Discussion on the Insomnia Therapy from the Perspective of Traditional Chinese Medicine

Yu Guan¹, Sha Liu¹, Huan Yu¹, Zhihong Yang^{2,a,*}

¹The First Clinical Medical College of Shaanxi University of Traditional Chinese Medicine, Xianyang, China ²Neurology Department, Affiliated Hospital of Shaanxi University of Traditional Chinese Medicine, Xianyang, China ^aE-mail:1947842175@qq.com *Corresponding author

Abstract: Chief physician Yang Zhihong is the third famous Chinese medicine practitioner in Shaanxi Province. He believes that in insomnia diseases, "fire" is the main cause of insomnia. The fire pathogens are divided into yin deficiency and fire due to virtual fire, and heart and liver fire due to real fire, and phlegm fire disturbing the heart. The self-made Qingxin Ningshen Decoction has better curative effect in treating insomnia due to heart and liver fire. , Now analyze the composition rule of Qingxin Ningshen Decoction, and give a case.

Keywords: Insomnia; Exuberance of Heart and Liver Fire; Qingxin Ningshen Decoction; Experience of Famous Chinese Medicine

1. Introduction

Insomnia is a disease characterized by short sleep time or lack of depth, which can be manifested as difficulty falling asleep, easy waking up after falling asleep, difficulty returning to sleep after waking up, and insomnia in severe cases, accompanied by many dreams, anxiety, depression, and crankiness Diseases with a series of symptoms. Severe insomnia may be accompanied by headache, dizziness, general fatigue and weakness. Several symptoms interact with each other and aggravate the progression of the disease [1]. With the development of society, insomnia has become a major disease of various occupations and age groups. According to clinical research, in terms of gender, the proportion of female insomniacs is greater than that of males, which is 1.73 times that of male patients. In terms of age distribution, the proportion of children with insomnia is about 40%, and the proportion of elderly patients with insomnia is about 10%-50% [2]. Western medicine mainly uses benzodiazepines to treat insomnia, while traditional Chinese medicine is based on syndrome differentiation and symptomatic treatment based on the overall concept.

2. Insomnia Records

Insomnia has various names in ancient books. The earliest existing records are called "not lying down" in "The Eleven-Moxibustion Classic of the Foot and Arm" and "The Eleven-Moxibustion Classic of Yin and Yang"; It is called "no sleep" in "Dou Lun"; "Danxi Hand Mirror", "Medical Sect Must Read", "Medicine Heart Prescription" are all called "no sleep"; "Nan Jing" is called "insomnia". "; "Secrets from Outer Taiwan" is the earliest work called "Insomnia" [3].

3. Insomnia Caused By Fire Evil

"Lingshu kouwen" expounds the sleep mechanism: "Wei qi travels in yang day and day, and yin in the middle of the night. When the qi is exhausted and the yang qi is abundant, it will be dead." The pathogenesis of insomnia is: the yin and yang are lost, and the yang does not enter the yin. Fire belongs to yang, and the evil fire is slanted, and the fire rises upward, causing the whole body to be full of yang, and yin to decline. Tang Rongchuan pointed out in "Blood Syndrome: Sleeping Sleep" that "it is because of the restlessness of the mind that either phlegm is fire", indicating that phlegm fire is an

important cause of insomnia. Professor Dai Yongsheng analyzed the diagnosis and treatment of 1353 cases of insomnia. According to statistics, there are 52 types of pathogenesis and syndrome differentiation. Among them, the most common ones are heart fire disturbing the mind, liver stagnation transforming fire to hurt the stomach, phlegm heat disturbing the heart, heart and spleen deficiency, blood 168, 48, 34, 59, 95, and 385 cases of deficiency of liver-heat and heart-kidney incompatibility respectively [5]. Fiery evil is particularly common among the syndromes. Song Fenfen et al[6] divided 68 patients into the control group and the treatment group by using the method of purging fire and cultivating the earth. They found that the patients' insomnia PSQI score, clinical symptom relief, and overall efficacy evaluation were all significantly improved.

