# Treating Sleep Disorders

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More than 1 in 4 Americans report that they are subject to insufficient amounts of sleep and 1 in 10 of us experience chronic insomnia. The Center for Disease Control frequently renews its declaration that "Insufficient Sleep is a Public Health Epidemic." Fortunately, Chinese medicine can be very effective for nearly all causes of sleep disorders.

#### Non-Genuine Sleep Disorders

Before treating a patient for a sleep disorder it is imperative to consider first whether they actually need treatment or if they simply need some counsel. Many times a change in the environment or a change in habit is all that it takes to help someone achieve a good night's sleep. (For example, if a crying baby is keeping someone up, perhaps it is the baby that needs attention.)

The first question to ask is always something along the lines of "Do you have any ideas about why you're having problems with sleeping?" The patient's own insights are often invaluable. In addition, ask the patient about their habits and nighttime routine. If they are falling asleep on the sofa watching television or playing video games on their tablet, drinking caffeine in the evening, if they are awakened by snoring (theirs or someone else's) or just working late into the night because they presume that they won't be able to sleep, then a little counseling can go a long way. Sometimes the "cure" is just a cheap package of earplugs, a different pillow, ending the habit of nighttime caffeine, or a simple matter of turning off the television or moving a bright clock further from the bed.

Consider too that a significant percentage of so-called "insomnia" cases are actually some other medical issue such as frequent nocturia, digestive distress, musculoskeletal pain, hot flashes, or even allergies. When you ask the patient the initial questions about what is keeping them up, their answers may often lead you to a completely different medical issue. These each have their own treatment category and should be addressed accordingly. Patients are more than happy to explore this with you because, for them, it will kill two birds with one stone: if pain is keeping them up nights and you eliminate the pain, then you also fix the sleep problem. If you do not sufficiently inquire into the circumstances of their sleep issue, you may miss a simple solution or even give an inappropriate treatment. The present paper will limit itself to the discussion of the causes and treatments of true insomnia. that is, insomnia which is not due to environmental, habitual, or non-insomnia medical causes.

# ZANG-FU PATTERNS OF INSOMNIA Deficiency

All true insomnia patterns involve the heart in some way.

The issue may originate in another organ, but there would be no insomnia if the heart itself were not adversely affected by the pathology. Deficient patterns of the heart can only arise from within the heart zang itself, or from one of the three organs that nourish the heart: spleen, liver, or kidney. The heart does not make its own blood; "heart blood" refers to the blood in the heart supplied to it from another organ. This blood is created by the spleen but governed and distributed by the liver. So if there is heart blood deficiency, either the spleen is not producing adequate amounts of blood, or the liver is not supplying sufficient blood to the heart. Differentiation of the origin of the heart blood deficiency can be made easily through the pulse. Simply compare the right and left guan positions at mid-level. If the right guan is weak or thin (or both), then it is the spleen which requires supplementation. If the left guan pulse is thin in the mid-level (indicating liver blood deficiency) or shows excess as a wiry, tight, or choppy pulse, the liver may not be able to supply abundant blood to the heart.

The heart-kidney connection is the primary yin-yang connection among the *zang-fu*. Yin from the kidney should rise to cool and nourish the heart tissue while fire from the heart should descend to the kidneys to prevent *jing* from congealing and to provide yang support from the post-natal realm for the distribution of the *jing* through the *sanjiao* mechanism. If kidney yin is not rising to nourish the heart, then the heart will over-heat, causing palpitations, anxiety or insomnia. When this has continued for a long period of time, other body fluids will also become deficient, especially those in the lower burner, causing concentrated urine, dry mouth, dry stool, or vaginal dryness.

When the heart *zang* itself is the primary deficiency in a sleep disorder, the pattern will always include "heart qi deficiency." The three main patterns you will see that include "heart qi deficiency" are: "heart qi and yin deficiency," "heart qi and blood deficiency," or "heart and gallbladder qi deficiency." The yin of the heart is supplied by the kidney and the blood of the heart is supplied by the spleen or liver; so usually more than one organ will need supplementation. Individuals with a pattern of "heart and gallbladder qi deficiency" often have timid personalities and the *shen* is constitutionally predisposed to be overly susceptible to shock, fright, and anxiety. This fragility naturally manifests in sleep disorders as well as the other standard *shen* disturbance signs/symptoms of anxiety and palpitations.

