

The treatment and prevention of recurrent urinary infection with *Bu Zhong Yi Qi Tang*

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Abstract

Herbal medicine, along with acupuncture has been one of the most prominent treatment modalities of the Traditional Chinese Medicine (TCM). Herbal formulas have a centuries long history of use in treating patients. Just like the western medicine drugs are created each to treat a specific condition, the herbal formulas are created for treatment of a specific pattern.

In Chinese medicine, treatment is primary based on each patient's personally presenting patterns and only secondarily on their disease diagnosis. Therefore, patients with completely different disease may receive basically the same or similar treatment if the Chinese medical patterns they present are the same. Thus a single Chinese medical formula for the treatment of a single pattern may be used clinically to treat a large variety of western medicine disease. Therefore, over time, a new and alternative clinical applications may emerge for use of herbal formulas.

one example is the Bu Zhong Yi Qi Tang herbal formula. This formula was written by Li Dongyuan, a famous doctor who wrote the *Pi Wei Lun* (Discussion of spleen and stomach), and it has traditionally been used to treat spleen and stomach deficiency with inability to raise the clear, qi deficiency fever and sinking of the middle Jiao Qi. However, over time, clinical practitioners added some new applications to this formula.

This study will explore a alternative use of Bu Zhong Yi Qi Tang ----Treatment and prevention of chronic urinary infection (CUI). CUI is a common disease, and its incidence rate has been rising in recent years, which seriously affects people's life quality. Based on the evidence available in the literature, the study will make conclusions about the deeper, philosophical context that underpins the clinical application of Bu Zhong Yi Qi Tang in treating CUI.

This study is a desk based study that utilizes literature review as a data collection method. The conclusions will be based on the information collected from the peer-reviewed journals and conferences as well as from the personal experiences of the author as an experienced TCM practitioner who successfully utilized Bu Zhong Yi Qi Tang many times to treat CUI and other conditions.

Key words: Bu Zhong Yi Qi Tang Li Dongyuan Herbal formulae
TCM Chronic urinary infection

Introduction

In Chinese Medicine (hereby known as CM), treatment is primarily based on each patient's personal presenting pattern(s) and only secondary on their disease diagnosis. Therefore, patients with completely different diseases may receive basically the same or similar treatment if the Chinese medicine patterns they present are the same. Thus a single Chinese medicinal formula for the treatment of a single pattern may be used clinically to treat a large variety of Western medical diseases. One of the commonly used formulas to treat fever and prolapse due to deficient *Qi* is *Bu Zhong Yi Qi Tang*. The formula has been used since ancient times with the treatment principle and key ingredients remaining unchanged over time.

The formula *Bu Zhong Yi Qi Tang* was created by Dr. Li Dong Yuan (Li Gao) during the Jin dynasty and first appeared in his book *Nei Wai Shang BianHuoLun* (Clarifying Doubts About Injury from Internal and External Causes, 1274 CE). Today it is one of the most frequently used Chinese herbal formulas. The functions of *Bu Zhong Yi Qi Tang* are to tonify the spleen and stomach *Qi*, ascending yang, treat stagnation, and prevent yin fire. This formula is indicated for prolapse due to deficient *Qi*, marked by poor appetite, lassitude, loose stool, fever with perspiration, thirst with preference for hot drinks, or prolapse of the organs, protracted diarrhoea, metrorrhagia and metrostaxis.

Although normally used for treating indications listed above, presented as part of *Qi* deficiency with *Qi* stagnation pattern, *Bo Zhong Yi Qi Tang* is known to have alternative applications as well. For example, Dr Jin Zhao treats myasthenia gravis, diabetes, allergic chronic rhinitis, haemorrhoids, and chronic eczema [1]. Mei Wang applied this formula to treat Irritable Bowel Syndrome [2]. Bob Flaws achieved good result on prevention of nosocomial fungal infections with *Bu Zhong Yi Qi Tang* [3].

