to have an opportunity to be expelled, and both the interior and exterior can be penetrated. 3. Draining method: To provide an outlet for pathogens, smooth the Qi mechanism, and expel heat and pathogens, both cold and warm methods are used without being limited to cold or warm diseases. Different draining methods are selected according to the distribution and depth of pathogenic heat, with the upper jiao mainly using penetrating and opening methods, the middle jiao mainly using bitter and walking methods, and the lower jiao mainly using seepage methods. When pathogenic heat is combined with tangible solid pathogens in the intestines, the guiding drainage method is used; in the later stage of summer diseases, when residual pathogens are not completely eliminated and both heart and kidney are damaged, the sour drainage method is often used, and in warm diseases with dampness, the sweet and light cool drainage method is often used. When the pathogen is in the upper jiao or the Wei Qi division, the disease position is relatively shallow, and the penetrating method is often used to expel the pathogen from the surface. Because “the lung position is the highest, and the medicine is too heavy to pass the disease site”, it is said that “treating the upper jiao is like a feather, not light and not lifted”, and the medicine should be light and thin, with San Ju Yin, Yin Qiao San, and Mint as commonly used prescriptions, and even Ephedra’s acridity is used to assist, removing its nature and using both cold and warm methods to prevent ice from suppressing externally contracted febrile diseases refer to a category of diseases characterized by fever due to the influence of the six exogenous factors or epidemic toxins. Professor Bai Changchuan integrates the theories of “Wen Re Lun” and “Shang Han Lun” for the treatment of externally contracted febrile diseases, proposing the four methods of “sweating”, “penetrating”, “draining”, and “cutting”. Sweating method is used for fever reduction, applicable to both cold and warm diseases, with the proficient use of Ephedra; penetrating method is used to disperse stagnated heat, applicable to both cold and warm diseases, with the ingenious use of Gypsum and Ephedra; draining method is used to provide an outlet for pathogens; cutting method is used to prevent the spread of diseases, with warm diseases being cut in the Qi division and cold diseases in the Shao Yang. 1. Sweating method: Both cold and warm diseases can use Ephedra, regardless of the presence or absence of sweat. The key pathogenesis of fever is the stagnation of Yang Qi, and the important way to reduce fever is to open up the stagnation. For fever due to cold attack or early warm disease without fluid damage, the sweating method is the first choice, allowing heat to be resolved with sweat. Cold disease fever uses acrid and warm substances to induce sweating and resolve the exterior, such as Ephedra and Cinnamon Twig; warm disease fever uses acrid and cool drugs to induce sweating, such as Mint and Gypsum, or a small amount of Ephedra to enhance the dispersing power. 2. Penetrating method: To regulate the Qi mechanism, fever in both cold and warm diseases is actually caused by stagnated heat, so it is crucial to open up the stagnation, allow heat to be expelled, provide an outlet for pathogens, and prevent diseases from entering the interior. The sweating method mainly uses drugs like Ephedra, Cinnamon Twig, and Mint to induce sweating and resolve heat from the skin, mainly for exterior syndromes; the penetrating method mainly uses Houttuynia, Forsythia, Gypsum, and other acrid and cool penetrating

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In 2019, the COVID-19 pandemic spread, and the treatment plan of traditional Chinese medicine played an important role in the prevention and control of the epidemic. COVID-19 fits into the category of “epidemic diseases” in traditional Chinese medicine in terms of symptoms, pathogenesis, and disease momentum. Professor Bai Changchuan, through the characteristics of cases in the region, combined with the analysis of “three spaces” (time, space, and human), “three ecologies” (macro-ecology, micro-ecology, and micro-ecology), believes that the 2019 COVID-19 belongs to the wind-cold-damp epidemic. The treatment principle should be to expel the pathogen first. The development of this epidemic is divided into four stages: prodromal stage, progressive stage, critical stage, and recovery stage. Syndrome differentiation and treatment for each stage: 1. Prodromal stage, pathogenesis: internal dampness and external cold; treatment: strengthening the spleen and promoting lung ventilation to expel the pathogen; prescription: Si, Wu Jia Jian Zheng Qi San from “Yin

Zheng Lue Li” and “Wen Bing Tiao Bian”; 2. Progressive stage, pathogenesis: pathogenic heat transformation, dampness obstructing Qi mechanism; treatment: resolving the exterior and interior, promoting lung ventilation, and purging damp-heat; prescriptions: Xuan Bai Cheng Qi Tang, Sheng Jiang San; 3. Critical stage, pathogenesis: internal closure and external collapse; treatment: cold closure: restoring Yang and pulse; heat closure: opening orifices and awakening the spirit; prescriptions: cold closure: Si Ni Jia Ren Shen Tang; heat closure: Liang Kai San Bao from “Wen Bing Tiao Bian”; 4. Recovery stage, pathogenesis: pathogen departure and Qi deficiency; treatment: strengthening the spleen and benefiting the lung; prescriptions: Liu Jun Zi Tang, Sheng Mai San, Wu Wei Zi Tang [19-21].

