# Tong Xiè Yào Fāng (Important Formula for Painful Diarrhea) 痛瀉要方

痛泻要方

Pinyin Name: Tong Xie Yao Fang

Literal Name: Important Formula for Painful Diarrhea

Alternate Names: Bai Zhu Shao Yao San (Atractylodes Macrocephala and Peony Powder), Important Formula for Painful

Purging

Original Source: Jing Yue Quan Shu (Collected Treatises of [Zhang] Jing Yue) by Zhang Jie-Bin (Zhang Jing-Yue) in 1624

#### COMPOSITION

Bai Zhu (Rhizoma Atractylodis Macrocephalae), chao (dry-fried) with soil	90g [6g]
Bai Shao (Radix Paeoniae Alba), chao (dry-fried)	60g [6g]
Chen Pi (Pericarpium Citri Reticulatae), chao (dry-fried)	45g [4.5g]
Fang Feng (Radix Saposhnikoviae)	60g [3g]

#### **DOSAGE / PREPARATION / ADMINISTRATION**

The source text states that this formula may be prepared as a decoction, pills or powder. Today, this formula is usually prepared as a decoction with the doses suggested in brackets.

#### CHINESE THERAPEUTIC ACTIONS

- 1. Tonifies the Spleen and sedates the Liver
- 2. Dispels dampness and stops diarrhea

#### **CLINICAL MANIFESTATIONS**

Abdominal pain and diarrhea caused by Spleen deficiency and Liver excess: borborygmus, flatulence, diarrhea, tenesmus, abdominal pain which persists after defecation, a thin, white tongue coating, and a thin, wiry, pulse.

#### **VETERINARY CLINICAL APPLICATIONS**

Diarrhea, diarrhea secondary to hyperthyroidism in the cat, chronic enteritis and inflammatory bowel disease.

#### **EXPLANATION**

Tong Xie Yao Fang (Important Formula for Painful Diarrhea) treats abdominal pain and diarrhea caused by the Liver overacting on the Spleen, with abdominal pain and cramping prior to defecation that is relieved after the stool has been passed. The pain is not due to retention of food or other substances; rather, the pain is due to the Liver (excess) overacting on the Spleen (deficiency). Diarrhea is the direct reflection of digestive weakness secondary to an overactive Liver.

This formula contains *Bai Zhu* (Rhizoma Atractylodis Macrocephalae) as the chief herb to tonify the Spleen and dry dampness. *Bai Shao* (Radix Paeoniae Alba), the deputy herb, nourishes the blood and relieves pain by sedating the Liver and softening Liver qi. *Chen Pi* (Pericarpium Citri Reticulatae) regulates qi, dries dampness, awakens the Spleen and harmonizes the middle *jiao*. *Fang Feng* (Radix Saposhnikoviae) disperses Liver qi to help stop the Liver from overacting on the Spleen, and directs the effects of the formula to the Spleen and Liver.

Tong Xie Yao Fang (Important Formula for Painful Diarrhea)

Diagnosis	Clinical Signs	Treatment	Herbs
Abdominal pain and diarrhea caused by Spleen deficiency and Liver excess	Borborygmus, flatulence, diarrhea, tenesmus, abdominal pain and bloating: Liver excess overacting on Spleen deficiency     Thin, white tongue coating and a wiry, thin pulse: presence of deficient and excess conditions	Tonifies the Spleen and sedates the Liver     Dispels dampness and stops diarrhea	<ul> <li>Bai Zhu (Rhizoma Atractylodis Macrocephalae) tonifies the Spleen and dries dampness.</li> <li>Bai Shao (Radix Paeoniae Alba) nourishes the blood and relieves pain by sedating the Liver and softening Liver qi.</li> <li>Chen Pi (Pericarpium Citri Reticulatae) regulates qi, dries dampness, and harmonizes the Stomach.</li> <li>Fang Feng (Radix Saposhnikoviae) disperses Liver qi to help stop the Liver from overacting on the Spleen.</li> </ul>