Bu Zhong Yi Qi Tang can be chosen to treat large amounts of diseases. However, all these diseases can be divided into two different stages of the *Bu Zhong Yi Qi Tang's pattern*. Professor Jiang gives a wonderful explanation to these two stages:

First stage:

The main condition of this stage is spleen and stomach *Qi* deficiency, with or without *Qi* sinking. Stagnation may be included, but not heat. The treatment method is to tonify the spleen and stomach and to clear or prevent stagnation. Using only *Bu Zhong Yi Qi Tang* is normally sufficient.

Second stage:

The main condition of this stage are spleen and stomach *Qi* deficiency with stagnation causing heat. The treatment method is to tonify deficiency, treat stagnation, clear heat, nourish fluids, blood, and *Yin*, and calm the *Shen*. If the heat becomes more severe, we need to clear heat. [4]

There are clear indications that *Bu Zhong Yi Qi Tang* can be utilised in treatment of recurrent UTIs.

Dr Ou observed the clinical efficacy of *Bu Zhong Yi Qi Tang* in treating urethral syndrome. A total of 40 cases were treated with self-made decoction- the modified *Bu Zhong Yi Qi Tang* (Huang Qi 60g, Bai Zhu 15g, Sheng Ma 15g, Dang Gui 15g, Ju Pi 10g, Chai Hu 15g, Zhi Gan Cao 9g, and Rou Gui 10g). One packet per day of these medicines was decocted in water to

obtain about 300 millilitres of medicinal liquid. This was administered in 100 millilitre doses each morning, lunchtime, and evening. Ten to fourteen days equalled one course of treatment. In terms of Chinese medical pattern discrimination, all 40 cases met the diagnostic criteria for *Qi* deficiency. Signs and symptoms included shortness of breath, lack of strength, abdominal distention, loose stool, fatigue, white facial complexion, pale tongue with thin and white coating, plus symptoms of urethral syndrome such as lower abdominal pain, a feeling of pressure in the abdomen, a sense of urgency to urinate or more frequent urination or trouble urinating, pain during urination or sex. All these symptoms will become worse after exertion. The results showed that the clinical symptoms of 30 patients disappeared after one course of treatment and for 10 patients it improved. Only for one patient did the symptoms remain the same [5].

Dr Fan treated an acute occurrence of chronic urinary tract infection with *Bu Zhong Yi Qi Tang* successfully. The 47-year-old male had suffered from haematuria for three years. Sometimes there would be blood in the urine and sometimes it would stop. However, this bleeding easily recurred after the man got fatigued. His Western medical diagnosis was chronic urinary tract infection, and he had previously been given various Western and Chinese medical treatments, including *Ba Zheng San* and *Xiao Ji Yin Zi*, but without obvious effect. His urine dribbled and dribbled with recurrence of haematuria. This was accompanied by lower abdominal sagging and distention, fatigue, shortness of breath, dizziness, a pink tongue, with white coating, and a weak pulse.

The patient's Chinese medical pattern was spleen deficiency and *Qi* falling to govern blood. Therefore, the treatment principles were mainly to tonify and boost the *Qi* assisted by clearing heat and nourishing *Yin*. The medicinals used consisted of uncooked *Huayu Qi* 15g, *Tai Zi Shen* 10g, *Bai Zhu* 10g, *Dang Gui* 10g, *Chai Hu* 3g, *Sheng Ma* 3g, *Chen Pi* 6g, *Zhi Mu* 6g, *Huang Bai* 5g, and mix-fried *Gan Cao* 5g. One packet of these medicines was decocted in water and administered orally once per day. After taking twelve packets, all his symptoms improved. Dr Fan next prescribed *Bu Zhong Yi Qi Wan* at a rate of six grams each time, twice a day. The man did this for a month and all his symptoms disappeared [6].

When we talk about *Bu Zhong Yi Qi Tang*, we must begin by understanding *Yin* fire (*Yin huo*). Although this is a challenging concept, when we understand what is meant by *Yin* fire, we will be able to understand how *Qi* deficiency can cause heat and how sweet and warm herbs may be used to clear heat. According to Dr Li, *Yin* fire is heat, and this heat is caused by stagnation. Why did Dr Li refer to the heat as *Yin* fire? Perhaps it is because the root of *Yin* fire is *Qi* deficiency.