4. Make Good Use Of Clearing And Tonic Methods For Insomnia

When Director Yang treats insomnia, he pays special attention to fire evil. Fire belongs to yang evil. Its nature is inflammatory, and it is easy to disturb the gods. Fire evil can be divided into virtual and real, all of which have upward characteristics. In the treatment, it is suggested that the real fire should be cleared and dispersed, and the virtual fire should be replenished and lowered. Generally, insomnia caused by fire evil is divided into the heart and liver fire-prosperous type of real fire, the phlegm-fire disturbing heart type, and the yin-deficiency fire-prone type of virtual fire.

4.1 The Real Fire Should Be Cleared and Dispersed

4.1.1 Clear the Mind and Calm the Mind to Help Sleep

The heart, the official of the monarch, belongs to fire in the five elements, and its nature is in summer. Liver, the body is yin and uses yang, its nature is in spring, and all belong to the yang viscera. When the heart-yang is too high, the liver is the mother of the heart because of "the heartbeat will shake the five viscera and six fu-organs", the liver is the mother of the heart, and the child is sick and the mother, the liver is affected, the liver loses its softness, the anger is strong, and insomnia is aggravated. Or when the liver gets angry, the anger rises up and spreads to the heart of the sub-organs. The two are in no particular order. One of them is diseased and the other is easily affected. For this type of insomnia due to hyperactivity of the heart, liver and fire, Professor Yang Zhihong, based on years of clinical experience, drew up his own "Qingxin Ningshen Decoction": the formula consists of: Coptis chinensis 6g, Scutellaria baicalensis 10g, Jiaoshanzhi 10g, Poria 15g, Fried Baishao 15g, Fried Suanzaoren 15g, Magnolia 10g, Shouwu Teng 15g [7].

Coptis chinensis is used in the treatment of insomnia, which is mainly used for the treatment of insomnia. It is mentioned in the "Dharma Image of Medicine": "Purge heart fire, remove damp heat in the spleen and stomach, treat irritability and nausea, and stagnant heat in the middle Jiao". Among them, Huanglian Ejiao Decoction in Treatise on Febrile Diseases, which states that "Shaoyin disease causes trouble in the heart, and cannot lie down" is the earliest formula that embodies the treatment of insomnia by Huanglian [8]. Scutellaria baicalensis is often used to treat insomnia, mainly found in Chaihu Jialonggu Muli Decoction [9]. It can be modified or subtracted from this recipe for palpitation, palpitation, insomnia, and insomnia caused by accumulated heat, liver stagnation, qi stagnation, and phlegm knot. treat. In addition, the prescriptions containing Scutellariae for treating insomnia include Chaiqin Wendan Decoction, Chaihu Guizhi Decoction, Huanglian Jiedu Decoction, Banxia Xiexin Decoction, and Longdan Xiegan Decoction. The treatment of insomnia by gardenia was first recorded in "Treatise on Febrile Diseases". It is also proposed in "Golden Mirror of Medicine" that this recipe can treat insomnia. In Treatise on Febrile Diseases, it is mentioned many times that Gardenia Soy Soy Decoction can treat insomnia. For example, "After sweating and vomiting, you will be troubled and unable to sleep. If it is a drama, it will be upside down again and again, and you will feel regretful. Gardenia Soy Soy Decoction is the first record." In "Shen Nong's Materia Medica", modern research shows that gardenia has anti-inflammatory, antihypertensive, analgesic, sedative and hypnotic, liver and gallbladder protection, neuroprotection and other effects. And studies have found that the iridoid glycosides in gardenia have anti-anxiety effects through experimental studies, among which gardeniside, geniposide, genipin-1 β -gentiobiglycoside and other substances are also effective for insomnia symptoms. Have a relieving effect [10].

Magnolia officinalis has been shown by modern pharmacological research: the main chemical component in Magnolia officinalis is lignan, and the active ingredient that occupies a large proportion is magnolol, which has been found to have anti-anxiety, anti-depression, anti-senile dementia through experimental research. It has a good therapeutic effect on insomnia caused by anxiety and depression.

