

Linking Formula (*Yi Guan Jian*) originally appeared in the *Continuation of Classified Case Histories by Renowned Physicians (Xu Ming Yi Lei An)* by Wei Zhi-Xiu (1770).

GENERAL SIGNS/SYMPTOMS

This formula was designed to treat qi stagnation of the liver that is secondary to yin deficiency. The common signs and symptoms include acid reflux, gastric ulcers, and pain in the flanks or chest. These will be accompanied by signs of yin deficiency or dryness, such as dry mouth or thirst, a red, dry tongue, a thin or deficient pulse or heat in “the five palms” (palms of the hands, soles of the feet, and chest).

CLASSICAL APPLICATIONS

1. Liver Qi Stagnation

- Pain of the chest, flanks, or epigastrium
- Chronic regurgitation of food or acids

2. Yin Deficiency and Liver Blood Dryness

- Heat in the “five palms”
- Dry mouth or throat
- Scant tongue coat with red body
- Thin, deficient pulse

INGREDIENTS

PINYIN	LATIN	ENGLISH	PERCENT OF FORMULA
Sheng Di Huang (Assistant)	Rehmannia (unprocessed root tuber)	Rehmannia Root, unprocessed	26%
Gou Qi Zi (Chief)	Lycium (fruit)	Lycium Fruit, Chinese Wolfberry	14%
Bei Sha Shen (Assistant)	Glehnia (root)	Glehnia Root	14%
Mai Men Dong (Assistant)	Ophiopogon (tuber)	Ophiopogon Tuber	14%
Dang Gui (Deputy)	Angelica sinensis (root)	Dong Quai, Tang Kuei	12%
Chuan Lian Zi (Assistant / Guide)	Melia (fruit)	Melia Fruit, Chinaberry	10%
Bai Shao (Assistant)	Paeonia lactiflora (root)	Chinese White Peony	5%
Gan Cao (Assistant / Guide)	Glycyrrhiza (root)	Chinese Licorice Root	5%

GENERAL INDICATIONS / MODERN APPLICATIONS

- Acid regurgitation
- Behcet's syndrome
- Bitter taste in the mouth
- Chemo and radiation, side effects of
- Cirrhosis, liver
- Constipation
- Diabetes mellitus
- Dreaming, excessive or vivid
- Dry mouth/throat, with thirst
- Epigastric pain
- Fatty liver disease
- Flank pain
- Gastritis, chronic
- Hepatitis, chronic
- Hernia
- Hot flashes
- Hypertension, essential
- Hypertension, gestational
- Hyperthyroidism
- Hypochondriac neuralgia
- Hypochondriac pain
- Insomnia, with restlessness
- Intercostal neuralgia
- Jumpiness/easily startled
- Hot palms and soles
- Nervous exhaustion
- Orchitis, chronic
- Ovarian failure, premature
- Palpitations
- Pulmonary tuberculosis
- Purpura, thrombocytopenic
- Reflux, acid
- Restless leg syndrome
- Sweating, excessive underarm, odorless
- Ulceration, peptic or duodenal
- Vomiting of sour fluid

SYNERGY OF INGREDIENTS

Lycium fruit (*gou qi zi*) is the chief ingredient of this formula. It enters the kidney, liver, and lung channels to nourish yin, supplement blood, and moisten. By virtue of its moistening property, lycium fruit (*gou qi zi*) can free stuck qi and facilitate movement because it promotes the mediums (*jin* fluid and blood) through which qi moves.

Rehmannia (*sheng di huang*) is one of the assistant herbs of this formula. (Some experts believe it to be the chief.) In the present formulation, rehmannia (*sheng di huang*) accounts for 26% of the formula, almost twice

FORMULA ACTIONS

- Nourishes liver and kidney yin
- Supplements liver blood
- Clears heat
- Gently spreads liver qi

TONGUE

Red, dry or with scanty coat.

PULSE

Thin and deficient or thin and wiry, may also be rapid.

CONTRAINDICATIONS / CAUTIONS

Do not use to treat symptoms caused by dampness or phlegm.