#### **Excess**

Excess patterns that cause insomnia are always related to fire or to blood stasis in the chest. (Phlegm is also a common factor, but rarely the chief pathogen responsible.) Fire is often

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misleadingly defined in Chinese medicine as merely "intense heat," but the real definition of fire is "heat that affects the eyes and the shen." The eye signs/symptoms associated with fire are generally redness or blurred vision; the shen disturbance signs/symptoms will always be in the form of irritability or agitation, delirium, inability to concentrate, or insomnia. The only fire pattern that matters for insomnia is liver fire; only in this pattern will insomnia be a primary sign/symptom. All other fire patterns (including heart fire) are acute situations where the insomnia is secondary to an infectious external pathogenic factor and should be addressed accordingly, that is, as an acute infection. Liver fire, however, can accumulate over time (for example with nightly alcohol consumption) or can develop out of persistently stagnating liver qi. Anatomically, the heart is above the liver, and since it is the nature of heat to rise, "liver fire disturbing the heart" is common.

## PRIMARY FORMULAS FOR INSOMNIA

An Mien Formula (An Mien Pian) is one of the two insomnia formulas discussed here that will most likely have some benefit no matter what the pattern. Several of the ingredients are natural sedatives, yet, generally these will not cause a desire to sleep during the day. What distinguishes An Mien Formula from the others in this class is that it directly treats heart qi deficiency. In addition to insomnia, the patient may also experience frequent anxiety and/or palpitations. An Mien Formula is a strong anti-anxiety formula and can be used to treat panic attacks and general anxiety, both of which indicate a heart qi deficiency.

Zizyphus Formula (Suan Zao Ren Tang) is the other insomnia formula in this discussion that is likely to be effective no matter what the pattern. Like An Mien Formula, Zizyphus Formula contains natural sedative herbs, and are natural somnolents. The main difference in application is that the patient who best will benefit from Zizyphus Formula will have signs of liver yin and blood deficiency. (The left guan pulse will be deficient—usually thin.) It will be a stronger formula when the patient also experiences frequent frustration or irritability, rather than anxiety, as is the case when An Mien Formula is preferred.

Heavenly Emperor's Formula (Tian Wang Bu Xin Dan) has legendary origins. It is originally indicated for heart and kidney exhaustion when the individual has used the will to push past their post-natal capacity. They begin to consume the pre-natal qi in order to continue pressing forward, especially pressing forward with too much thinking. This exhaustion can also lead to the development of anxiety, memory loss, or mental confusion. Today, this formula is indicated for use in kidney and heart yin deficiency, making it very popular for insomnia among menopausal or andropausal patients. It is also the best formula when dryness is a significant factor, since it possesses a strong action to

replenish fluids. Choose **Heavenly Emperor's Formula** for insomnia if the patient also shows signs of significant dryness such as dry or itchy skin or vaginal dryness. A common tongue picture for the patient benefitting from **Heavenly Emperor's Formula** is a mirror coat/no coat on a red tongue that may also be a bit small. The pulse too will show yin deficiency.

**Restful Sleep Formula** (An Xin Pian) is a modification of **Baked Licorice Formula** (Zhi Gan Cao Tang). It is used for chronic sleep disorders where there is deficient qi and blood. It is similar in action to **Ginseng & Longan Formula** (Gui Pi Tang), but is specifically modified to address insomnia. Comparatively, **Ginseng & Longan Formula** is stronger to nourish spleen qi and heart blood, but **Restful Sleep Formula** is superior for inducing sleep. It is especially effective for chronic insomnia among the elderly with a presenting pattern of qi and blood deficiency.

Bupleurum D Formula (Chai Hu Jia Long Gu Mu Li Tang) is used to treat excess conditions only. The pattern it addresses will include restless sleep, possibly with dream disturbance. There may be constipation or other heat signs. Bupleurum D Formula is useful for insomnia during periods of acute stress which have a clear end in sight, such as performance anxiety or heavy workloads associated with a particular project. Originally designed to treat iatrogenic patterns when purgatives were used for an exterior condition, driving the pathogen deeper into the body, Bupleurum D Formula can still be used for post-illness insomnia if the pattern is excess.

**Blood Palace Formula** (Xue Fu Zhu Yu Tang) is used for insomnia due to blood stasis or stagnation in the chest. This is often missed in diagnosis because the practitioner's attention is usually on heart deficiencies or excesses of heat when they are differentiating patterns of insomnia, yet Blood Palace Formula is very often the best choice for the condition. Quite simply, if the pulse (especially in the heart position) is choppy or tight/wiry, Blood Palace Formula is probably going to be the most effective choice. Characteristic supporting signs and symptoms include any type of persistent pain in the chest, including the ribcage itself and angina (but not lung pain such as chest oppression from phlegm-heat.) If the patient has a known heart condition such as coronary plaque, or valve issues along with their insomnia, Blood Palace Formula should be your first choice. It is also the best choice if insomnia is coupled with fibromyalgia. (CAUTION: Do not combine Blood Palace Formula with pharmaceutical anti-coagulant agents such as Coumadin.)

