

## *“Tongfa” in the Treatment of Insomnia*

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**Keywords:** Insomnia, Mood, Circadian Rhythm

**Abstract:** The reason why people can sleep is because yin and yang can communicate, and the root cause of insomnia is that yin and yang can not communicate. The dialectical complexity of insomnia, involving many viscera, makes it difficult to achieve a significant effect in clinical treatment of insomnia, but the essence of insomnia can be dialectical and recuperated. Insomnia often interferes with human normal life, work, study and health, and can increase or cause palpitation, chest arthralgia, dizziness, headache, stroke and other symptoms." [1] “Tongfa” is effective in the treatment of insomnia, and its related research is of valuable value.

Insomnia is difficult to fall asleep, the brain can not rest, it is easy to wake up after sleep, it is not easy to fall asleep after waking up, and the brain can not get rest, and even can not sleep all night. Traditional Chinese medicine calls it "sleepless." [2] there are many causes of insomnia, mainly due to overweight thinking, imbalance between work and rest, low physical quality, post-illness body deficiency, depression and panic, nervous mood, irregular diet, abnormal stomach qi, or anemia, hypertension, atherosclerosis, neurosis, etc., so that Wei-yang can not enter the camp yin, yin and yang do not mix, the heart loses nourishment, resulting in the brain central nervous system excitement and depression process balance disorder, resulting in insomnia. [3] The author discusses the etiology, pathogenesis and modern experimental research of insomnia from the theoretical relationship between general method and insomnia, so as to provide clinical reference and discussion and promote the improvement and development of related theories.

### **1. Theoretical Study on Insomnia and General Methods in traditional Chinese Medicine**

#### **1.1 TCM Theory of Insomnia**

Insomnia is called insomnia in the Internal Classic, and points out that the cause of insomnia is generally the disharmony between qi and blood, yin and yang, which leads to the inability of people to sleep. For example, the theory of "plain asking about disease and energy" said: "people are lying

and nervous, what is it?" Dirt is hurt, essence is sent, and then it is safe, so people can not hang their illness. In the inverse tune Theory of Su Wen, it is described that "if the stomach is not in harmony, you will lie uneasy." it means that Yangming cannot go against his way and cannot lie down, while the rest has a sound. But later doctors have developed to belong to this place where there is disharmony between the spleen and stomach, eating dampness, food stagnation and even restlessness. In the book "difficult Classic", it is first pointed out that the disease name "insomnia". "difficult Classic " points out that the pathogenesis of insomnia is the decline of blood gas, the non-slippery body, and the astringent way of Rong Wei [4] ,so it fails to be refined during the day and can not sleep at night. The body is not slippery, while Rong Wei's astringency shows that although it is a deficiency of both qi and blood, the basic cause of insomnia is also "impassable". In Han Dynasty, Zhang Zhongjing introduced the prevention and treatment of epilepsy with Huanglian Ejiao decoction and Suanzaoren decoction in the Treatise on febrile Diseases and the Golden Chamber, but it is still of great significance in the clinical treatment of infantile insomnia. [5] Children's "Yang is often more than Yin, Yin is not enough", and there is a medicine for nourishing Yin in the prescription. The causes and diseases of insomnia are analyzed in detail in the complete Book of Ancient and Modern Medicine, and the clinical manifestations and nursing principles are also described in detail. Zhang Jingyue's Insomnia in the whole Book of Jingyue summarizes and sums up the etiology, pathogenesis and dialectical treatment of insomnia in an all-round way. \ "the coveted person is originally yin, the master of God is also, Shenan is sleepy, and restless is sleepless. For those who are so nervous, because of the disturbance of evil spirit and the lack of ears due to the lack of Ying Qi, they still think that if they drink strong tea, they will not sleep, and those who have something to do with their hearts will be attacked with their spirit. In the treatment of insomnia in Jingyue's whole book, it is pointed out that:"if there is no evil, we should take nourishing camp qi as the main treatment, that is, we should not pay attention to micro-phlegm and micro-fire, but should only cultivate qi and blood, and if we treat all kinds of diseases by giving consideration to each other, then ten will be exposed to a cold, and it will be difficult to cure the disease, and there will be those who are exhausted and hopeless." [6] "Doctor must read, can not lie" summed up the causes of insomnia as "Qi Sheng, Yin deficiency, phlegm stagnation, water stop, stomach disharmony" and other five factors. [7] The secret transmission of medical efficacy explains the pathogenesis of insomnia after illness as "the night is characterized by yin. If yin is full of qi, the eyes are closed and lie peacefully. If yin is full of yang, it bothers all night and cannot sleep." The heart hides the god, but after the great sweat, the yang is deficient, so he doesn't sleep. The heart governs the blood, but after the sun goes down, the yin is weak, so he does not sleep, the wind of fever is hot, and the spirit is not fine, so he cannot fall asleep. After Xinzu, if Yin Qi has not returned, he will not be able to fall asleep. If the sweating nose is dry and can not sleep, then the disease is evil in the surface." [8]