DOSAGE

2-3 tablets, 2-3 times a day.

the amount of the chief herb. Its main function in the formula is to supplement yin, generate fluids, and moisten dryness, for which it is one of the most commonly used substances in the entire *materia medica*. Rehmannia (*sheng di huang*) has a secondary function in this formula—to cool the blood and *ying* levels that may be storing heat.

Glehnia (*bei sha shen*) enters the lung and stomach channels to nourish yin and moisten dryness. It is used in this formula chiefly for its ability to enter the stomach and generate fluids. When combined with ophiopogon (*mai men dong*), the properties of both herbs are augmented.

Ophiopogon (*mai men dong*) enters the lung, stomach, and heart channels to nourish yin and generate fluids. Its sweetness nourishes yin, and its slightly bitter/slightly cold properties help to clear heat. The moistening action extends to both channels of the *yangming*—stomach and large intestine—additionally acting to moisten the intestines and move the bowels in order to clear additional heat.

Tangkuei (*dang gui*) supports the action of the chief herb, lycium (*gou qi zi*), to nourish the blood. Tangkuei (*dang gui*) is also warming and acrid, giving it the ability to move blood and qi to assist in relieving stagnation.

Melia (*chuan lian zi*) is the guide in this formula, and the only herb that acts directly on dispersing liver qi constraint to relieve pain. Though this herb is bitter and cold, which could be damaging to the yin, this potential effect is counterbalanced by the prominence of yin nourishing herbs in the formula.

White peony (*bai shao*) and licorice root (*gan cao*) are added to increase the formula's ability to relieve pain. White peony (*bai shao*) soothes the liver by supplementing liver blood, "softening" the liver, and decreasing its over action on the stomach. The licorice root (*gan cao*) has further action to harmonize the rest of the ingredients and has been shown to help both with pain management and recovery with peptic ulcers.¹ One of the most popular applications of this formula in modern times is for treating gastric and duodenal ulcers, when the pattern is yin deficiency with liver qi invading the stomach.

FORMULA DISCUSSION

As with most Chinese medicinal formulas, in order to achieve optimal results, proper pattern identification is the key. **Linking Formula** (*Yi Guan Jian*) treats many conditions that are treated by other Chinese formulas (as well as over-the-counter drugs), but it is the most appropriate choice for many of these complaints when the pattern is a proper fit.

The underlying pattern for application of **Linking Formula** (*Yi Guan Jian*) is yin (or yin and blood) deficiency that has led to liver qi stagnation. Heat is often a component of this pattern, but not

always present. There are a few etiological scenarios that can lead to this pattern. In each, though, the liver first becomes deficient in yin or yin and blood. Qi stagnation is the result of insufficient humors to transport the qi, which tends to stagnate in the rib cage, blocking the natural coursing of the liver. This blockage has an effect on two ends of the body. The upper part of the body is deprived of moisture because the *jin* fluids are unable to ascend; in the torso, the backed up qi must have someplace to go. Frequently, this excess of liver qi diverts into the stomach causing stomach pain, duodenal or gastric ulcers, or vomiting of sour fluids. But the errant liver qi can also invade other areas and affect other systems that depend upon the free coursing of liver qi. If the excess liver qi backs downward into the lower warmer, it can lead to premature ovarian failure, hernia, chronic orchitis, or constipation. If it invades the blood vessels, it can develop into palpitations, hypertension, or Behcet's syndrome. If the yin deficiency is constitutional, and if liver qi invades the spleen/pancreas complex, the condition can develop into type 2 diabetes mellitus. In order to confirm proper application of **Linking Formula** (*Yi Guan Jian*) for any of these indications, one must always confirm the pattern through signs such as palmar heat, odorless sweating around the ribcage, pain or fullness in the flanks or thorax, dry mouth, and a red tongue, with a dry or scanty coat. If yin deficiency is still primary, the pulse will be thin and deficient; or it may be thin and wiry, if qi stagnation has developed significantly. The pulse may also be rapid, if heat is prominent.