# ZANG-FU DEFICIENCY PATTERNS FOR INSOMNIA

Pattern	Description	Formula(s)
Spleen Qi and Heart Blood Deficiency	Insomnia with difficulty falling asleep, difficulty switching off the mind, pale/sallow complexion, weak digestion, fatigue, pale tongue, thin, weak pulse.	Restful Sleep Formula (if insomnia more prevalent than spleen qi deficiency signs) or Ginseng & Longan Formula (if spleen qi deficiency signs more prevalent than insomnia)
Liver and Heart Yin/ Blood Deficiency	Difficulty falling asleep or frequent waking, talking during sleep, not capable of achieving deep sleep, irritability or quick temper, dry, gritty eyes, left guan pulse is thin or wiry and rapid.	Zizyphus Formula If pulse is more wiry than thin, combine with Free and Easy Wanderer Plus
Heart and Kidney Yin Deficiency (or Disharmony of Heart and Kidney)	<b>Pattern A</b> : Frequent waking or waking with deficiency heat signs, lower burner dryness such as concentrated urine, dry stools, or vaginal dryness, thready rapid pulse, little or no tongue coating, tongue may be small and red.	Pattern A: Heavenly Emperor's Formula
	<b>Pattern B:</b> insomnia due to shock or abuse, or from over-ejaculation featuring dream disturbed sleep, seminal or vaginal leakage; pulse will be hollow or thready and floating.	Pattern B: Cinnamon D Formula
Heart Qi and Yin Deficiency	Difficulty falling asleep, anxiety and/or palpitations, panic attacks, mild heat signs mixed with fragility.	An Mien Formula
Heart and Gallbladder Qi Deficiency	Frequent waking throughout the night, not feeling secure, timid personality, easily destabilized by shock or fearfulness, weak constitution, spontaneous sweating.	An Mien Formula plus Jade Windscreen Formula or An Mien Formula plus Bupleurm & Tang Kuei Formula

# ZANG-FU EXCESS PATTERNS FOR INSOMNIA

Pattern	Description	Formula(s)
Blood Stasis in the Chest	Restless sleep, pain, discomfort, or stifling sensation in the rib cage or chest cavity (excluding lungs), irritability and restlessness, broken vessels on the face, depression with warm sensation in chest, low grade fever at night, history of angina or thoracic injury, pulse is deep and choppy or wiry or intermittent, tongue may be purple.	Blood Palace Formula
Liver Qi Stagnation Transforming into Fire (may also have Phlegm)	Difficulty falling asleep, dream-disturbed sleep, sighing, teeth grinding, hypochondriac pain, moodiness, sudden temper flares, constipation or alternating constipation and diarrhea, shoulder and neck tension, headaches (frontal or temporal), withdrawal from a chemical dependency, pulse will be wiry, tongue may be unremarkable or have a yellow coat with red edges.	Bupleurum D Formula or, if fire is prominent, Gentiana Drain Fire Formula
Phlegm-Heat in the Gallbladder Disturbing the Heart	Fitful sleep or insomnia, may have frequent waking, much dreaming (vivid), or waking up early with inability to fall back to sleep, irritability, may have gnawing hunger or bitter taste in mouth, rebellious stomach qi such as belching or acid reflux is common, may have dizziness or vertigo; pulse will be wiry or slippery and rapid, tongue will have a greasy yellow coat. <b>Must have significant phlegm!</b>	Poria & Bamboo Formula

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# TRADITIONAL SOLUTIONS TO MODERN IDENTIFICATIONS OF SLEEP DISORDERS

Many patients with long-standing insomnia may have already investigated with modern medicine fairly deeply into their condition by the time they come to visit the office of an OM practitioner. Some "answers" will inevitably be discovered through sleep studies, bloodwork, and other lab analyses. It is good practice for us to honor these answers or diagnoses brought to us by the patient, especially if they have already invested in those "answers". It is always important for any practitioner to bear in mind that their own perspective is not the final word on anything. Humility and respect go a long way to reinforcing the relationship between healer and patient; and creating for the patient a deeper connection to a treatment strategy will very often improve the outcome. With this in mind, the present section will attempt to provide traditional treatment insights for some modernlydefined causes of sleep disorders.

#### **Cortisol**

A normal circadian cortisol rhythm begins to rise during the "yang within yang" time (dawn), and rises rapidly to reach its zenith by mid-morning in order to give us energy for the day. Cortisol levels begin to gradually decline after lunchtime and by 9 or 10 p.m., levels reach their lowest and remain there until dawn the next day. These nadir times of cortisol levels correspond with the yin time of day, when we should be turning inward or settling down. The first part of the day is about preparation for engaging the world and about taking action. To stay in accord with the circadian clock, as afternoon slides into evening, we should become more reflective; outward-directed action should begin to turn inward: we should begin to process the experiences of the day and perhaps look ahead a few hours to winding down. Finally, before turning in for the night, we should simply let go of what we are able to let go of so that we do not take the activity of the day into the relative stillness of our sleep.