## Tông Xiè Yào Fang (Important Formula for Painful Diarrhea)

#### **VETERINARY MODIFICATIONS**

- For chronic diarrhea, add dry-fried Sheng Ma (Rhizoma Cimicifugae).
- If the diarrhea is caused by acute gastroenteritis or bacterial diarrhea, add Ge Gen Huang Qin Huang Lian Tang (Kudzu, Coptis, and Scutellaria Decoction) and Shan Zha (Fructus Crataegi).
- If the diarrhea is caused by hyperthyroidism, add *Ge Gen* (Radix Puerariae Lobatae), *Mu Li* (Concha Ostreae), and *Xia Ku Cao* (Spica Prunellae), and increase the dose of *Bai Shao* (Radix Paeoniae Alba) and *Fang Feng* (Radix Saposhnikoviae).
- For diarrhea in chronic hepatic diseases, add *Ge Gen* (Radix Puerariae Lobatae), *Shan Zha* (Fructus Crataegi), *Fu Ling* (Poria), and *Yi Yi Ren* (Semen Coicis).
- With a greasy, yellow tongue coating, add Huang Lian (Rhizoma Coptidis).

#### **CAUTIONS / CONTRAINDICATIONS**

- Fang Feng (Radix Saposhnikoviae) is an important herb in this formula that serves two purposes: to disperse Liver qi stagnation and to guide the formula to the Spleen channel. However, its dose must not be arbitrarily increased, or its function will shift to an exterior-releasing emphasis.
- Avoid cold, raw, oily or greasy foods while taking Tong Xie Yao Fang.<sup>1</sup>

#### **PHARMACOLOGICAL EFFECTS**

- 1. Gastrointestinal: This formula had a marked effect on the production of gastric acid in laboratory rats. At 25g/kg and 75g/kg (dose of dried herbs), it reduced gastric acid production by 59.1% and 64.1%, respectively.<sup>2</sup> The use of this formula was also associated with a marked inhibitory effect on intestinal peristalsis in rabbits.<sup>3</sup>
- Antibiotic: This formula was associated with an inhibitory
  effect against Bacillus dysenteriae, E. coli, and Staphylococcus
  aureus.

#### **HUMAN CLINICAL STUDIES AND RESEARCH**

- 1. Diarrhea: Use of Tong Xie Yao Fang was associated with recovery in 43 of 45 children with diarrhea.<sup>4</sup> Another study reported 93.8% effectiveness using modified Tong Xie Yao Fang to treat 32 patients with diarrhea.<sup>5</sup>
- 2. Acute enteritis: Sixty patients with acute enteritis characterized by severe pain and diarrhea were treated with Tong Xie Yao Fang with a 90% overall rate of effectiveness. The patients received 1-2 packs of herbs for treatment. The study reported no side effects in most patients.<sup>6</sup>
- 3. Chronic enteritis: Thirty-five patients with chronic enteritis were treated with modified *Tong Xie Yao Fang* with complete recovery in 28 patients, moderate improvement in 5 patients, and no effect in 2 patients. The herbal treatment

