

## Insomnia and Chinese Medicine

Insomnia is a symptom that can accompany several sleeping, medical and psychiatric disorders, characterized by persistent difficulty falling asleep and/or staying asleep despite the opportunity. Both organic and non-organic insomnia without other cause constitute a sleep disorder, primary insomnia.

### Types of insomnia

1. Transient insomnia lasts from days to weeks.
2. Acute insomnia is the inability to consistently sleep well for a period of between three weeks to six months.
3. Chronic insomnia lasts for years at a time.

### Patterns of insomnia

1. Onset insomnia: difficulty falling asleep at the beginning of the night.
2. Middle insomnia: waking during the middle of the night, difficulty maintaining sleep.
3. Terminal (or late) insomnia: early morning waking. Often a characteristic of clinical depression.
4. Sallow sleep: easy to wake up.

### Causes

Insomnia can be caused by various conditions or disorders.

- Emotional and mental tension: such as fear, stress or anxiety
- Disturbances of the circadian rhythm: such as shift work and jet lag
- Poor sleep hygiene: such as noise
- Physical exercise: exercise-induced insomnia is common in athletes
- Hormone imbalances: such as premenstrual syndrome, perimenopause, during menopause and postmenopause
- Any injury or conditions caused pain
- Medical conditions: digestive or cardiovascular disorders; mental disorders; certain neurological disorders; restless legs syndrome; parasites-induced intestinal disturbances
- Stimulants: caffeine or cocaine
- Certain medication
- Parasomnia

### Conventional treatment

Sleep disruption is often managed by the use of medications such as benzodiazepines and tricyclic antidepressants. Sedatives and oral hypnotics have high abuse potential and can be addictive. Tricyclic antidepressants may have intolerable adverse effects, including dry mouth, orthostatic hypotension, urinary retention, and cardiac conduction effects. Melatonin is widely available and may be used in an attempt to normalize the sleep-wake cycle. However, there is a paucity of data on the long-term safety of melatonin. Non-pharmacological interventions include "light therapy," a commonly used modality for seasonal affective disorder and sleep disruption. But it has been noted significant adverse effects such as nausea, headache or shakiness.

### Chinese Medicine

**Acupuncture studies** Chinese medicine is used for the treatment of insomnia and related conditions for thousands of years in China and is uniquely beneficial for the patients with insomnia. Various acupuncture studies have been done and the evidence show that the effectiveness of acupuncture. In a study by Lee,<sup>1</sup> all

patients reported severe insomnia as a chief complaint; no patient slept more than 3-4 hours per night. Seven auricular points were used in this study: heart, kidney, adrenal, sub-cortex, endocrine, san chiao and shen men. In addition to these standard 7 auricular points, sympathetic, occiput, and gallbladder auricular points were added if reactive or tender. Treatment was 3 times per week with a typical duration of 10-12 initial treatments, followed by a 2- to 4-week observational period; 15 of 16 patients had regimens of 15 treatments or fewer; 1 patient received 28 treatments total. Lee reported that lidocaine injections into exclusively auricular points improved symptoms of sleep disorder in 15 of 16 patients treated. Therapeutic effects were still present 3 months following the conclusion of treatment. In a study of outpatients, Fischer<sup>2</sup> reported similarly encouraging results: 100% of patients treated for insomnia obtained benefit without recurrences within 18 months of follow-up. Montakab and Langel<sup>3</sup> diagnosed 40 patients using Chinese traditional diagnosis and performed polysomnographic analyses of true acupuncture vs control needed patients. Objective change was noted and found statistically significant in the true acupuncture group.

Ruan et al<sup>4</sup> applied 4 courses of electroacupuncture treatment in 47 patients. Result showed that electroacupuncture considerably improved insomniacs' sleep quality and social function during the daytime. Electroacupuncture had certain repairing effect on the disruption in sleep architecture. At the same time, electroacupuncture prolonged slow wave sleep (SWS) time and relatively rapid eye movement sleep (REM sleep) time. There was no hangover, addiction or decrements in vigilance during the daytime. Electroacupuncture treatment for chronic insomnia is safe. Therefore, electroacupuncture therapy could be a promising avenue of treatment for chronic insomnia.