Not being able to wind down and let go throws off the cortisol rhythms. Unmanaged stress is the cause of the disturbance. Stress can cause cortisol rhythms to become almost opposite of what they are supposed to be: spiking in the evening and dropping in the morning, locking the individual into a pattern of insomnia at night and chronic fatigue during the day. Even when the initial stressor is removed from the picture, the body rhythms can become locked into this insomnia—fatigue cycle and the pattern itself becomes another stressor. The inverse cortisol pattern must be corrected.

## **Normal Circadian Cortisol Rhythms**

6:00 a.m.→10:00 a.m. **Peak levels of cortisol** 

10:00 a.m.→Noon **Peak levels of cortisol, but begin-**

ning to decline

Noon→9:00 p.m. Steady decline of cortisol levels

9:00 p.m.→11:00 p.m. Lowest cortisol levels of the day 11:00 p.m.→3:00 a.m. Still very low, but beginning to rise 3:00 a.m.→6:00 a.m. Steep rise in cortisol levels

Your treatment strategy will most likely occur in stages. The first stage is always to do what you can to manage the stress. If the original cause of the stress is still a factor, the clinician's role may involve a little counseling or at least compassionate listening. **Free and Easy Wanderer Plus** (*Jia Wei Xiao Yao San*) is a favorite formula for the decompression required for acute stress. This formula is not, however, a somnolent, so a sleep aid from the chart in the *Zang-Fu* Pattern section above may be required to help induce sleep at bedtime

Once the acute stress has passed (or if nothing can be done about it for the time being) and the focus of treatment is on the inverted cortisol pattern, you can begin to rectify the cortisol issue more directly. This is done by prescribing:

- Adaptogenic herbs or yang tonics before noon (the times that are supposed to be peak cortisol times). Adaptogenic formulas should be chosen for their ability to reach the heart as well as the hormonal centers. Eucommia & Rehmannia Formula (*You Gui Wan*; KPC 1260) is an effective choice for a yang tonic.
- Yin-nourishing formulas (with an affinity for the heart) from early afternoon until early evening—formulas with a high percentage of prepared rehmannia (shu di huang) work best and,
- Somnolent formulas before bed.

Experience is processed through the action of the spleen qi, which is why the spleen is the first to suffer signs of stress (worry, obsessive thinking, loss of appetite, loose stools, etc.). But when stress is held deeper, when it is disturbing sleep and creating anxiety, it has gone to the *shaoyin* axis of heart and kidney. This axis is, among other things, a hormone manager. Chinese medicine's *shaoyin* axis includes the thyroid and the endocrine system's HPA (hypothalamic-pituitary-adrenal) axis, as well as the effects these hormonal centers have upon the heart. All adaptogens have a regulating effect on kidney yang via the adrenals, but not all provide support for the heart.

The Morning Herbal Strategy will focus on front-loading with adaptogenic herbs or yang tonic formulas. Two main adaptogenic formulas can be used throughout the first part of the day to raise cortisol levels and reset the cortisol rhythm.

Use **Ginseng Endurance Formula** (Ren Shen Pian) in high doses every 2-3 hours (3-6 tablets, depending on weight and sensitivity) with the final dose between 11:00 a.m. and noon. It is important to stop the dosing at this time, so that the normal drop of cortisol can occur at its proper time. **Ginseng Endurance Formula** is preferred when, in addition to acting as an adaptogenic to support adrenal function and

reduce the effects of stress on the physiology, one also requires an energy boost to break through the fatigue.

Use **Eleuthero Tablets** (Wu Jia Shen Pian) when the fatigue is secondary to the insomnia. Eleuthero has been widely studied and praised for its adaptogenic properties. It nourishes heart, kidney and spleen. The adaptogenic actions of eleuthero help to harmonize the effects that the world can have upon the *shaoyin* axis. It is not as stimulating as **Ginseng Endurance Formula**, and can be taken a little longer into the day, up until about 1:00 p.m.

Since the inverse cortisol pattern is essentially a yin-yang inversion, yang tonics like Eucommia & Rehmannia Formula (*You Gui Wan*; KPC 1260) are often more effective than adaptogens.