## 1.2 The TCM Theory of Dredging Method for the Treatment of Insomnia

### 1.2.1 The Guiding Basis for the Empirical Treatment of Insomnia

Under the guidance of Fuzheng "principle of dispelling evil", it may include the method of dredging viscera and viscera, dredging meridians and collaterals, and so on. The Theory of Lingshu Great confusion says "Wei Yang cannot enter Yin, but often stays in Yang. [9] Staying in Yang means Yang Qi is full, Yang Qi is full, and Yin Qi is not allowed to enter Yin, so you can't rest in peace." this is Yin and Yang without traffic, can't sleep. In addition, in the "plain question inverse tone theory" there are "Taiyang Mingda scholar stomach, stomach six fu sea, its qi is also downward, so Taiyang Ming big reverse, can not follow its way, so can not lie down." the reason why yin and yang cannot follow its way is mainly due to phlegm and blood stasis, diet stagnation in

the interior, blocking meridians, affecting blood circulation, Ying Wei qi and blood circulation, heart blood support, and insomnia. "Lingshu evil guest" has a method to cure epilepsy by making up for its deficiency, releasing its excess, adjusting deficiency and reality, in order to communicate its way, and get rid of its evil. [10] "Differentiation of febrile diseases" also has the theory of passing through its path and dispelling its evil. "Medical skills really spread heart and abdominal pain" that: "Fu Tong slightly does not hurt, reason is also, and the methods are different. Therefore, regulating qi to harmonize blood, regulate blood and harmonize qi, pass it; those who are rebellious make it go up, those who end in the middle make it reach, and also pass it; those with upper deficiency help it, and those with cold temperature pass through it. If the following catharsis is necessary, it will be false!" then it is pointed out that it is impossible to pass through because of deficiency. [11] There is also a discussion on the method of Xintong, which is "the kidney is bitter and dry; the urgent food is pungent to moisten it, open the reason, and ventilate the body fluid." Liu Shunong and other old doctors often use the "general method" to treat insomnia, that is, using perilla to dredge the pathway of yang into yin, such as *Pinellia ternata*, rice, etc., or dredging blood collaterals with *Ligusticum chuanxiong* and *Angelica sinensis*, all of which have achieved good results. For the insomnia of "thinking for a long time, entering collaterals and causing blood stasis", the old doctor Zhu Liangchun used Xuefu Zhuyu decoction plus *Salvia miltiorrhiza* and night vine to nourish the heart and calm the mind. [12]

### 1.2.2 The Guiding Basis for the Treatment of Insomnia

According to the general method under the guidance of the treatment principle of "plug", it may include "nourishing yin and increasing fluid, reaching qi and blood, tonifying spleen and kidney" and so on. "Cain is used to replenish the plug" refers to the true and false evidence that the obstruction occurs due to congenital deficiency or long-term illness and deficiency of vital qi, blood and body fluid due to the use of deficiency medicine or external treatment techniques with tonifying effect. [13] "The use of Sainsai" is one of the anti-treatment methods, which comes from Suqian to Zhenyao. Because the appearance of some diseases is inconsistent with the essence, or even on the contrary, it is necessary to pay attention to treatment and seek the root of the disease in clinic. This method is mainly applicable to some diseases with complex condition and disease essence that are inconsistent with the appearance, such as deficiency of spleen and stomach yang, abdominal distension and abdominal pain. When the treatment is to replenish qi, increase yang and strengthen the spleen, the upper disease will decrease. Again, for those with blood deficiency and restlessness, when replenishing qi and nourishing blood, Chong Ren filling will lead to the harmony of yin and yang. This method is mainly aimed at the nature of deficiency of disease. He Ren old doctor uses Qi Ju Dihuang pills for patients with deficiency of yin and hyperactivity of yang, vexation of deficiency and sleeplessness, to collect yin and nourish yin in order to harmonize yang, which is the embodiment of the general method. [14]The method of invigorating spleen and invigorating qi of traditional Chinese medicine is widely used in insomnia. The author collected and compared the randomized controlled studies of invigorating spleen and invigorating qi of traditional Chinese medicine and pure Western medicine in treating insomnia through a comprehensive search of major databases.[15] After data extraction, Meta analysis was conducted by Revman5.2 software.A total of 22 randomized controlled studies meeting the inclusion criteria were included. The effect of invigorating spleen and invigorating qi in the treatment of insomnia (RR=1.25, 95% CI: 1.13, 1.37) and the total score of Pittsburgh Sleep Quality Index Rating Scale (MD=-2.13, 95% CI:-2.72, -1.54) were better than those of western medicine control group. Conclusion: Invigorating spleen and invigorating qi is effective in treating insomnia.[16](Figure 1, 2)