Professor Bai Changchuan is well-versed in the four classics of traditional Chinese medicine and the medical works related to the cold-warm theory, accumulating a wealth of clinical experience and being good at treating various febrile diseases. The fever caused by lurking pathogens is a kind of pathogen that is not immediately manifested after being invaded by the pathogen, which can be an externally contracted pathogen or an unresolved internal injury pathogen. The symptoms of fever are mostly characterized by recurrent fever, with the heat suddenly high and low, the body is deficient and the pathogen is lingering, and it is difficult to cure. Professor Bai Changchuan believes that although there are many kinds of antibiotics in the contemporary era, compared with the numerous, fast-mutating, and adaptable pathogens, it is difficult to form an absolute advantage in the long term. The misuse or abuse of antibiotics often leads to the lurking of pathogens, and fever occurs when the weather changes and the body’s Qi retreats and the pathogen grows. Professor Bai Changchuan believes that although the symptoms of internally injured fever are diverse, the first thing to grasp is the main symptom of fever. Through the four diagnoses and commonly used traditional Chinese medicine syndrome differentiation methods such as the six meridian syndrome differentiation, the triple burner syndrome differentiation, and the Wei Qi Ying Xue syndrome differentiation, collect clinical data with syndrome differentiation significance purposefully and selectively, carefully analyze the location and nature of the “lurking pathogen”, and then determine the diagnosis and prescribe the prescription. The treatment method is based on the clever use of the guiding prescription, and the combined prescription is used to treat concurrent symptoms [22-23].

Intracranial non-specific infection caused by purulent bacteria is a common critical and severe disease in clinical practice. The main clinical manifestations of intracranial infection are high fever, chills, constipation, and abnormal consciousness, which belong to the categories of “febrile diseases” (Yang Ming Fu Shi Zheng, Qi Xue Liang Huan Zheng, Re Jin Xin Bao Zheng, etc.), “headache”, “convulsion disease”, “Jue Zheng”, etc., in traditional Chinese medicine. Professor Bai believes that the treatment of intracranial infection should first clarify the disease localization and nature. Localization belongs to the “three outlines and visceral localization” of the interior, and the interior syndrome. Professor Bai Changchuan, with over 50 years of experience in TCM clinical practice, is a nationally renowned TCM doctor and recipient of the National Outstanding Contribution Award for TCM. He has served as a mentor for inheriting the academic experience of traditional Chinese medicine experts in the third, fourth, and sixth batches. Professor Bai possesses rich clinical experience and unique characteristics in syndrome differentiation and treatment. In clinical diagnosis and treatment, he selects drugs based on Zang-Fu organs and channels, Qi and blood, cold and warmth, meridians,

and drug properties. He particularly values the new use of ancient prescriptions, explores the clinical function and compatibility of new drugs, and considers the dose and efficacy in toxicity application. In his academic thoughts, he has gradually formed views such as the unification of spleen and stomach stagnation, cold and warmth, the localization of triple energizer and Zang-Fu organs, the qualitative analysis of Qi and blood, and the four-stage deficiency and reality set. He has established the classical clinical pathway of TCM, which has achieved good results in the diagnosis and treatment of common diseases and complex diseases. In the academic thought of Professor Bai, the concept of “three outlines and visceral localization, two transformations and Qi-Blood characterization, four stages of deficiency and reality setting” has been gradually formed, which provides a new perspective on the diagnosis and treatment of externally contracted febrile diseases. This approach integrates the cold and warmth within a diagnostic system that is both localized and characterized, aiming to perfect the differentiation system of externally contracted febrile diseases [24-25].

For the treatment of intracranial infections, Professor Bai emphasizes the importance of disease localization and characterization. The localization belongs to the “three outlines and visceral localization” of the interior, involving the heart spirit and the primal spirit, while the characterization belongs to the “two transformations and Qi-Blood characterization” of heat, specifically the blood aspect of heat transformation. He believes that intracranial infections are mostly caused by externally contracted toxic heat, which generates heat and is combined with stasis, disturbing the interior heart spirit and primal spirit. The nature and momentum of the disease are due to toxic heat and the interplay of stasis heat. The treatment should focus on emergency measures to address the symptoms, commonly using clearing, penetrating, draining, and opening methods. The primary method is clearing, which cools the blood and prevents stasis from congesting the Qi and blood, with main formulas such as Qingying Tang, Qingwen Baaidu Yin, and Xi Jiao Di Huang Tang. Penetrating method is used in conjunction with clearing, cooling the blood and penetrating the pathogen, blocking the pathogen from entering the interior and preventing the pathogen from sinking internally, with Gypsum and Water Buffalo Horn being commonly used penetrating agents. Draining method is used to unblock the bowels, guide stagnation, expel turbidity, and resolve stasis, treating constipation and the interplay of stasis heat, while also enhancing the antipyretic effect, with commonly used formulas being those of the Chengqi Tang category. Opening method is used to open the orifices and treat abnormal consciousness, with the cool opening trio and Water Buffalo Horn, Dragon Brain, and Musk being the preferred medicinal flavors [26-27].

In summary, Professor Bai Changchuan’s extensive experience and innovative approach to the treatment of externally contracted diseases, particularly focusing on the integration of traditional theories with modern clinical practices, have significantly contributed to the field of traditional Chinese medicine. His work continues to provide valuable insights and treatment for a wide range of diseases.

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