The Afternoon/Evening Herbal Strategy is going to focus on supplementing vin and nourishing the heart and kidney to support the shaovin axis. Studies have shown that prepared rehmannia (shu di huang) is a key ingredient for resetting this phase of the circadian cortisol rhythm. True Yin Formula (Zuo Gui Jia Er Zhi Wan) is the main formula for the afternoon/early evening phase of treatment, with its high percentage of prepared rehmannia (shu di huang) and its strong support of the heart and kidney with herbs like eclipta (han lian cao), ligustrum (nu zhen zi), lycium fruit (gou qi zi), schisandra fruit (wu wei zi), honey-fried licorice root (zhi gan cao), Chinese yam (shan yao), and cornus (shan zhu yu). Two other formulas can be effectively used during the afternoon/evening phase to nourish yin and reset the shaoyin axis: Rehmannia Six Formula (Liu Wei Di Huang Wan) and Heavenly Emperor's Formula (Tian Wang Bu Xin Dan). Rehmannia Six Formula has the highest percentage of prepared rehmannia (shu di huang). Because it contains a little tree peony cortex (mu dan pi) and water plantain (ze xie), it is preferred when a little draining of heat and damp is required with the supplementation. Heavenly Emperor's Formula does not contain any prepared rehmannia (shu di huang), but it has a high percentage of unprocessed rehmannia (sheng di huang) and has a strong action to support the shaoyin axis. Use Heavenly Emperor's Formula when there is dryness/body fluid deficiency, or deficiency heat.

The Bedtime Herbal Strategy is about the use of somnolents to help induce sleep. These are typically administered in two doses. The first dose is taken after dinner and is typically smaller than the bedtime dose (2-3 tablets). The second dose is taken 20-60 minutes before going to bed and is typically a little larger than the first dose (3-5 tablets). The two main somnolent formulas are An Mien Formula (An Mien Pian) and Zyziphus Formula (Suan Zao Ren Tang). Determination will be made based on pattern presentation. Please refer to the two tables in the Zang-Fu Patterns of

Insomnia section above to determine the most appropriate formula for sleep induction.

# Sleep Apnea

Modern medicine recognizes two types of sleep apnea: Obstructive Sleep Apnea (OSA) and Central Sleep Apnea (CSA). OSA is more common and is defined by an obstruction in the airway. The most common obstructions involve one or more of the soft tissues at the back of the throat. The uvula can be enlarged, the soft palate can sink into the throat, or the tongue can be too loose and slide a little down the throat while the patient is lying on his/her back. Sleep position plays a big role in the severity of the OSA. Many times, if the patient can be helped to sleep on their side or on their stomach (and remain off their backs through the night), the airway can remain open. This may require counseling as well. They may claim that they "have tried to sleep on their side, but always wind up turning over onto (their) back," but rarely have they really exhausted their strategy options. There are special pillows that cradle the head in a side position, body pillows that can help prevent the sleeper from rolling back, ways of tucking the covers that can limit rolling, and other aids for more extreme cases. Herbal treatments can be of assistance too. Many times, Ginseng and Astragalus Formula (Bu Zhang Yi Qi Wan) is sufficient for raising the sinking spleen qi to remedy this problem. But because, for some, ginseng is a stimulant, it is recommended that the patient concentrate his/her doses in the first part of the day and finish the day's dosing by early evening. I usually have them take a large dose (3-4 tablets) in the morning during spleen time, a second, smaller dose (2-3) tablets) around lunch time, and the third and final dose of the day (also 2-3 tablets) in late afternoon, a little before dinner. Other times, if the uvula is swollen, for example, there may be an excess issue of either damp or toxin causing the swelling.

Formulas for Obstructive Sleep Apnea (OSA) Ginseng & Astragalus Formula (Bu Zhang Yi Qi Wan) for sinking qi, obstruction by the tongue, or enlarged uvula due to spleen qi deficiency.

**Zhong Gan Ling Formula** (*Zhong Gan Ling Pian*) for swollen adenoids or swollen uvula due to toxin. The large percentage of pueraria (*ge gen*) in this formula also helps to raise the qi. If needed for more than a week, it is best to combine with **Astragalus Formula** (*Huang Qi Jian Zhong Tang*) to protect the middle burner.

**Astragalus Formula** (*Huang Qi Jian Zhong Tang*) for children with weak digestion causing open mouth sleeping, excessive night drooling, or whose weak immune systems interfere with good sleep.

**Poria Fifteen Formula** (Shi Wu Wei Fu Ling Pian) when obesity or excess dampness is the underlying cause of OSA.

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[Note: Obesity should never be treated with herbs or supplements alone. If lasting results are to be expected, the root cause of the obesity must be determined and treated. Usually, multiple supports including acupuncture, some type of counseling, and of course exercise and good diet are required for success.]

