## MINOR BUPLEURUM COMBINATION XIAO CHAI HU TANG

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MINOR BUPLEURUM COMBINATION is one of the greatest prescriptions in the history of the formulary. It is versatile with wide ranging applications and as a result, is one of the most often used. Modifications are easily done with liquid extracts by mixing two to three formulas into one bottle. Or, one can prescribe separate bottles; the advantage of this method is the allowance for dose adjustment as the case progresses. This is very close to the prescribing styles of Kanpo in Japan where the formula is held "sacred," kept intact and then combined.

## FUNCTIONS OF FORMULA INGREDIENTS

Bupleurum relieves stagnation of Shao Yang, courses the liver and rectifies the qi, upbears the clear and disinhibits the Qi mechanism. Scutellaria clears heat of chest and abdomen including the liver, gallbladder, stomach, and lungs. When Bupleurum and Scutellaria are combined, the former disperses the exterior and the latter resolves and interior heat. Pinellia and Ginger harmonize the stomach to stop vomiting, downbear turbidity, eliminate dampness and transform Phlegm. Ginseng, Chinese Licorice root, and Jujube dates fortify the Spleen and supplement the Qi (as well as nourish the Heart spirit) and harmonizes the middle Jiao—this is the harmonizing method and is useful for complex conditions and under many circumstances for children adults and elderly.

#### CLASSIC SIGNS AND SYMPTOMS FOR MINOR BUPLEURUM COMBINATION IN A SHAO YANG DISORDER

Signs & symptoms from the *Treatise on Damage by Cold* include alternating heat effusion and chills, dry throat, bitter or sour taste in the mouth, dizziness, irritability, sensation of fullness in the chest & hypochondria (difficulty taking a deep breath), heartburn, nausea & vomiting, reduced appetite. The tongue has a thin white coat, and the pulse is bowstring. However, "One sign or symptom that's enough, it is not necessary to have the others" states author of the formula, Zhang.

#### **INGREDIENTS:**

Radix Bupleuri(chai hu)
Rhizoma Pinellia Ternatae(ban xia)
Radix Scutellariae(huang qin)
Fructus Zizyphi Jujubae(da zao)
Radix Codonopsitis Pilosulae(dang shen)
Rhizoma Zingiberis(sheng jiang) Officianalis Recens
Radix Glycyrrhizae Uralensis(gan cao)
Radix Panacis Ginseng(bai ren shen)

#### COMMENTARY FROM EXPERIENCE

When a person has an infection, the most reliable indications for transmission into the shao yang are diminished appetite and a wiry pulse at moderate depth. This condition is more common than initial infection patterns, especially in children and elderly. This is probably because by the time the patient seeks advice the infection has begun to generate heat and stimulate the sympathetic nervous system causing diminished appetite. If an infection is not very severe, one can give Minor Bupleurum Combination since "the righteous is weak and the evil is not strong." This refers to a moderate response to a pathogen. In this situation "half interior and half exterior" refers not to location, rather to moderate pathogens with moderate responses. When there are moderate symptoms Minor Bupleurum Combination can be also used in early Tai Yang stage. In addition, all age groups can use this formula. Lastly, ancient books have stated that the primary formula for disease of the three Yang stages is Minor Bupleurum Combination.

## ADDITIONAL PATTERNS OF DISHARMONY

Minor Bupleurum Combination is mild and can be used for many different types of problems besides disharmony between the interior and exterior. It can be used for internal disharmonies such as zang-fu patterns involving the liver and spleen, spleen and stomach, and the stomach and intestines. In addition, it can be used for reversal patterns including these Yin Fire concepts of Li Dong Yuan. These include ministerial fire (flushing due to emotions) that tends to rise through the shao yang, spleen qi vacuity with damp sinking down causing dampness and heat wherein the heat rises, and qi stagnation that results in heat that rises.

# TYPICAL BIOMEDICAL CONDITIONS THAT ARE TREATED WITH MINOR BUPLEURUM COMBINATION

The principal biomedical indications are: infectious disease that lingers and the body does not succeed in fighting such as influenza, bronchitis, pneumonia, malaria, hepatitis, mumps, common cold with lingering fever, acute and chronic bronchitis, pleuritis, pneumonia, liver and gallbladder diseases including hepatitis and gallstones, gastric diseases, middle ear infections, mastitis, neck stiffness, puerperal fever, chills and fever caused by uterine inflammation, stuttering, epilepsy, impotence, neurosis, alopecia, mental instability in children, and to generally improve one's health.

#### SOURCE TEXT

I,700 years ago, the "Saint of Medicine," Zhang Zhong Jing compiled the Treatise on Damage by Cold and Miscellaneous Diseases during the Han dynasty. From his fountain of deep knowledge, he summarized two earlier essential schools of thought into the text, they were the classical Yi Jing school (based on Yellow Emperor's Classic) and the Jing Fang school, which is based on clinical experience. The text was later divided into the Treatise on Cold Diseases (Shang Han Lun) and the Treasures of the Golden Cabinet (Jin Gui Yao Lue). The people called these two texts "The Precious Sword."