The heat component in this pattern can be the cause and/or the result of the yin deficiency. Internal heat from illness can scorch the yin and damage the blood of the liver, which can lead to the rise of deficient/false heat. In either scenario, the heat component complicates and aggravates the condition.

The yin deficiency, which is the chief component of this pattern, can be the result of febrile disease, aging, or constitution. Stresses such as over-work, excessive thinking, or even prolonged excessive desire can damage *jing* (essence) and blood. Any of these can bring a patient to the point where the liver blood and yin can no longer support the yang activity (qi-

coursing function) of the liver. This condition can be made worse if the yang builds up in the interior and pushes fluids outward in the form of sweat.

Many Americans are not tuned into the symptom of ribcage and flank fullness and pain until it becomes severe. In most instances it is imprudent to take the patient's word that they have no signs of thoracic fullness or pain. Clinical confirmation can be obtained by palpating for tightness/congestion at the front *mu* point of the liver (Liv 14) and around the hypochondriac region.

The formula's name, **Linking Formula** (*Yi Guan Jian*), comes from the fact that it treats seemingly unrelated symptoms, thus making a "link" between them. For example, **Linking Formula** (*Yi Guan Jian*) is very effective for treating duodenal ulcers, but it can also be used to treat constipation or intercostal neuralgia.

MODERN APPLICATIONS

Gastrointestinal Disorders

Gastric and Duodenal Ulcer – A group of 18 patients were treated with **Linking Formula** (*Yi Guan Jian*) for a 90 day treatment period. 10 had gastric ulcers and 8 had duodenal ulcers. Improvement or complete recovery was experienced by 15 of the 18 patients.ⁱⁱ

Atrophic Gastritis – A number of clinical studies have shown that significant success rates can be achieved in treating atrophic gastritis by using **Linking Formula** (*Yi Guan Jian*). One study reported a 95% effectiveness rate when the participants in the study were limited to those with an underlying condition of stomach yin deficiency.ⁱⁱⁱ

Liver Disease

If the underlying yin or yin and blood deficiency causes the qi stagnation to build up in the liver *zang*, the body may compensate by producing pathogenic yin in the form of phlegm (fatty liver) or pathogenic blood in the form of a tumor. If significant portions of the liver are cut off from yin and blood nourishment, cirrhosis can develop.

Fatty Liver – Fatty liver is the accumulation of fatty deposits in the liver tissue due to long term or repeated exposure to pathogenic factors. When the

deficiencies of this pattern (yin and blood) combine with the excesses (qi stagnation and heat) and remain in the liver *zang*, rather than seeking release through the invasion of another organ system, the body may compensate for the lack of nourishing yin by producing phlegm in the form of fatty deposits in the liver *zang*. When the underlying condition of the patient with fatty liver disease is liver and kidney yin deficiency with liver qi stagnation, **Linking Formula** (*Yi Guan Jian*) can be combined with **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*) and **Rehmannia Six Formula** (*Liu Wei Di Huang Wan*) to treat this condition effectively.^{iv}

Cirrhosis of the Liver – One study compared the effectiveness of **Linking Formula** (*Yi Guan Jian*) and **Minor Bupleurum Formula** (*Xiao Chai Hu Tang*) in treating cirrhosis of the liver that had been induced in rats by injection of CCl₄. The results of the study showed that **Linking Formula** (*Yi Guan Jian*) was more therapeutically effective through the mechanism of inhibiting hepatocyte apoptosis and hepatic stellate cells activation, and regulating of the function of Kupffer cells.^v

Chronic Hepatitis – In one study, 50 patients with chronic hepatitis were treated with a modified **Linking Formula** (*Yi Guan Jian*) with success.^{vi}