In Central Sleep Apnea (CSA), the cause is believed to lie with the brain failing to signal regularly to the muscles and apparatuses of respiration. Acupuncture can go a long way toward remedying the miscommunication between organs. The *yin qiao mai* is one excellent choice because the kidney points on the chest connect deeply to the lung and general apparatuses of respiration while BL-1 and GB-20 both connect with the brain. Yin qiao mai is also closely associated with sleep disorders, although, traditionally it is somnolence rather than insomnia. What this means in terms of treatment strategy is that the *vin qiao mai* needs to be tonified instead of dispersed. Tonification of the *yin qiao mai* with moxa will automatically reduce any excess in the yin qiao mai, which is often indicated for insomnia. (yin qiao and yang qiao are connected in a polarity; that is, reducing one automatically tonifies the other.) Needle first, then moxa the opening point, the xi-cleft point, and selected chest points on the kidney channel. (Needle transversely from the boarder of the sternum aiming laterally.) Another acupuncture option for CSA, is to reset the central pole-zong qi (pectoral qi) connection. The mu points are used because they represent the junction of jing and blood (pre-natal and post-natal energetics). The strategy is to open the chest and regulate the breath and brain. Needle either bilaterally, or men on left/ women on right. Needle in the following order:

 $[(\uparrow) = \text{tonify}; (\downarrow) = \text{reduce}]$ 

- (†) CV-12 (to augment Earth in order to support Metal, and to engage the central pole)
- (†) Lu-1 (to augment Metal to control Wood, and to support the breath cycle)
- (1) Lv-14 (reduce Wood and free the chest)
- (even) BL-1 (to enter the brain)
- (even) GV-20 (to finish engaging the central pole)
- (†) CV-17 (to draw the qi from the brain to the chest via the central pole and to regulate *zong* qi)

Herbal strategies will be determined by pattern identification.

#### Formulas for Central Sleep Apnea (CSA)

**Ginkgo Formula** (*Yin Guo Ye Wan*) is arguably the first choice for CSA. It can be combined with any of the other formulas to enhance their effectiveness or used on its own if none of the above patterns seems to fit the presentation of the patient. Often mistaken for a single-ingredient ginkgo supplement, this 13-ingredient formulation accomplishes a great deal more.<sup>iii</sup> Besides the well-know and thoroughly

studied brain-nourishing actions of ginkgo, this formula also reconnects the brain and chest by nourishing heart and liver blood, invigorating blood in the chest, and astringing lung qi. Additionally, **Ginkgo Formula** opens orifices and calms the spirit. All of these actions are valuable in rectifying the brain-respiration connection. Success may take up to a few weeks if used without acupuncture.

**Blood Palace Formula** (*Xue Fu Zhu Yu Tang*) is one of the best all-around formulas to address issues in the *zong* (pectoral) qi when the pattern is blood stasis. **Blood Palace Formula** "drives out stasis in the mansion of the blood" and can help regulate the breath by removing obstructions in the heart. The patient must have a choppy pulse and/or purple in the tongue for this formula to be appropriate.

**Baked Licorice Formula** (*Zhi Gan Cao Tang*) is the best formula if the CSA began in the aftermath of a febrile disease where qi and yin were consumed and the heartbeat became irregular. **Baked Licorice Formula** can be very helpful when the CSA pattern presents with an irregular pulse or one which is thin and forceless.

**Eight Immortals Formula** (Ba Xian Chang Shou Wan) reinforces the connection between kidney and lung and nourishes yin and qi. It is an appropriate choice for CSA when the pattern is chronic lung and kidney deficiency, especially when the yin is deficient. If the patient also experiences chronic dry, weak cough or has chronic asthma with yin deficiency, this is the formula of choice.

Mulberry and Lycium Formula (Xie Bai San) can disperse latent heat in the lungs. There may or may not be other heat signs, but, if there is latent heat in the lungs, the pulse in the mid-level of the lung position will be noticeably more rapid or more urgent than it is in the other levels of the same position. Latent heat is usually seasonal, emerging in midwinter or in the spring. If the CSA is of recent onset (weeks or maybe months as opposed to years) or if it is seasonal, recurring only during certain times of the year, check the midlevel of the lung pulse in order to determine the presence of latent heat. If it is rapid and if latent heat in the lungs is the primary cause of the problem, then dispersing constrained heat with Mulberry and Lycium Formula should remedy the CSA within a week or two.

# **Restless Leg Syndrome**

Restless Leg Syndrome (RLS) is classified in modern medicine as a neurological disorder characterized by a sensation in the leg with a strong, sometimes overwhelming urge to move the leg in an attempt to quiet the sensation. It can interfere with sleep not only of the RLS sufferer, but also for anyone sharing a bed with them. Most causes are idiopathic, but it is widely believed that in many cases the cause is a disorder of the basal ganglia's dopamine pathways. RLS should be distinguished from other disorders such as Par-

kinson's disease, myoclonic jerks, and diabetic restlessness. Modern medicine has no cure for RLS, though the condition does sometimes go away on its own as inexplicably as it developed. In other instances, a deficiency of iron, magnesium, or folate is behind the problem; in such cases supplementation of the deficiency successfully remedies the issue.