I would like to divide the *Yin* fire into two types according to their cause and indications.

Qi stagnation causing *Yin* fire.

Generally speaking, *Qi* deficiency does not directly generate fire. However, *Qi* deficiency is a common cause of *Qi* stagnation and stagnation easily creates heat. Therefore, *Qi* stagnation is the first cause of *Yin* fire. We recognise symptoms of stagnation in the abdominal pain distention etc. Symptoms of heat include fever, hot sensation on four limbs or palms, and dry mouth and throat. The fever or hot sensation are worse with exertion and better with rest.

Damp stagnation causing *Yin* fire

Dr Li states "Dampness from the spleen and stomach moves downwards into the area of the kidneys where it causes obstruction." According to Dr Li, the deficient spleen and stomach creates dampness, and this dampness descends abnormally and obstructs the lower *Jiao*. Finally, this damp obstruction causes heat. The *Yin* fire together with damp obstruction on lower *Jiao* can cause urinary

problems such as hot sensation and pain during urination, unsmooth or frequent urination etc. In fact, because *Qi* deficiency is the root pattern, and the heat is from stagnation, other heat signs is rarely seen in this pattern. For example, the tongue is pale or pink, but not red, the coating is white but not yellow (the tongue tells the truth), the face is pale or shallow but not red, and there is a preference for warm over cold drinks etc.

From my own clinical practise experiences, I found that recurrent urinary infection due to *Qi* deficiency is caused by the combination of those two types of *Yin* fire. That is why the patients got hot, painful, unsmooth urination together with fever, hot sensation on four limbs or hot palms. Normally the patients have weak and deep *cun* pulse because of the *Qi* sinking.

It is important to understand that although we can use *Bu Zhong Yi Qi Tang* alone to treat both deficiency and stagnation, we must make some modifications to the formula when we treat yin fire due to damp stagnation, and one of the most important pieces of information mission in modern texts is how Dr Li modified this formula. I formulate a modified *ByZhong Yi Qi Tang* as follows to treat the recurrent urinary infection patients in my clinical practise and got significant results.

Ingredients and dosage

Huang Qi 20-30g

Dang Shen 10-15g

Bai Zhu 15-20g

ZhiGan Cao 6g

Dang Gui 6g

Ju Pi 3g

Sheng Ma 6-9g

Chau Hu 9g

CheqianZi 10g

Hua Shi 15-20g

Shi Wei 10g

One packet per day of these medicines was decocted twice in water to obtain a total of 600 millilitres of medicinal liquid. This was administered in 300 millilitre doses in the morning and afternoon. 10 to 15 days equals one course of treatment.

Analysis of formula

Huang Qi, Dang Shen, and ZhiGan Cao

These three herbs tonify spleen and *Qi* deficiency as the root treatment, and *HuangQi* is the best herb to both raise the *yang* and tonify the spleen deficiency. This is why they are used in large dose.

It is important to understand the meaning of Dr Li's statement that "these three herbs are the best combination for treating damp heat or heat." This action is an indirect consequence of tonifying deficiency. Because stagnation (*Qi* and damp) and heat comes from deficiency *Qi* tonifying

herbs ultimately move *Qi* and clear damp stagnation. However, to think they clear heat or damp heat directly would be a great mistake.

Bai Zhu

Bai Zhu tonifies the spleen and dries dampness, treating both the root deficiency and branch damp stagnation.

Chai Hu and Sheng Ma

Dr Li states that *Chai Hu* and *Sheng Ma* both help the clear *Qi* to ascend. While both herbs are well-known for their ability to raise sinking *Qi*, as acrid herbs they also move stagnation. It is important to note that these herbs do not tonify, and to ascend *Yang* we must simultaneously tonify with herbs like *Huang Qi* and *Dang Shen*, since *Qi* deficiency is the cause of *Qi* sinking. If tonifying herbs are not applied, acrid and cold herbs will not help to raise the *Yang*, but will instead cause further damage to the spleen and stomach *qi*. The most important part of the function of *Chai Hu* and *Sheng Ma* is that they move stagnation and clear some heat. Therefore, I will choose comparatively big dosage of *Chai Hu* and *Sheng Ma* if the patients have obvious fever, or severe hot sensation on four limbs or hot palm to clear the *Yin* fire due to the *Qi* stagnation.