- contained dry-fried *Bai Shao* (Radix Paeoniae Alba) 20-30g, dry-fried *Bai Zhu* (Rhizoma Atractylodis Macrocephalae) 15g, *Chen Pi* (Pericarpium Citri Reticulatae) 6g, and *Fang Feng* (Radix Saposhnikoviae) 10g. Modification included the addition of *Sheng Ma* (Rhizoma Cimicifugae) 6g for chronic diarrhea; increased dose of *Bai Shao* (Radix Paeoniae Alba), with the addition of *Mu Gua* (Fructus Chaenomelis) 6g, and *Mu Xiang* (Radix Aucklandiae) 6g for severe abdominal pain; and *Dang Shen* (Radix Codonopsis) 10g for fatigue.<sup>7</sup>
- 4. Chronic colitis: Twenty patients with chronic colitis were treated with modified Tong Xie Yao Fang for one and a half months with marked improvement in 14 patients, moderate improvement in 4 patients, and no effect in 2 patients. The treatment included Fang Feng (Radix Saposhnikoviae), Bai Zhu (Rhizoma Atractylodis Macrocephalae), Chen Pi (Pericarpium Citri Reticulatae), Bai Shao (Radix Paeoniae Alba), Wu Mei (Fructus Mume), Mu Gua (Fructus Chaenomelis), Dang Shen (Radix Codonopsis), Shan Yao (Rhizoma Dioscoreae), and Shan Zha (Fructus Crataegi).8 Another study reported 93.55% effectiveness using modified Tong Xie Yao Fang to treat 124 patients with chronic colitis (25 with complete recovery, 68 with significant improvement, and 23 with moderate improvement). The herbal formula contained Yi Yi Ren (Semen Coicis) 20g, Che Qian Zi (Semen Plantaginis) 20g, Huang Qi (Radix Astragali) 15g, Bai Jiang Cao (Herba cum Radice Patriniae) 15g, Bai Zhi (Radix Angelicae Dahuricae) 15g, dry-fried Bai Shao (Radix Paeoniae Alba) 12g, Hou Po (Cortex Magnoliae Officinalis) 12g, Fang Feng (Radix Saposhnikoviae) 3g, Bai Zhu (Rhizoma Atractylodis Macrocephalae) 10g, Ku Shen (Radix Sophorae Flavescentis) 10g, dry-fried Cang Zhu (Rhizoma Atractylodis) 10g, Mu Xiang (Radix Aucklandiae) 5g, Chen Pi (Pericarpium Citri Reticulatae) 6g, and Chai Hu (Radix Bupleuri) 6g. The patients were given the herbs in decoction for 2 weeks per course of treatment, with duration of 1-6 courses total.9
- 5. Ulcerative colitis: Thirty-five patients with ulcerative colitis were treated with modified *Tong Xie Yao Fang* for 20 days with marked improvement in 30 patients and moderate improvement in 5 patients. The formula included *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), *Bai Shao* (Radix Paeoniae Alba), *Chen Pi* (Pericarpium Citri Reticulatae), *Fang Feng* (Radix Saposhnikoviae), *Sheng Ma* (Rhizoma Cimicifugae), *Qin Pi* (Cortex Fraxini), and *Chi Shi Zhi* (Halloysitum Rubrum). Another study reported 93.5% effectiveness for treatment of chronic colitis using *Tong Xie Yao Fang* plus *Shan Yao* (Rhizoma Dioscoreae), *Gu Ya* (Fructus Setariae Germinatus), *Mai Ya* (Fructus Hordei Germinatus), and other herbs as deemed necessary. Modifications included the addition of *Yan Hu Suo* (Rhizoma Corydalis) and a larger dose of *Bai*

# Tong Xiè Yào Fang (Important Formula for Painful Diarrhea)

Shao (Radix Paeoniae Alba) for severe abdominal pain; Mu Xiang (Radix Aucklandiae), Zhi Qiao (Fructus Aurantii), and Hou Po (Cortex Magnoliae Officinalis) for Liver qi stagnation; Chuan Lian Zi (Fructus Toosendan) for qi stagnation turning into fire; Da Huang (Radix et Rhizoma Rhei), Bing Lang (Semen Arecae) and Huang Lian (Rhizoma Coptidis) for dampness in the Intestines; Dang Shen (Radix Codonopsis), Huang Qi (Radix Astragali) and Yi Yi Ren (Semen Coicis) for Spleen and qi deficiency; and Si Shen Wan (Four-Miracle Pill) for Spleen and Kidney deficiencies. Of 32 patients, the study reported complete recovery in 21 patients, improvement in 9 patients, and no benefit in 2 patients.