Endocrine Disorders

Hyperthyroidism – There are several possible Oriental medicine patterns for a Western diagnosis of hyperthyroidism. When the diagnosis is yin deficiency with yang rising due to damage to and/or deficiency of yin, **Linking Formula** (*Yi Guan Jian*) is an excellent strategy. This patient may present with any of the following: a mildly enlarged goiter, bulging eyes or tension around the eyes, five palm heat, insomnia or scanty sleep, profuse dreams, dizziness, blurred vision, heart palpitations, restlessness, sweating, hot flashes, aversion to heat, red face, red eyes or irritated eyes, tinnitus, shaking hands, low back and knee pain and weakness, increased appetite, lack of strength, dry mouth and throat. **Linking Formula** (*Yi Guan Jian*) may be combined with **Heavenly Emperor's Formula** (*Tian Wang Bu Xin Dan*) to successfully treat this patient.^{vii} When the patient exhibits symptoms primarily of liver and kidney yin deficiency with

liver yang rising, **Linking Formula** (*Yi Guan Jian*) can nourish both yin and blood, while moving liver qi to prevent stagnation in the liver channel, leading to more yang rising symptoms. In this treatment strategy, yin is nourished to subdue and anchor yang, and liver blood is nourished to dispel symptoms of liver wind.^{viii}

Premature Ovarian Failure (POF) – The symptoms of this disorder may include: irregular menses, amenorrhea, vaginal dryness, hot flashes, painful intercourse, and infertility. Sometimes the precursor to complete ovarian failure is severe pain with ovulation that may or may not occur every month. This condition has been shown to often accompany autoimmune disorders such as systemic lupus erythematosus, rheumatoid arthritis, and genetic disorders such as Turner's syndrome. It can result from oophorectomy, radiation or chemotherapy treatments, or endocrine disorders, such as Graves' disease. When the Oriental medicine diagnosis of the underlying pattern is liver and kidney yin deficiency, with liver qi stagnation, then **Linking Formula** (*Yi Guan Jian*) with modifications may be appropriate. Additional symptoms to look for would be irritability, pre-menstrual tension, breast tenderness, irregular menses or amenorrhea, frequent sighing, constipation, ovulatory pain, stress, hypochondriac pain and distention. Confirm the pattern with tongue and pulse (see page 2).^{ix}

Behcet's Syndrome

This syndrome is difficult for Western medicine to diagnose because it presents as similar to so many common diseases and it is of unknown etiology. Behcet's syndrome is a chronic, inflammatory syndrome involving inflammation of the blood vessels. The symptoms usually begin to appear when the patient is in his or her 30's, more often occurring in men than women. It is somewhat rare in the United States, but is more common in the Middle East. Most patients exhibit oral ulcers that may later appear on the genitals. Other symptoms appear over the years: eye pain, photophobia, blurred vision, skin sores, mild arthritis of the large joints, arterial aneurysms, thrombosis, and GI disorders that resemble Crohn's disease. Western medicine treats the symptoms with corticosteroids, and in severe

cases, with immunosuppressive medications. In OM diagnostics, this syndrome can fall into several *zang-fu* patterns. One possible diagnosis is liver and kidney yin deficiency. This pattern may present during the mid-late stages of the progression and often is exacerbated by long-term steroid use. Symptoms that may present are as follows: oral and genital sores that do not heal, are dark, red and painful, dry; irritated eyes, blurred vision, dark circles around the eyes, photophobia; five palm heat, insomnia, night sweats, low back and knee pain and lack of strength. The tongue is frequently red, with a dry, scanty coat or red tip with no coat. The pulse is fine and rapid. With this presentation, a combination of **Linking Formula** (*Yi Guan Jian*) and **Rehmannia Six Formula** (*Liu Wei Di Huang Wan*) is recommended.^x

Side-effects of Chemotherapy and Radiation

The combination of Western and Eastern methods for treating cancer patients can enhance the effectiveness of chemotherapy and radiation treatments, allowing lesser amounts of the dangerous toxins to be used in treatment and yielding greater success rates. This is common practice in China. Herbal treatment to support *zheng* (upright) qi, as an adjuvant treatment of cancer to mitigate the undesirable side effects of the main therapy is something that Oriental medical practitioners can offer their patients in the West as well. One of the patterns that develops as a result of chemotherapy treatments is liver and kidney yin deficiency with liver qi stagnation. When the yin and blood have been damaged, the liver qi can invade the stomach causing stomach pain and burning, dry mouth, cough, thirst, mouth sores, and so forth. **Linking Formula** (*Yi Guan Jian*) is an effective choice for this pattern.^{xi}