Chen Pi

The main functions of *Chen Pi* are to treat and prevent stagnation of *Qi* and dampness.

Dang Gui

Dang Gui is sweet, acrid, bitter, and warm. It tonifies the blood, but also moves blood stagnation and prevents heat from damaging the blood. Therefore, it both treats and prevents blood deficiency and stagnation. Dr Li calls this action “harmonises blood vessels”.

The one function of *Dang Gui* mentioned here is “treats stagnated *Qi*,” so *Bai Shao* is not suitable in this formula even though *Bai Shao* can nourish blood, clear away heat, and stop abdominal pain. Because of its astringent nature, it will aggravate the stagnation.

Che Qian Zi, Hua Shi, and Shi Wei

Three of them clear heat and facilitate the resolution of dampness from the lower *Jiao* to treat the branch. *Hua Shi* is an especially important substance in treating hot painful urinary dribbling or any condition with dark, painful, burning, and scanty urine.

Generally speaking, if a patient clearly shows a heat condition, we must add cold herbs to treat it, as *Bu Zhong Yi Qi Tang* treats deficiency and some level of stagnation but not heat. This is an important point that must be emphasised, since these modifications are often omitted from modern text when they should be included.

Cases

Two recurrent urinary infection cases with treatment of *Bu Zhong Yi Qi Tang* in my clinical practise are presented below.

Case one

A 28-year-old male has suffered from recurrent lower abdominal pain, hot and unsmooth urination for a year. His accompanying symptoms included mild lower abdominal pain, hot and unsmooth urination, fatigue and abdominal distention. He was diagnosed as recurrent urinary infection by a Western medicine doctor. He got a few sessions of treatment with antibiotics, but the condition would come back later, especially when he feels tired. His face is shallow and flabby, his

body surface and palms were very hot and he always wears less clothes than normal people. His tongue is pale with thin white coating, his *Cun* pulse is weak. I prescribed 10 days modified *Bu Zhong Yi Qi Tang* for him . His symptoms significantly improved.

Case two

A 53-year-old female had suffered from recurrent painful and unsmooth urination for 10 years. Her condition would occur when she became very tired or after sexual intercourse. She visited her GP several times. No disease was detected. She took some antibiotics without obvious efficacy. She was very frustrated because she cannot find a real treatment. Her energy was very low, she would sweat very easily when she did a bit of physical work. She would get heavy, prolapse sensation on her forehead after her sweating. She felt cold and hot very easily and her palm was very hot. Her tongue was pale with thin and white coating and her pulse was weak and rapid. I prescribed her 10 day modified *Bo Zhong Yi Qi Tang*. Afterwards, her hot and painful urination disappeared and other symptoms improved. I asked her to take *Bo Zhong Yi Qi wan* regularly.

Conclusion

In this research, I presented an alternative use for *Bo Zhong Yi Qi Tang*. The theoretical and practical background behind the reasons why the formula works in this alternative application was given. Two patient cases have been presented and some conclusions made. It can be suggest that more research is needed in this basis to prove the utility of *Bo Zhong Yi Qi Tang* in treating chronic urinary infection. If tests prove successful, it might be that this application becomes part of the standard body of knowledge related to *Bo Zhong Yi Qi Tang* especially as antimicrobial resistance for treating recurrent urinary infection become more serious internationally [7]. It is important to use alternative medicine therapy. Chinese herbal medicine has a recorded history of treating symptoms of UTI for over two thousand years [8]. Therefore, the Chinese herbal medicine may become important part for treating UTI in the future, and *Bo Zhong Yi Qi Tang* might become the common choice for treating recurrent urinary infection due to *Qi* deficiency.

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