The volatile oil of Magnolia officinalis and its eucalyptol and its isomers, γ -terpinene, citronene, etc. have sedative effects [11]. The soothing effect was recorded for the first time in "Rihuazi Zhujia Materia Medica". "Compendium of Materia Medica" says "the nature is sweet and flat; it returns to the heart and liver meridians. It has the effect of nourishing blood and calming the nerves, dispelling wind and dredging collaterals."

Poria and Suanzaoren have obvious soothing effects. As antidote, they appear more frequently in the composition of prescriptions in the past dynasties and have better therapeutic effect. There are 8 prescriptions, 28 prescriptions, 19 prescriptions, and 15 prescriptions for the treatment of drug pairs [12]. Suanzaoren is an essential medicine for soothing the nerves. It is recorded in Li Shizhen's "Compendium of Materia Medica" in the Ming Dynasty that Zaoren "is used to treat the symptoms of gallbladder deficiency, insomnia, polydipsia and sweating; raw use to treat gallbladder heat and good sleep, it is also a medicine for Jueyin and Shaoyang. It can be seen from this that Suanzaoren is good at treating insomnia of the heart and liver fire. Heart blood, its qi is fried and turned into a slight warmth, and the fragrance can be used to permeate the qi of the heart, and it can be warmed to help the mind. It should be used for those who suffer from bitterness of ambition, damage the blood, damage the spirit by using wisdom, cause deficiency of the heart, loss of spirit, palpitation, dizziness, forgetfulness, sweating and polydipsia. "There is a direct record in "Famous Doctors", indicating that Suanzaoren is mainly used for "restless sleep". "Kaibao Materia Medica" records its treatment of "restless sleep." ; Suanzaoren "sour sour into the liver, red color into the heart, the heart of the liver medicine is also. Taking the knots, dispersing, gathering and dissipating, the mind is calm and restless, so you can sleep." In "Shen Nong's Materia Medica", Poria is divided into three categories: upper, middle, and lower. Intimidating against qi, worrying and frightening evil spirits, and fear of palpitations, pain in the heart, cold and heat, full of irritability... Long-term use to reassure the soul, nourish the mind, not hunger, prolong life. "Compendium of Materia Medica" records that Poria can "pacify the heart and qi, regulate health, calm the soul and reassure the soul". "Materia Medica Chongyuan" records that Poria "for a long time to soothe the liver and store the soul, to nourish the heart and store the spirit" "Depei Materia Medica" records that it can "benefit the heat of the heart meridian, so it can cure panic".

A separate analysis of the components of Qingxin Ningshen Decoction shows that each drug can directly or indirectly help insomnia. Overall, the relationship between its components can be seen to contain Huanglian Ejiao Decoction and Gardenia Houpu Decoction. The main pathogenesis of Huanglian Ejiao Decoction in Treatise on Febrile Diseases is that the heart fire is hyperactive, the kidney water is insufficient, and the heart and kidney are not connected. The bitterness of Coptis chinensis and Scutellaria baicalensis is used to remove heat; the lack of yin is used to supplement it; the sweetness of Jizihuang and donkey-hide gelatin is used to nourish the blood; the acidity of rhizoma japonica and scutellariae are used to relieve heat; Therefore, to eliminate the effects of donkey-hide gelatin and Jizihuang to nourish blood, nourish yin, moisten dryness, and nourish the yin of liver and kidney, the formula uses Coptis chinensis., can also enter the liver, which is about the same as the medicine that leads to the meridian, all can enter it, and the heart is especially full-time..." Choose its effect of dispelling heart fire and liver fire; choose Scutellaria baicalensis, strengthen the effect of clearing the heart and purging fire, choose peony, Its taste is bitter, sour, slightly cold, using its sour, bitter and cold nature, with Coptis chinensis and Scutellaria baicalensis to strengthen its sour, bitter and heat-relieving effect. Gardenia Houpu Decoction removes Zhishi and leaves Jiaoshanzhi and Magnolia officinalis. The taste of gardenia is bitter and cold, clears the evil heat in the chest and diaphragm, relieves depression and eliminates vexation, and strengthens the effect of purging fire and eliminating vexation. Compatible with Poria, stir-fried Suan Zao Ren, Shouwu Teng and other drugs that have obvious soothing effects to strengthen the soothing effect. Among them, Poria cocos is sweet and calm, invigorating the spleen and calming the heart. Consumption and death, the soul has no owner, so I can't sleep", and in the "Classification of Syndrome and Judgment: Insomnia", it says: "Thinking hurts the spleen, the spleen blood is deficient, and there is insomnia for many years." It can be seen that Qingxin Ningshen Decoction is composed of 8 herbs, which is mainly used for insomnia due to excessive heart and liver fire. "Ouanshu of Jingyue": "When the gods are calm, they can sleep soundly, and when the gods are restless, they can't sleep soundly." In the Qing Dynasty, there are soothing drugs to treat the symptoms and symptoms, and even more to help sleep.