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(continued)

One could describe the *Treatise on Damage by Cold* as running water since it is always changing (channel transmission) whereas the *Golden Cabinet* is more similar to a stable eddy in the river. *Treatise on Damage by Cold* is active and the *Golden Cabinet* is relatively static. *The Treatise on Damage by Cold* is acute disease, with severe or changing symptoms. *Golden Cabinet* is used to treat acute or chronic infectious or degenerative diseases that affect the internal organs. The two texts are used in concert, they are interdependent and they cannot be separated.

#### BIOMEDICAL CONCEPTS RELATED TO THE SHAO YANG STAGE OF SHANG HAN LUN

Minor Bupleurum Combination is appropriate when cellular immunity and pathogens are both weak; the low toxicity combined with a weak response causes a lower fever. These weak toxins cause disorders of the vegetative nervous system causing sympathetic dominance with effects on the gut system leading to diminished secretions of gastrin, kinins, or enzymes. In this pattern, aversion to cold is only slight, this is because the endopyrogens are low so the fever is low.<sup>2, 3</sup> However, this is true whether the nervous system is responding to pathogens or stress.<sup>4</sup>

The nervous system is affecting the digestive<sup>5</sup> system This causes symptoms such as bitter mouth, dry throat, dizzyness, or headache. These are due to slight toxins attacking the body. If there are no toxins but emotional disorders, the same symptoms may be present. Depression thus applies to *Shao Yang* disease. This is why it is the most commonly prescribed formula.

Minor Bupleurum Combination enhances immunity by augmenting killer cell activity.<sup>6</sup>

This could be one of the mechanisms involved in clinical efficacy of Minor Bupleurum Combination for patients with chronic viral hepatitis.  $^{\rm I}$ 

#### RESEARCH

I. Minor Bupleurum Combination animal studies suggest the need for further inquiry into efficacy against infectious agents such as Pseudomonas aeruginosa<sup>7</sup> and Listeria monocytogenes.<sup>8-10</sup>

- Minor Bupleurum Combination may be a potent macrophage activator<sup>II</sup> stimulating phagocytic activity.
- Minor Bupleurum Combination acts as a polyclonal B-cell activator which induces IgA production in the mucosal immune system.<sup>12</sup>

#### DRUG HERB INTERACTIONS

- I. Minor Bupleurum Combination slightly hastens the gastrointestinal absorption of tolbutamide. In addition, the elevation of the gastrointestinal absorption rate by Minor Bupleurum Combination might potentiate the hypoglycaemic effect of this sulphonylurea in the early period after oral administration.<sup>13</sup>
- 2. There is a suggestion that combining Minor Bupleurum Combination and interleukin(IL)-2 induces enhanced immunological reaction in specific organs and tissues, and IL-6 may have a role in the synergistic effect of these two agents. It was concluded that combination of Minor Bupleurum Combination and IL-2 can be useful in the treatment of patients with renal cell carcinoma.<sup>14</sup>
- 3. Interferon causes neutrophils to accumulate in the lung. Minor Bupleurum Combination alone may not injure lung tissue, but it increases the effect of interferon. When stimulated by some antigens, Minor Bupleurum Combination may overstimulate the neutrophils. Granulocytes elastase and oxygen radicals released from activated neutrophils may damage lung tissue. The fibroblasts that repair the damaged tissue may increase the risk of pulmonary fibrosis.<sup>15</sup>

#### **EPILOGUE**

Minor Bupleurum Combination is versatile and effective, especially for people with weakened immune status or a weak constitution. Examples include elderly, children, and women postpartum. There is a good reason it is most often prescribed in Japan, and that includes the significantly growing body of evidence for the efficacy of this formula in a wide range of applications. As this culture moves towards evidence based medicine, this is a formula that can be presented in hospital settings or other mainstream medical settings as material with evidence for its safety and efficacy, with an understanding of risks and benefits.

#### CASE STUDIES

A 50-year-old man presented with fever, headache, slight sweat, aversion to cold. The man was exposed to cold due to insufficient clothing. Upon presentation to the office, he wore a scarf demonstrating aversion to cold. This case should be tai yang. But, he has stuffiness in the chest with a sore throat, indicating the cold is beginning to penetrate the interior and generate heat. In this situation one can't use Bupleurum and Cinnamon which would be appropriate for a combined tai yang-shao yang pattern because of the sore throat. A prescription of Minor Bupleurum Combination resolved the case in three days.

A 28-year-old female presented with a sudden high fever one week after giving childbirth. The vaginal discharge was normal. She used Ma Huang and Armeniacae for three days with no affect. She had alternating dimished appetite, nausea, bitterness in the mouth, and subcostal fullness. The tongue had a white coating and the pulse was wiry. Her case resolved in two days.