FORMULA COMPARISONS

Linking Formula and True Yin Formula

Though both formulas focus on nourishing yin, there are significant differences. **Linking Formula** (*Yi Guan Jian*) emphasizes promotion of fluid production as part of its strategy to nourish yin. Its actions are directed primarily to the liver, with some action on generating fluids by engaging the stomach, and some action on rectifying the flow

of liver qi. **True Yin Formula** (*Zuo Gui Jia Er Zhi Wan*) focuses completely on nourishing the root yin in the kidney, and does not address tangential issues of yin deficiency, such as false heat, depleted body fluids, and possible liver qi stagnation.

Linking Formula and Rehmannia & Scrophularia Formula

These formulas nourish liver and kidney yin, but there are differences in their emphasis. **Rehmannia and Scrophularia Formula** (*Zhi Bai Di Huang Wan*) emphasizes nourishing the kidney yin over liver yin and is stronger to clear fire and false heat. It has no action for rectifying qi flow. **Rehmannia and Scrophularia Formula** (*Zhi Bai Di Huang Wan*) is therefore more appropriate when there are pronounced deficiency heat symptoms present, and when the yin deficiency is mainly affecting the lower warmer. **Linking Formula** (*Yi Guan Jian*) is more appropriate when the liver is the primary organ affected by the yin deficiency, i.e., when there is flank, hypochondriac, or thoracic pain or fullness.

Linking Formula and Free & Easy Wanderer Plus

Both **Linking Formula** (*Yi Guan Jian*) and **Free and Easy Wanderer Plus** (*Jia Wei Xiao Yao San*) can treat the pattern of liver and middle warmer disharmony with signs of heat and stagnation.

The chief difference between the two formulas is that the **Free and Easy Wanderer Plus** (*Jia Wei Xiao Yao San*) pattern is primarily excess (liver qi stagnation) with some deficiency (spleen qi and blood *xu*), while the pattern for **Linking Formula** (*Yi Guan Jian*) is primarily one of deficiency (liver yin or liver yin and blood *xu*) with mild excess (qi stagnation). There will be more signs of dryness (thirst, dry mouth) in the **Linking Formula** (*Yi Guan Jian*) pattern.

Linking Formula and Stomach Harmonizing Formula

Both **Linking Formula** (*Yi Guan Jian*) and **Stomach Harmonizing Formula** (*Jia Jian Bao He Wan*) are effective at treating stomach pain, bitter taste in mouth, constipation, and acid reflux. But **Linking Formula** (*Yi Guan Jian*) treats these conditions when due to deficiency and **Stomach Harmonizing Formula** (*Jia Jian Bao He Wan*) treats them when they are due to excess. Choose

USEFUL COMBINATIONS

Linking Formula addresses an underlying pattern, and therefore, is easily and frequently combined with other formulas to achieve a specific therapeutic result. Below are some effective combinations:

When pain is the main complaint, and the pattern of yin or yin and blood deficiency with qi stagnation fits, (especially for abdominal pain, gallbladder spasms, or significant rib and flank pain)	Use with Corydalis Formula .
For heart palpitations due to heart and liver blood deficiency and liver qi stagnation	Use with Zizyphus Formula . ^{xii}
For liver wind problems such as headaches, dizziness, hypertension, or dream-disturbed sleep, that originated with liver yin deficiency	Use with Gastrodia and Uncaria Formula .
For hypertension with liver yin deficiency	Use with Luo Bu Ma Formula .
For Premature Ovarian Failure due to kidney and liver blood deficiency with blood stagnation and liver qi stagnation	Use with Nourish Ren and Chong Formula . ^{xiii}
For Fatty Liver Disease with underlying liver and kidney yin deficiency and liver qi stagnation	Use with Bupleurum and Tang Kuei Formula and Rehmannia Six Formula . ^{xiv}
To support patients undergoing chemotherapy or recovering from chemotherapy who exhibit primarily liver/kidney and stomach yin deficiency symptoms with liver qi stagnation combined with qi and blood deficiency symptoms	Use with Five Mushroom Formula . ^{xv}
For weakness and atrophy in the lower extremities with liver yin deficiency in addition to damp-heat obstruction in the lower warmer	Use with Four Marvels Formula .
For dry mouth and thirst	Use with Jade Source Formula .

