

Precise Application of the Xiao-Chai-Hu-Tang in 98 Cases of Patients with the Major Syndrome of Feeling Pain and Tenderness under the Right Costal Arch

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Abstract

Xiao-Chai-Hu-Tang (XCHT), a representative of previous edition of Formulas of Traditional Chinese Medicine and harmonizing formulas, has multiple pharmacological functions. However, a variety of side effects could be caused by misuse or abuse, ignoring the theory of diagnosis and treatment based on the combination of syndrome and disease differentiation. Therefore, we conducted a retrospective study to evaluate the efficacy of XCHT, depending upon the individual patient's condition. Among 98 patients treated with XCHT, most of the patients of syndromes could be cured after about two course. The therapeutic effect rate of prescribed XCHT in our 98 cases of treatment is 91.84% (90/98). In addition, the high frequently syndromes are consistent with Shanhanlun. With multiple years of experience, we believe that: patient feel pain and tenderness under the right costal arch is one of the symptoms of patients who fit for the treatment with XCHT.

Key words: diagnosis; Xiao-Chai-Hu-Tang (XCHT); syndrome; therapeutic effect

Xiao-Chai-Hu-Tang (XCHT), the famous classical prescription, was earliest reported in the ancient Chinese medical book Shanghanlun over 2000 years ago^[1]. It consists of Bupleurum falcatum, Panax ginseng, Scutellaria baicalensis, Pinellia ternate, Glycyrrhiza glabra, Zingiber officinale, and Zizyphus jujube^[2, 3]. With these 7 simple types of medicinal herbs, XCHT combines the therapy of cooling with warming and is homological in ascending and descending and works on clearing and tonifying^[4]. As the representative of previous edition of Formulas of Traditional Chinese Medicine and harmonizing formulas, XCHT takes "mediation" as a functional feature, which can be used in exogenous febrile diseases and miscellaneous diseases of internal injury. Generations of physicians extend and derive its connotation based on "mediation". The common saying, "Xiao-Chai-Hu-Tang cure for all disease", represents XCHT's wide range of applications and its impressive curative effects. However, a variety of side effects could be caused by misuse or abuse, ignoring the theory of diagnosis and treatment based on the combination of syndrome

CLINICAL DATA

In this retrospective study, we reviewed the data of 100 patients (56 male and 44 female, range 3-78 years) who had prescribed Xiao-Chai-Hu-tang from June 2009 to May 2017 at Shouguang Hospital of Traditional Chinese Medicine and Shandong University of Traditional Chinese Medicine Affiliated Hospital.

DIAGNOSTIC CRITERIA

The diagnostic criteria are met with the major syndrome and the one of secondary syndromes. The major syndrome is that the patient feel pain and tenderness under the right costal arch. The secondary syndrome were as follows: (1) intermittent chills and fevers, (2) a feeling of distention and oppression in the chest and costal region, (3) anorexia and disinclination to talk, (4) restless and nauseous, (5) bitterness in the mouth, (6) a parched throat, (7) vertigo, (8) pulse string.

TREATMENTS

The treatment was in accordance with the modification of XCHT in Shanghanlun. To be restless but not nauseous: Take away *Pinellia ternate* and *Panax ginseng*, and add *Fructus Trichosanthis*; With thirst for water: Take away *Pinellia ternate*, increase *Panax ginseng* to four and a half liang, add *Radix Trichosanthis*; With abdominal pain: Take away *Scutellaria baicalensis*, add *Radix Paeoniae*; With mass below the costal margin: Take away *Zizyphus jujube*, and add *Concha Ostreae*; With palpitation and dysuria: Take away *Scutellaria baicalensis*, and add *Poria*; No thirst of water but with a slight exterior fever: Take away *Panax ginseng*, and add *Ramulus Cinnamomi*. Cover the patient with a quilt to obtain a light perspiration; Accompanied by coughing: Take away *Panax ginseng*, *Zingiber officinale* and *Zizyphus jujube*; add *Fructus Schisandrae* and *Rhizoma Zingiberis*. Five days count as a course, and the total treatment time is two courses or until the patient is cured.

THERAPEUTIC CRITERIA

Cured: major syndrome and secondary syndromes disappeared; Effective: major syndrome significantly decreased and secondary syndromes were significantly alleviated; Ineffective: the symptoms were not significantly improved.