6. Irritable bowel syndrome (IBS): Tong Xie Yao Fang has been shown in many studies to effectively treat IBS. Fifty patients with IBS were treated with modified Tong Xie Yao Fang with complete recovery in 35 patients. The average length of treatment was 28.4 days, with a range of 23 to 120 days. Fifteen patients discontinued the treatment due to various reasons, with most showing some indications of improvement.<sup>12</sup> Another study reported 89.9% effectiveness using Tong Xie Yao Fang plus Si Shen Wan (Four-Miracle Pill) to treat 187 patients with IBS.13 Lastly, one study reported 93.3% effectiveness using modified Tong Xie Yao Fang to treat 30 patients with IBS. The herbal treatment used Tong Xie Yao Fang as the base, with the addition of Sheng Ma (Rhizoma Cimicifugae) and Chi Shi Zhi (Halloysitum Rubrum) for chronic diarrhea; Bu Gu Zhi (Fructus Psoraleae) and Rou Gui (Cortex Cinnamomi) for Spleen and Kidney yang deficiencies; and Chai Hu (Radix Bupleuri) and Dang Gui (Radix Angelicae Sinensis) for Liver qi stagnation with blood deficiency. Each course of treatment lasted 1 month. Of 30 patients, the study reported significant improvement in 9 patients, improvement in 19 patients, and no improvement in 2 patients.14

#### SUGGESTED ACUPUNCTURE TREATMENT

- Points: Ganshu (BL 18), Xingjian (LR 2), Sanyinjiao (SP 6), Yinlingquan (SP 9), Sibai (ST 2), Guanchong (TH 1), Pishu (BL 20), Zhongwan (CV 12), Housanli (ST 36), and Tianshu (ST 25).
- Technique: both tonification and sedation. Moxibustion may be used.

Ganshu (BL 18) and Xingjian (LR 2) together sedate the Liver and relieve pain. Sanyinjiao (SP 6) and Yinlingquan (SP 9) strengthen the Spleen and help stop diarrhea. Sibai (ST 2) and Guanchong (TH 1) encourage qi flow in the abdomen and stop pain. Pishu (BL 20), Zhongwan (CV 12), and Housanli (ST 36) strengthen the Spleen and Stomach. Tianshu (ST 25), the mu (collecting) point of the Large Intestine, relieves diarrhea. In patients with

severe deficiency of the middle *jiao*, apply moxibustion on *Zhongwan* (CV 12) and *Housanli* (ST 36).

#### **AUTHORS' COMMENTS**

Tong Xie Yao Fang was originally called Bai Zhu Shao Yao San (Atractylodes Macrocephala and Peony Powder), with the understanding that this was an "important formula for painful diarrhea" and that abdominal pain may persist after defecation. Tong Xie Yao Fang eventually became the "official" name of this formula, however, since this name meaningfully incorporates its primary function.

Tong Xie Yao Fang is a common foundational formula for treating various types of diarrhea and inflammatory bowel disease in veterinary species. Inflammatory bowel disease due to Liver qi stagnation and Spleen qi deficiency is prevalent in dogs and cats as a result of feeding commercial diets which are species inappropriate. It is also fairly common in horses overfed concentrates and confined to a stall for long periods. The animals for which this formula is appropriate have abdominal pain and abdominal cramps manifested by a humped backed, looking at the abdomen, rolling, vocalizing while passing stool, or walking during defecation and straining to pass a relatively small amount of stool. In some cases the animal may suddenly shriek or scream and try to "run" away from their stool after it is passed. The diarrhea may be soft and pasty to watery and contain both blood and mucus and is worse when the animal is stressed. Dry food diets, which contain high amounts of dampnessengendering carbohydrates such as corn, wheat and soybean, and energetically hot meats such as lamb eventually lead to chronic Spleen qi deficiency and dampness in the dog and cat. Likewise, diets that approach and surpass 50% of concentrated feeds, especially those with a great deal of molasses, create similar patterns in the horse. In cases where the Spleen is predominantly weak and has invited the Liver to invade it, the diarrhea will not resolve until the Spleen has been sufficiently strengthened. This formula can be combined with Dang Shen (Radix Codonopsis), Huang Qi (Radix Astragali) and Yi Yi Ren (Semen Coicis) to further tonify the Spleen, depending on the individual case. In horses with digestive issues, combining this formula with Shen Ling Bai Zhu San (Ginseng, Poria, and Atractylodes Macrocephala Powder) or Bu Zhong Yi Qi Tang (Tonify the Middle and Augment the Qi Decoction) will be helpful.