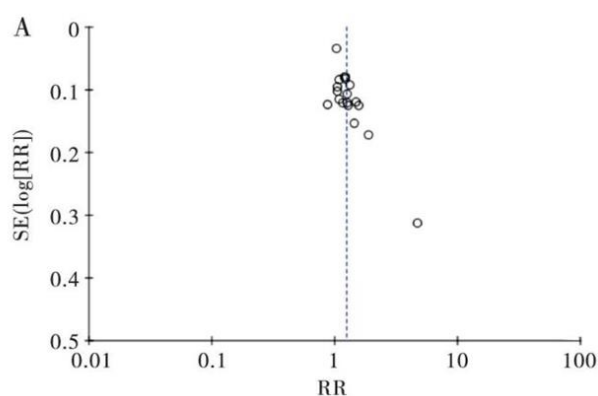


Figure 1. Funnel diagram of efficacy analysis

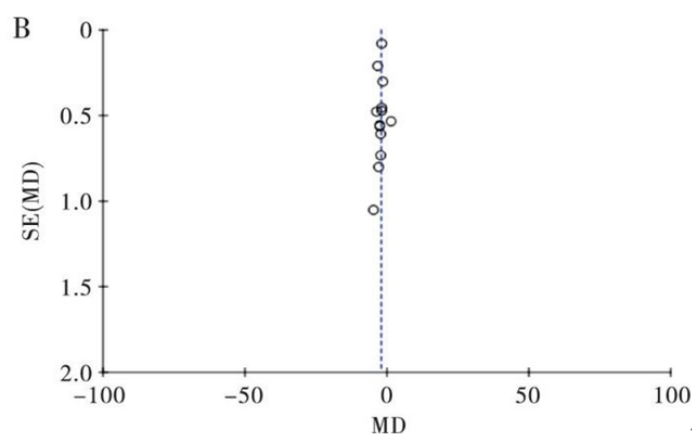


Figure 2. PSQI Analysis funnel plot[17]

## 2. Modern Experimental Research on the Treatment of Insomnia

By general method the experimental research on insomnia in modern medicine mainly starts from two aspects: abnormal mental and emotional disorders and circadian rhythm disorders. Xu determined the causal relationship between anxiety symptoms and insomnia severity by stepwise regression analysis of Logistic and comparison of various dimensions of PSQI data scale and ISI test scale, while Wang's randomized controlled empirical analysis showed that aiming at insomnia in people with depression and taking corresponding intervention would be more effective in improving the sleep quality of the population. Thus reducing bedtime anxiety and dependence on other psychotropic drugs. [18]Chen analyzed the harm of circadian rhythm disorder of ambient light on sleep quality, and concluded that circadian rhythm has an effect on sleep quality and time, which further confirmed that circadian rhythm, plays an important role in sleep regulation. [19] Many famous doctors have obtained brand-new dialectical thinking from clinical practice, and have achieved remarkable curative effect by treating mental state and insomnia with heart and liver. On the other hand, according to the theory of circadian rhythm, there are timely measures to treat insomnia. These ideas can be explained by the theory of "general method". Western medicine studies have found that the expression of some genes in liver cholesterol metabolism has circadian rhythm and plays a potential role in sleep (Figure 3, 4).