Lee et al<sup>5</sup> studied the effect of intradermal acupuncture on 52 patients with insomnia after stroke. Hospitalized stroke patients with insomnia were enrolled in the study and were randomly assigned to either a real intradermal acupuncture group (RA group) or a sham acupuncture group (SA group). The effect of acupuncture on insomnia was measured using Insomnia Severity Index (ISI) and Athens Insomnia Scale (AIS) at baseline and three days after treatment. To assess the effect of acupuncture on the autonomic nervous function, the subjects' blood pressure and heart rate variability were monitored. The insomnia-related scales ISI and AIS showed greater improvement of insomnia in the RA group than in the SA group. Moreover, there is a greater reduction of the number of non-dippers and a greater decrease of the LF/HF ratio (heart rate variability) in the RA group than in the SA group. These results indicate that sympathetic hyperactivities were stabilized in the RA group. It can thus be concluded that intradermal acupuncture is a useful therapeutic method for post stroke-onset insomnia as it reduces sympathetic hyperactivities.

**Classification and manifestations** In Chinese medicine, sleep is seen as one's yang energy moving inward to be enfolded by yin and sleeplessness is a sign of imbalance. The effects of imbalance can be as simple as difficulty quieting the mind when preparing for sleep, or sleep which is easily disturbed by light or sound, to restless, agitated or dream disturbed sleep. If your sleep is habitually disturbed it can be very damaging to the vital energy of the body and immune system. If this is the case it is important to determine the cause of the imbalance and treat it appropriately. In Chinese medicine, insomnia is caused by different reasons. The following are the common causes encountered in clinical practice.

- **Deficiency of heart and spleen**
  - Symptoms: hard to fall into sleep, dream a lot and easy to wake up, hard to fall into sleep after waking up, pale complexion, palpation,

- forgetful, easy to be tired and low energy, poor appetite, abdominal bloating or loose stool
- Tongue: light-colored with white coat
- Pulse: thin and weak
- **Disharmony of heart and kidney**
  - Symptoms: restless, hard to fall into sleep, dream a lot, with dizzy and tinnitus, feel sore and weak in waist and knees, hot flash and night sweating, feeling hot in the body, rashes in mouth and tongue, spermatorrhoea and irregular menstruation
  - Tongue: red
  - Pulse: thin and fast
- **Qi deficiency of heart and gallbladder**
  - Symptoms: weak, restless, timidity and easy to get startled, fearful all the time, palpitation, often sighing, pale complexion, uncomfortable on lateral chest, and vomit
  - Tongue: light-colored and fat
  - Pulse: thin and weak
- **Disturbance by phlegm heat**
  - Symptoms: restless, dream a lot, easy to wake up, plenty phlegm and feel chest congested, heavy head and tinnitus, bitter mouth and aversion to food, belch and swallow acid
  - Tongue: lightly red and greasy-yellow coat
  - Pulse: slippery and fast
- **Disharmony of stomach-qi**
  - Symptoms: can not sleep peacefully with uncomfortable stomach, poor appetite and belch, abdominal bloating and borborygmus, constipation
  - Tongue: thick and greasy coat
  - Pulse: heavy and slippery
- **Liver stagnation-caused fire**
  - Symptoms: insomnia, anxiety and easy to get angry, red-eyes, bitter mouth, dark or dark yellow-colored urine and constipation
  - Tongue: red, yellow tongue coat
  - Pulse: stringy

### Principle of treatment

- Deficiency of heart and spleen: tonify heart and spleen, nourish qi and stimulate blood.
- Disharmony of heart and kidney: tonify yin and suppress heat, smooth the route of heart and kidney.
- Qi deficiency of heart and gallbladder: tonify qi, suppress fright, peace spirit and sedate heart.
- Disturbance by phlegm heat: clear heart, dissolve phlegm, sedation and peace mind
- Disharmony of stomach-qi: improve food digest, eliminate constipation, harmonize the stomach qi and peace the mind.
- Liver stagnation-caused fire: Smooth liver and eliminate the heat.

Chinese medicine practitioners treat insomnia according to patient's initial cause, symptoms and signs, presentation of pulse and tongue. Acupuncture, herbal

medicine and some other modalities of Chinese medicine can be used alone, or combined, which depend on individual situation. Acupuncture, twice a week for 4 weeks, is a common practice. And herbal medicine, twice a day for 10 days, is often used in clinic practice. Responses to acupuncture or herbal medicine are different, so treatment course and modalities used are different.

## References

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