RESULTS

With the exception of one patient who was unable to fulfill timely follow-up and another patient who was transferred to another hospital due to aggravation in the primary diseases, the therapeutic effect for the other 98 patients is shown in Table 1. Among these patients, most of the patients of syndromes could be cured after about two course. The high frequently syndromes are consistent with Shanhanlun (Table 2).

Table 1. Therapeutic Effect of Prescribed XCHT

Patients	Cured	Effective	Ineffective	Total Effective Rate(%)
98	84	6	8	91.84

Table 2. The High Frequency Syndromes of XCHT

Syndrome	Frequency	Ratio (%)
Bitterness in the mouth	45	45.92
Reluctant to speak and eat	45	45.92
Nauseous	41	41.84
Intermittent chills and fevers	27	27.55
Parched throat	26	26.53

Vertigo	25	25.51
Feels a distention and a sensation of oppression in the chest and costal region	21	21.43
Restless	20	20.41
Headache	17	17.35

DISCUSSION

Xiao-Chai-Hu-Tang also called Minor Bupleurum Decoction is traditionally used in Japan, Korea and China^[5]. The preparation of formulas in which herbs are combined to achieve greater efficacy than individual herb is a form of oriental herbology. These herbal formulas are commonly used for treatment of a number of disorders^[6]. Previous studies demonstrated that XCHT has multiple pharmacological functions, such as inhibition of hepatitis virus^[7, 8], anti-inflammatory^[9-13], anti-hepatic fibrotic^[14], immune-modulating^[9, 15, 16], antioxidant^[17], anti-cancer^[18-20], liver protective effect^[21-23], and renal protective effect^[24-26]. However, Chinese herbal medicine should be specifically used depending upon a syndrome, not a disease, and a number of side effects could be caused by the misuse or abuse without any consideration of syndrome differentiation^[27]. Reports have raised concerns regarding acute respiratory failure and interstitial pneumonia^[28]. Indeed, the patients who took XCHT for treating chronic liver diseases have cases of interstitial pneumonia^[5]. According to Lee^[29] et al, the incidence of side effects could be increased by coadministration of interferon, the duration of XCHT treatment and increasing age of patients. Therefore, it is very difficult to tell whether or not the apparent side effects are causally linked to XCHT administration.

With multiple years of experience, we believe that: patient feel pain and tenderness under the right costal arch is one of the symptoms of “When one of the symptoms of syndrome is observed, a diagnosis of Xiao-Chai-Hu tang syndrome can be established.” Other examples include Triple-jiao and Gallbladder, which are associated with Couli and vellus hair (Cou is a juncture where the Triple-jiao and Body Resistance converge and a Channel where in vital energy and the blood flow. Li is the texture on skin, viscera and bowels.)^[30]. When the blood is deficient and Vital Resistance weaken, the Couli opens, so the pathogenic factor intrudes into Couli through the vellus hair and enters the triple-jiao channel of hand shaoyang; then the triple-jiao channel of hand shaoyang intersect with the gallbladder channel of foot shaoyang on the neck and shoulder. Consequently, pathogenic factors enter the gallbladder Channel of Foot-Shaoyang; Then through quepen (supraclavicular fossa), gallbladder channel connect to the liver and the gallbladder attaches to the liver, the pathogenic factors enter the gallbladder. On the other hand, liver is located at the left side and lungs are located at the right side, spirit and essence circulation refer to left as ascending and right as descending^[31]. The lung governs qi, externally it connects with skin and body fair. The pathogenic factors pass through upper-jiao with lung qi fall from the right side, then stagnate in the subcostal; consequently, the patient feels pain and tenderness under the right costal arch. The evidence exhibited is caused by the pathogenic factors’ struggles against the body resistance at the costal region. The syndromes include feeling of distention and oppression in the chest and costal region, anorexia and disinclination to talk, restless and nauseous.

In summary, among 98 patients treated with XCHT, most of the patients of syndromes could be cured after about two course. The therapeutic effect rate of prescribed XCHT in our 98 cases of treatment is 91.84% (90/98). In addition, the high frequently syndromes are consistent with Shanhanlun. With multiple years of experience, we believe that: patient feel pain and tenderness under the right costal arch is one of the symptoms of patients who fit for the treatment with XCHT.

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