For the patterns of Minor Bupleurum Combination combined with:

- I. FEVER, SWEAT AND HEADACHE: use Bupleurum and Cinnamon Formula instead of Minor Bupleurum Combination
- 2. NECK PAIN OR EXTREMITY PAIN: use with Pueraria Plus Formula
- 3. AT THE END OF AN INFECTION: add Ginseng and Astragalus to assist the righteous qi to expel any remnants of evil.
- 4. WITH A THIN WIRY PULSE, A PALE TONGUE WITH A RED TIP AND PERIMENSTRUAL DISCOMFORT: add Dong Quai Four Formula.
- 5. WIND HEAT TRANSFORMING TO THE INTERIOR: combine with Yin Qiao San
- 6. RED SORE THROAT: add Isatis Formula.

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#### **FOOTNOTES**

- Kaneko M, Kawakita T, Tauchi Y, Saito Y, Suzuki A, Nomoto K. Augmentation of NK activity after oral administration of a traditional Chinese medicine, xiao-chai-hutang (shosaiko-to). Immunopharmacol Immunotoxicol. Feb 1994;16(1):41-53.
- Sakaguchi S, Furusawa S, Yokota K, Sasaki K, Takayanagi Y. Depressive effect of a traditional Chinese medicine (sho-saiko-to) on endotoxin-induced nitric oxide formation in activated murine macrophage J774A. I cells. Biol Pharm Bull. Apr 1995;18(4):621-623.
- Sakaguchi S, Tsutsumi E, Yokota K. Defense effects of a traditional Chinese medicine (sho-saiko-to) against metabolic disorders during endotoxemia; approached from the behavior of the calcium ion. Biol Pharm Bull. Feb 1994;17(2):232-236.
- Travagli RA, Hermann GE, Browning KN, Rogers RC. Musings on the Wanderer: What's New in our Understanding of Vago-Vagal Reflexes?: III. Activity-dependent plasticity in vago-vagal reflexes controlling the stomach. Am J Physiol Gastrointest Liver Physiol. Feb 2003;284(2):G180-187.
- Nishimura N, Naora K, Hirano H, Iwamoto K. Effects of sho-saiko-to (Minor Bupleurum Combination), a Chinese traditional medicine, on the gastric function and absorption of tolbutamide in rats. Yakugaku Zasshi. Feb 2001;121(2):153-159.
- Yamaoka Y, Kawakita T, Kaneko M, Nomoto K. A polysaccharide fraction of shosaiko-to active in augmentation of natural killer activity by oral administration. Biol Pharm Bull. Jun 1995;18(6):846-849.
- Kawakita T, Yamada A, Mitsuyama M, Kumazawa Y, Nomoto K. Protective effect of a traditional Chinese medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to), on Pseudomonas aeruginosa infection in mice. Immunopharmacol Immunotoxicol. 1987;9(4):523-540.
- 8. Kawakita T, Yamada A, Mitsuyama M, Kumazawa Y, Nomoto K. Protective effect of a traditional Chinese medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to), on Listeria monocytogenes infection in mice. Immunopharmacol Immunotoxicol. 1988;10(3):345-364.

- Kawakita T, Mitsuyama M, Kumazawa Y, Miura O, Yumioka E, Nomoto K.
  Contribution of cytokines to time-dependent augmentation of resistance against
  Listeria monocytogenes after administration of a traditional Chinese medicine,
  xiao-chai-hu-tang (Japanese name: shosaiko-to). Immunopharmacol Immunotoxicol.
  1989;11(2-3):233-255.
- Yonekura K, Kawakita T, Mitsuyama M, et al. Induction of colony-stimulating factor(s) after administration of a traditional Chinese medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to). Immunopharmacol Immunotoxicol. 1990;12(4):647-667
- II. Kumazawa Y, Takimoto H, Miura S, et al. Activation of murine peritoneal macrophages by intraperitoneal administration of a traditional Chinese herbal medicine, xiao-chai-hu-tang (Japanese name: shosaiko-to). Int J Immunopharmacol. 1988;10(4):395-403.
- Tauchi Y, Yamada A, Kawakita T, et al. Enhancement of immunoglobulin A production in Peyer's patches by oral administration of a traditional Chinese medicine, xiao-chai-hu-tang (Shosaiko-to). Immunopharmacol Immunotoxicol. Mar-Jun 1993;15(2-3):251-272.
- Nishimura N, Naora K, Hirano H, Iwamoto K. Effects of Sho-saiko-to on the pharmacokinetics and pharmacodynamics of tolbutamide in rats. J Pharm Pharmacol. Feb 1998;50(2):231-236.
- 14. Huang Y, Marumo K, Murai M. Antitumor effects and pharmacological interaction of xiao-chai-hu-tang (sho-saiko-to) and interleukin 2 in murine renal cell carcinoma. Keio J Med. Sep 1997;46(3):132-137.
- Murakami K, Okajima K, Sakata K, Takatsuki K. [A possible mechanism of interstitial pneumonia during interferon therapy with sho-saiko-to]. Nihon Kyobu Shikkan Gakkai Zasshi. Apr 1995;33(4):389-394.