Chinese medicine views RLS as an internal wind syndrome. This wind can arise from a number of different sources. One common origin of the "leg wind" of RLS is blockage in the lumbar spine. Often, RLS can be resolved with some body work and acupuncture aimed at releasing the lumbar spine and sacrum. Still more often the RLS is more complicated. Determine which channel is the primary one involved. The patient may be of great assistance in this determination. For some, RLS is experienced as beginning in the foot and extending up the leg toward the hip. The origin will almost always be one of the three leg yang channels, but these may be hard to differentiate. Palpate each of the three leg yang channels and check for areas of tightness in either the muscle (like IT band tightness) or simply some tightness on the surface. If the patient does not notice specifically that the RLS follows the stomach channel or the bladder channel, or if you are unable to determine the channel of origin, then the default channel is going to be the GB, since it has the closest association with internal wind. In other words, when in doubt, treat the GB channel.

Once you have decided which channel to treat, initial elimination of wind is quite simple, but the underlying cause of the wind will need to be addressed as well if your treatment is going to hold. Initial elimination of wind can be accomplished by first cupping the sacrum and GB-29 or GB-30 on the affected side. Then, open the sinew channel with SI-18 plus the jing-well of the affected channel. Next, gua sha the affected channel from the sacrum down past the ankle. It is advantageous to add a needle at one of the points that has "wind" or "feng" in its name. These are Du-16 (Feng Fu), GB-20 (Feng Chi), GB-31 (Feng Shi), or the set of 4 extra points just proximal to the margins of the webs of the toes, M-LE-8 (Eight Winds, Ba Feng). Obviously, if the GB channel is the focus, then either GB-20, GB-31, or both will be chosen. If the bladder channel is the focus of treatment, then cup BL-12. Ba Feng can be used for the stomach channel, Du-16 when the origin seems to be from the spine.

If physical obstruction was the cause of the leg wind, then the above should be sufficient. But there are numerous other etiologies of internal wind. If the pulse is floating and rapid, but weak in the deep level, or if it is felt medially (against the tendon) in the *chi* position, but laterally (radially) in the *cun* position, then the wind is being created from a pathology in the *yang wei mai*. An alternate pulse picture for *yang wei mai* pathology is one which is weak and deep in the right *chi* position, but floating and rapid in the *cun* posi-

tion. Both of these pulses indicate improper movement and governance of the yang qi as it moves from its origins in the interior to its circulation in the exterior. Yang wei treatments for RLS are best executed one-sided, opposite the affected side. There is no need to obscure the treatment by adding points which are not on the yang wei trajectory. The yang wei is dominated by the GB channel in the first place and subduing wind is one of its primary actions. GB-20 (Feng *Chi)* is one of the landmark points of its trajectory. The simplest point selection for using the yang wei mai to treat RLS might look something like the following. Note that this is a one-sided treatment, needling opposite the affected side:  $BL-63 \rightarrow GB-35 \rightarrow GB-29 \rightarrow GB-21 \rightarrow GB-20 \rightarrow and may$ be GB-13, since it marks the end of the trajectory. (There is no need to use the Opening Point, TH-5, but if you choose to do so, observe the male-female rule, needling males on the left and females on the right.) Needle all points deeply, relative to the anatomy at the point. Remember that GB-21 is needled either shallow or transversely from anterior to posterior in order to avoid causing a pneumothorax, and GB-20 is never needled toward the brain. If needling GB-13, aim the needle posteriorly, toward the back of the head. Leave needles in for 30-45 minutes.

# Formulas for Restless Leg Syndrome

Since there are at present no prepared formulas specifically for RLS, best results are going to be obtained from combining formulas. Bear in mind that acupuncture and/or bodywork will be required in addition to the herbal treatment.

**Luo Bu Ma Formula** (*Luo Bu Ma Pian*) is one of the strongest to stop tremors and extinguish liver wind. It invigorates blood through the legs, clears heat, and subdues yang.

Gastrodia and Uncaria Formula (*Tian Ma Gou Teng Yin*) is selected when the cause of the wind is liver yang rising due to kidney and liver yin deficiency. Choose this formula if the patient also suffers from distending headaches (liver yang rising) or if the onset of the RLS is closely linked with menopause.

**Linking Formula** (*Yi Guan Jian*) is used to address liver qi stagnation that is secondary to liver yin deficiency. If the pulse is thin and weak or thin and wiry in the left *guan* position, **Linking Formula** may be an effective option.

**Restorative Formula** (Yang Xue Zhuang Jin Jian Bu Wan) is used when the onset does not occur until old age or the patient is in feeble condition. It is nourishing while freeing the connecting vessels and expelling wind, making it safe for long term use with feeble patients.