ENDNOTES

- ⁱ Zhong Yao Zhi, *Chinese Herbology Journal*, 1993; 358.
- ⁱⁱ Gui Zhou Yi Yao, *Medicine and Medicinals from Guizhou*, 1991; 5:307.
- ⁱⁱⁱ Shan Xi Zhong Yi. *Shanxi Chinese Medicine*, 1999; 4:161.
- ^{iv} Peitian, Wu, The Combined Use of Tonification and Purgation in the Treatment of Fatty Liver, *Journal of Traditional Chinese Medicine*, March 2003.
- ^v Mu, Y. et al, Action mechanism of Yi Guan Jian Decoction on CCI4 induced cirrhosis in rats, *Journal of Ethnopharmacology*, 121:1, Jan. 2009, pp. 35-42.
- ^{vi} Hu Bei Zhong Yi Za Zhi, *Hubei Journal of Chinese Medicine*, 1986, 5:51.
- ^{vii} Zhongguo Zhong Yao Za Zhi. 1992 May;17(5):301-3.
- ^{viii} Zixiao, Wei, Differentiation and TCM treatment of Hyperthyroidism, *Journal of Chinese Medicine*, 57, May 1998, pp. 30-32.
- ^{ix} Rubio, Ray, Premature Ovarian Failure (POF) A Classical Approach to Treatment with Traditional Chinese Medicine, *American Acupuncturist*, Spring 2005, pp. 6-11.
- ^x Wu, Yang, and Bian, "Behcet's Disease: Clinical Report of 88 Cases Treated with Herbal Decoctions" *Journal of Traditional Chinese Medicine*, 1983, 3(3):223-6.
- ^{xi} Rosenberg, Z., Treating the Undesirable Effects of Radiation and Chemotherapy with Chinese Medicine, *Oriental Medicine Journal*, www.acupuncture.com/herbs/chemothera.htm.
- ^{xii} Z. W. Liu and Li Liu, *Essentials of Chinese Medicine*, Springer Vertag London Limited, 2009, Vol. 3, pp. 45-54.
- ^{xiii} Rubio, Ray, Premature Ovarian Failure (POF) A Classical Approach to Treatment with Traditional Chinese Medicine, *American Acupuncturist*, Spring 2005, pp. 6-11.
- ^{xiv} Peitian, Wu, The Combined Use of Tonification and Purgation in the Treatment of Fatty Liver, *Journal of Traditional Chinese Medicine*, March 2003.
- ^{xv} Rosenberg, Z., Treating the Undesirable Effects of Radiation and Chemotherapy with Chinese Medicine, *Oriental Medicine Journal*, www.acupuncture.com/herbs/chemothera.htm

REFERENCES

- John K. Chen, Tina T. Chen., *Chinese Medical Herbology and Pharmacology* (Art of Medicine Press, 2004).
- Mark H. Beers, Robert Berkow, Eds., *The Merck Manual of Diagnosis and Therapy 17th Ed.* (Whitehouse Station, NJ, Merck Research Laboratories, 1999).
- Dan Bensky, Steven Clavey, Erich Stöger, *Chinese Medicine Materia Medica, 3rd Ed.* (Eastland Press, 2004).
- Volker Scheid, et al., *Chinese Herbal Medicine: Formulas and Strategies, 2nd Ed.* (Eastland Press, 2009).
- John Scott, Lorena Monda, and John Heuertz, *Clinical Guide to Commonly Used Chinese Herbal Formulas, 5th Ed.* (Herbal Medicine Press, 2009).