3.1.2 Phlegm Fire to Jiangnaoqiao Clear

"Many diseases are mostly caused by phlegm", phlegm is glued and consolidated, difficult to get rid of, and at the same time hinders the movement of qi, blood and body fluids, and blocks orifices. Phlegm evil and fire evil go hand in hand, phlegm evil obstructs the mind, fire evil invades the mind, phlegm evil hinders the movement of yin and yang qi and prevents yang from entering yin. There are

many people who suffer from insomnia due to restlessness, excessive thinking, and insomnia caused by burning fire and stagnation of phlegm." Two causative factors aggravate the symptoms of insomnia. For insomnia caused by phlegm and fire disturbing the heart, Mr. Yang generally chooses Huanglian Wendan Decoction to treat insomnia [13-14]. The phlegm and fire are scattered and lowered, the heart and brain are channeled, and the main function of sleep is normal.

4.2 False Fire Should Be Nourished and Extinguished

The yin and yang of the human body are in balance and restrict each other, so that the human body can maintain a healthy state. If the yang qi is relatively high, the yin qi cannot restrict its rising, or if the yin qi is insufficient, which leads to the relative excess of the yang qi, it is easy to produce the pathology of fire and inflammation, and the symptoms of yin deficiency and fire will appear. The deficiency fire is because the lower coke is deficient and cannot be nourished, which leads to the relative abundance of yang qi, and the excess of yang is hot, the heat evil is still shallow, and the steaming and burning power of the deficiency fire is weak. It was destroyed in nourishment. "Over forty years, yin qi is half," Therefore, in clinical treatment, the symptoms of yin deficiency and fire exuberance are typical for senile insomnia patients, such as insomnia, hot flashes and night sweats, red tongue with little coating, rapid pulse, etc. Generally, Liuwei Dihuang Decoction is added or subtracted [15]. If there is "a person with insufficient kidney water, the true yin does not rise, the heart fire is only hyperactive, and they cannot sleep", the heart fire cannot be relieved due to the heart-kidney incompatibility. Kidney water, if the kidney water can't go up to the fire of the heart, add the two medicines of Coptis and Cinnamon in Jiaotai Pills.

5. Examples of Medical Records

Patient Luo Moumou, female, 43 years old, from Xianyang City. The patient at the first visit (2019-06-10) complained of "insomnia for 1 year, aggravated for 2 months". The patient complained that he had insomnia without obvious inducement 1 year ago, difficulty falling asleep, light sleep after falling asleep, easy to wake up with slight noise around, and difficulty falling asleep again after waking up. Symptoms improved after eszopiclone tablets, and she could fall asleep for 6-7 hours per night. Two months ago, due to the high work pressure, the patient suffered from insomnia again after staying up late, difficulty falling asleep, waking up easily after sleeping, dreaming a lot, falling asleep for about 4 hours every night, poor mental state after waking up during the day, irritable mood, acceptable diet, Normal urination, slightly dry stool. Red tongue with thin coating and fast pulse. Diagnosed by traditional Chinese medicine as insomnia, heart-liver-fire-prosperity syndrome, the Oingxin Ningshen Decoction was given. Coptis 6g, Scutellaria 10g, Jiaoshan Gardenia 10g, Poria 15g, Fried White Peony 15g, Fried Suanzao Ren 15g, Magnolia 10g, Chrysanthemum 15g, Mother of Pearl 20g, Boziren 10g, Astragalus 20g, Chenpi 15g, Longan Meat 12g, Cinnamon Branch 10g. A total of 7 doses, one dose per day, warm in the morning and evening. At the second consultation, the patient reported that he fell asleep better than before, had fewer dreams, improved spirit, and had dry stools. Continue to follow the original treatment method and add 30g of fried radish seeds to consolidate the curative effect.