#### SPECIAL ACUPUNCTURE ASSESSMENTS FOR INSOMNIA

The pulse should **always** be assessed before treating a sleep disorder. If the *zang-fu* herbal approach is not applicable, one handy method for treating true insomnia begins with

#### 8 TREATING SLEEP DISORDERS

determining whether the issue is due to a nighttime *ying* qi cycle problem or a nighttime *wei* qi cycle problem. In brief, nighttime *wei* qi cycle insomnia is characterized by frequent stirring and awakening throughout the night for brief periods of time, usually awaking once every hour or so for less than 10 minutes. Nighttime *ying* qi issues are characterized by one long period of wakefulness, usually about 1-2 hours. The acupuncture treatments are simple and effective. The patient's sleep will improve on the night of the first treatment, but a few treatments close together will be required for lasting effect.

## Nighttime Wei Qi Cycle Insomnia

Indicated by brief but frequent up and down periods throughout the night. Usually around 10 minutes up, never more than 30 minutes at a time. Sleep is not restful. Patient may not feel protected/safe at night. Treatment is performed on a controlling cycle pair, reducing the excess and tonifying the deficient one in the pair. Which pair to treat is determined by pulse alone (not the time of night they awaken)!

**Pulse:** Check the Controlling Cycle (see table below). Stagnation shows in the pulse as an excess in the controlling (grandmother) position with a relative deficiency in the grandson position. Look for the greatest difference between the two positions. By definition there can be only one pair with the greatest difference between them.

**Treatment:** There are a number of ways to accomplish the goal of reducing an excess while tonifying a deficiency in a pair. One simple method is to reduce  $(\downarrow)$  the excess at its front-mu point and xi-cleft point; then tonify  $(\uparrow)$  the back-shu of the weak one of the pair. Moxa on back-shu is often stronger than needling for tonification. **Method 2:** You can needle the jing-well of the excess with reducing technique, and moxa the jing-well of the deficient channel. (The wei qi is easily influenced at the jing-well points for both tonification and reduction.)

Pulse	Position	Controlling Cycle	Treatment
Kid > Ht	L chi > L cun	(Water→Fire)	↓Kid-5, GB-25; ↑BL-15
Ht > Lu	L cun > R cun	(Fire→Metal)	↓Ht-6, RCV-14; ↑BL-13
Lu > Liv	R cun > L guan	(Metal→Wood)	↓Lu-6, Lu-1; ↑BL-18
Liv > Sp	L guan > R guan	(Wood→Earth)	↓Liv-6, Liv-14; ↑BL-20
Sp > Kid	R guan > L chi	(Earth →Water)	↓Sp-8, Liv-13; ↑BL-23

# Nighttime Ying Qi Cycle Insomnia

The *ying* qi cycle is directly tied into the entry and exit points of the *ying* qi circulation/the circadian clock. Qi stagnates at the exit point of one channel and does not flow smoothly into the entry point of the next channel.

**Pulse:** The pulse will reflect this excess/deficiency clearly with an excess in the position of the channel with the exiting qi, and a deficiency in the position of the channel that the qi is supposed to enter into. Again, look for the greatest difference between the corresponding pulse positions. Note that the stagnation that concerns us here does not get blocked at the yin/yang pair, only when the qi moves from yin to yin or yang to yang.

**Treatment:** Treatment for this condition is very specific and very simple. Reduce  $(\downarrow)$  the stagnation at the exit point and tonify  $(\uparrow)$  it at the corresponding entry point. Moxa at the entry point in the pair may be stronger for tonification, but is not always necessary, because the issue real lies in the stagnating qi at the exit point.

Pulse	Position	Treatment	
		Exit Point	<b>Entry Point</b>
Liv > Lu	L guan > R cun	↓Liv-14	↑Lu-1
Sp > Ht	R guan > L cun	↓Sp-21	↑Ht-1
Kid > PC	L chi > R chi	↓Kid-22	↑PC-1
TW > GB	R chi > L guan	↓TW-22	↑GB-1
SI > BL	L cun > L chi	↓SI-19	↑BL-1
LI > St	R cun > R guan	↓LI-20	↑ St-1

#### **FOOTNOTES**

<sup>1</sup>Reite M, Ruddy J, Nagel K. *Concise Guide to Evaluation and Management of Sleep Disorders (3rd ed)*. American Psychiatric Publishing, Inc., 2002

ii http://www.cdc.gov/features/dssleep/, Jan, 2014

iii See **Ginkgo Formula Monograph** from Herbal Medicine Press, 2014.

iv http://www.ninds.nih.gov/disorders/restless\_legs/detail\_restless\_legs.htm#278833237