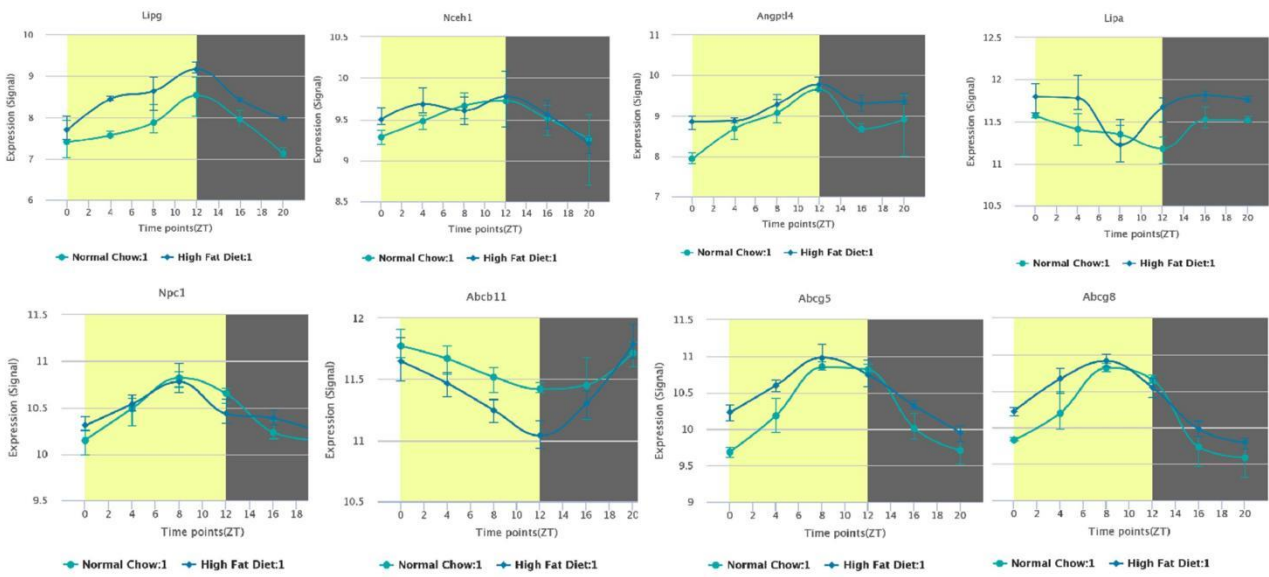


Figure 3. Characteristics of circadian rhythm expression of genes related to cholesterol metabolism in mouse liver

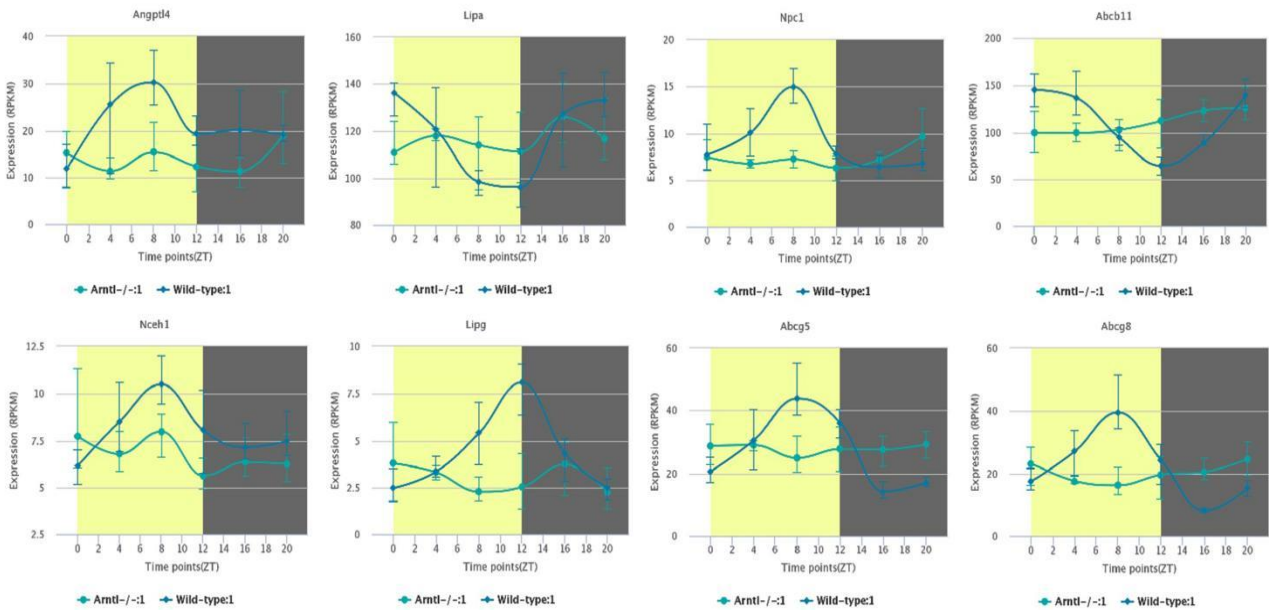


Figure 4. The circadian rhythm of cholesterol metabolism genes in liver of Arntl knockout mice disappeared

### 3. Summary

Through regulating yin and yang, viscera, meridians and collaterals, etc., to achieve the physiological dynamic balance of the body, so that insomnia can be alleviated. The influence of insomnia is great, so we must pay attention to recuperation and prevention.

### Funding

This article is not supported by any foundation.



## Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

## Conflict of Interest

The author states that this article has no conflict of interest.

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