Note: The patient is female. The female is born with the liver. Under the inducement of high work pressure, the quality of the liver is lost, and the liver qi is stagnant. In addition, it takes a long time. Coupled with the trouble of insomnia, thinking deepens, and it helps the evil of fiery heat. In the recipe, Huanglian, Huangqin, Jiaoshanzhi, and chrysanthemum are used to clear the fire of the heart and liver. Baishao nourishes and softens the liver. Suanzaoren, mother-of-pearl, Baiziren, and longan meat all play a role in soothing the nerves. Qi enhances the body's righteousness, and cinnamon sticks open the veins. In the second diagnosis, adding fried radish seeds can not only drain the dregs, but also help the spleen and stomach to dehumidify.

6. Conclusion

With the development of society and the improvement of economic level, people's requirements for living standards have also increased accordingly, and the pressure that comes with it has also increased. As a common disease, insomnia has an increasing incidence. In Western medicine.

The main mechanism of insomnia is related to the following points: γ -aminobutyric acid (GABA) produced by the central nervous system can inhibit excitatory neurons, and the synthesis and transport of GABA production affect the sleep process. Adrenaline-releasing hormone (CRH) and cortisol

secreted by the hypothalamic-pituitary-adrenal axis (HPA axis) are also involved in the process of sleep. Autonomic nervous system disorder caused by increased sympathetic nerve activity, and found that melatonin (Melatonin, MT) has the effect of regulating circadian rhythm and improving sleep. Inflammatory factors are also involved in the occurrence of sleep, and some inflammatory factors are easy to affect the chronic wave during sleep. For example, when IL-4, IL-10, and IL-13 are secreted too much, insomnia is prone to occur. The secretion of 5-HT, norepinephrine (NE), and dopamine (DA) in the central neurotransmitter is believed to be closely related to the sleep-wake cycle. Other scholars believe that functional or structural abnormalities of limbic-cortical system loops can also cause insomnia symptoms. Western medicine treatment is mainly given to sedative, hypnotic, and anxiolytic drugs, among which benzodiazepines such as sulazepine, alprazolam, selective serotonin reuptake inhibitors, paroxetine hydrochloride, etc. are the main treatment Drugs [16-17].

Western medicine treatment of insomnia has achieved certain clinical effects, and integrated Chinese and Western medicine treatment can better consolidate its symptoms. In the treatment of insomnia, Professor Yang Zhihong pays attention to starting from the overall concept, combining with the patient's constitution and giving the corresponding medication. He proposes to first distinguish the deficiency and the excess, make up for the deficiency, and relieve it by the evidence. Among them, the deficiency of the heart and spleen is the most common insomnia. There are many opinions on the pathogenic factors. At the same time, fire evil should distinguish between real fire or virtual fire. The real fire should be cleared away, and the virtual fire should be replenished. Type insomnia treatment is better. At the same time, Professor Yang Zhihong added Coix seed and Bai Kou Ren for phlegm-dampness; rehmannia glutinosa, yam and dogwood for yin deficiency; chrysanthemum and coptis for yang-heat constitution; peach kernel and safflower for blood stasis; For those with constipation, add fried radish seeds, citrus aurantium, etc. for flexible addition and subtraction for further treatment, which is worth clinical study.

References

[1] Zhang Mingming. Establishment of the concept of apathetic state of insomnia and exploration of its pathogenesis [D]. Shandong University of Traditional Chinese Medicine, 2012.