In the treatment of lymphocytic-plasmacytic enteritis/colitis (inflammatory bowel disease), *Tong Xie Yao Fang* can be tailored to fit the individual animal's pattern of illness more closely by using the following herbs:

## Tông Xiè Yào Fang (Important Formula for Painful Diarrhea)

- With more Liver qi stagnation, increase the dose of *Fang Feng* (Radix Saposhnikoviae) and add *Chai Hu* (Radix Bupleuri), *Qing Pi* (Pericarpium Citri Reticulatae Viride) and *Xiang Fu* (Rhizoma Cyperi).
- With watery diarrhea, add Fu Ling (Poria) and Che Qian Zi (Semen Plantaginis).
- If abdominal pain is severe, increase the dose of *Bai Shao* (Radix Paeoniae Alba) and add *Mu Gua* (Fructus Chaenomelis), *Yan Hu Suo* (Rhizoma Corydalis) and *Gan Cao* (Radix et Rhizoma Glycyrrhizae).
- With severe tenesmus, add Mu Xiang (Radix Aucklandiae) and Hou Po (Cortex Magnoliae Officinalis).
- If the stool is bloody, add Di Yu (Radix Sanguisorbae) and San Qi (Radix et Rhizoma Notoginseng).
- For increased dampness, add *Bing Lang* (Semen Arecae) and *Da Huang* (Radix et Rhizoma Rhei).

Tong Xie Yao Fang, literally meaning "important formula for painful diarrhea," treats abdominal pain and diarrhea caused by Spleen deficiency and Liver excess. Its formulation has a distinct rationale:

- Bai Zhu (Rhizoma Atractylodis Macrocephalae) and Chen Pi (Pericarpium Citri Reticulatae) strengthen the Spleen, dry dampness, and promote qi circulation. This formula does not use standard qi tonics, such as Ren Shen (Radix et Rhizoma Ginseng) and Huang Qi (Radix Astragali), because such herbs tonify qi and raise yang qi, but do not dry dampness and restore the normal transformation and transportation functions of the Spleen.
- Fang Feng (Radix Saposhnikoviae) is acrid, spreads Liver qi stagnation, awakens the Spleen, and dries dampness. It enters both the Liver and Spleen channels, raises yang, and stops diarrhea. When paired with Bai Shao (Radix Paeoniae Alba), it regulates Liver qi and relieves pain. When combined with Bai Zhu (Rhizoma Atractylodis Macrocephalae), it strengthens the Spleen and dispels dampness. Chai Hu (Radix Bupleuri), a standard Liver qi-regulating herb, is not used here because it does not strengthen the Spleen. In addition, Chai Hu (Radix Bupleuri) is slightly drying in nature, and may injure yin and contribute to more deficiency.<sup>15</sup>

Si Shen Wan (Four-Miracle Pill), Shen Ling Bai Zhu San (Ginseng, Poria, and Atractylodes Macrocephala Powder), and Tong Xie Yao Fang all treat diarrhea.

- Si Shen Wan warms and tonifies Spleen and Kidney yang to stop chronic diarrhea. It treats severe diarrhea that occurs in the early morning, and watery diarrhea that contains undigested food.
- Shen Ling Bai Zhu San treats diarrhea characterized by Spleen qi deficiency with damp accumulation, manifesting in fatigue, weakness of the limbs, and poor appetite.
- *Tong Xie Yao Fang* tonifies the Spleen and spreads Liver qi. This formula stops the type of diarrhea that accompanies stress-related abdominal pain. Animals will often have flatulence, bloating, and abdominal pain that appears relieved after stool is passed.
- Lastly, these formulas are commonly used together in clinical practices. *Tong Xie Yao Fang* can be combined with *Si Shen Wan* (Four-Miracle Pill) for the treatment of chronic diarrhea due to Kidney and Spleen yang deficiency in geriatric dogs and cats and in horses with Cushing's disease. *Tong Xie Yao Fang* may also be used with *Shen Ling Bai Zhu San* (Ginseng, Poria, and Atractylodes Macrocephala Powder) for animals with diarrhea due to predominance of Spleen qi deficiency.

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