[2] Huang Binqing. The distribution law of TCM syndrome types and the efficacy analysis of syndrome differentiation and treatment of insomnia [D]. Guangzhou University of Traditional Chinese Medicine, 2017.

[3] Ling Yan, Liu Shulin, Xian Shaoxiang. Research on the names of Chinese medicine diseases of insomnia [J]. Journal of Chinese Medicine, 2015, 30(12): 1846-1848.

[4] Wu Haiyan, Lv Chunyan. Treating insomnia from fiery heat [J]. Shandong Journal of Traditional Chinese Medicine, 1999(10): 437-438.

[5] Dai Yongsheng. Analysis on the diagnosis and treatment of 1353 cases of insomnia [J]. Journal of Guiyang University of Traditional Chinese Medicine, 2019, 41(04): 35-37+76.

[6] Song Fenfen. Clinical observation of purging fire and earth-cultivating acupuncture in the treatment of insomnia caused by liver fire disturbing the heart [D]. Chengdu University of Traditional Chinese Medicine, 2015.

[7] Zhu Xiaona, Guo Zhen, Xu Hong, Yang Zhihong. Clinical observation of Qingxin Ningshen Decoction in the treatment of insomnia combined with anxiety and depression [J]. Journal of Integrative Chinese and Western Medicine Cardiovascular and Cerebrovascular Diseases, 2019,17(15):2359-2361.

[8] Zhao Xiaodong, Yang Chengzhi, Xiao Di, Wang Wei, Li Bo, Kang Lei. Discussion on the mechanism of Huanglian Ejiao Decoction in the treatment of insomnia and some examples of cases [J]. Chinese Journal of Traditional Chinese Medicine, 2019, 34(11): 5253- 5255.

[9] Rui Yiqun, Lv Yang, Li Wenting, Yang Bin, Jia Yuejin. Meta-analysis of Chaihu Jia Longgu Muli Decoction in the treatment of insomnia [J]. Shandong Journal of Traditional Chinese Medicine, 2019, 38(12): 1123-1130+1136.

[10] Liu Yihua, Li Jing, Lin Manting, Zhou Haihong, Chen Shaodong. Modern research progress on the active ingredient geniposide from Gardenia jasminoides [J]. Chinese Journal of Pharmacy, 2012, 47(06): 406-409.

[11] Lin Chang, Yang Changfu, Yang Hongmei, Chen Binbin, Liu Yang, Liu Ming, Wang Jianke, Li Wei. The modern pharmacological research progress of Banxia Houpu Decoction [J]. Journal of Guiyang University of Traditional Chinese Medicine, 2016,38(06):92-95 +99.

[12] Xu Ling. Comparative study on chemical constituents and sedative effects of different combinations of Suanzaoren and Poria herbs [D]. Chengdu University of Traditional Chinese

Medicine, 2017.

[13] Liu Yongrui. Treatment of intractable insomnia from phlegm fire and blood stasis [J]. Journal of Henan University of Traditional Chinese Medicine, 2007(02):49.

[14] Meng Yilin, Chen Liqiong, Chen Jiafei, Zhang Yonghua. Introduction of Zhang Yonghua's experience in treating insomnia from qi, phlegm and fire [J]. New Chinese Medicine, 2020, 52(02): 183-184.

[15] Yang Xi, Wang Li. Analysis of the experience of "regulating fire and controlling water" in the treatment of insomnia [J]. World Journal of Sleep Medicine, 2018, 5(03): 325-327.

[16] Qu Weimin, Huang Zhili. Insomnia mechanism and drug treatment [J]. Chinese Journal of Pharmacology and Toxicology, 2019, 33(10): 824.

[17] Yang Yujuan, Cui Fangfang, Shi Ting, Yang Yuelin, Lan Yajia, Wang Yongwei. 5-HTTLPR gene polymorphism and susceptibility to insomnia in occupational population [J]. Sichuan University Journal (Medical Edition), 2020, 51(01) :113-117.