Treatment of an Insomnia Case Based on Iranian Traditional Medicine in the Health Center, Faculty of Traditional Medicine, Shahid Beheshti University of Medical Sciences in 2016

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ABSTRACT

Background: One of the most frequent abnormal sleep disorders is insomnia, which can interfere with the daily functioning of an individual by affecting social relationships and occupational activity. Insomnia is often referred to as "sahar" in most traditional Iranian sources. The scholars of traditional medicine in Iran grouped the causes of insomnia into "voluntary" and involuntary and considered abnormal brain temperament as one of the main causes of involuntary insomnia.

Case Presentation: The report introduces a patient with recurrent sleep disorder, and suffered from insomnia for periods with short intervals. This patient was treated with care and treatment based on traditional Iranian medicine.

Conclusion: A holistic and different view of Iranian Traditional Medicine that attaches more importance to restoration of temperament and lifestyle appropriate for individuals than treating the disease itself, can open a new window in the treatment of diseases, in particular, chronic and recurrent forms.

Keywords: Insomnia, Sahar, Iranian Traditional Medicine

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Introduction

Insomnia is a disorder faced by a person when he/she begins or continues to fall asleep, and is associated with clinical problems, distress and daily functional impairment. Insomnia can be a non-addictive sleep disorder (primary, isolated) or a sign of a medical and psychiatric disease, or other sleep disorders [1]. Approximately 30-40% of adults experience some degree of sleep disorder each year [2], while 10% of individuals suffer from persistent and chronic insomnia. According to American National Association's 2002 report, the one-year insomnia or difficulty in sleeping in adults, according to individual reports, was 17.4%. Given the significant incidence of insomnia and the resulting economic costs and complications caused by individuals' daily dysfunction, more effective treatment of this disorder should be considered [1-3]. Currently, in conventional medicine, insomnia treatment is based on drug therapies, including benzodiazepine receptor agonists such as diazepam or non-benzodiazepine, such as zolpidem plus cognitive-behavioral therapy for insomnia (CBTI). However, in cases of coexistence with other diseases, in addition to separate treatment for insomnia, comorbidities treatment is also carried out. Complications such as benzodiazepine dependency or more serious complications with antipsychotics use, considering that 40% of insomnia cases are associated with psychiatric illnesses, as well as inadequate response and insomnia recurrence after discontinuation of drug treatments, are among the main challenges of insomnia treatment in the common medicine [2-3]. In traditional Iranian medicine (ITM), insomnia is called “Sahar” (excessive awakening that is out of the normal level), and the treatment approach is based on its causes, which is also based on the changes and disorders caused by the body's temperament and its organs, and in particular, changes in the brain temperament [3]. With regard to the causes and reasons for insomnia, two main causes are considered, that is, voluntary or involuntary insomnia: 1) Voluntary causes of insomnia: Employment in night shift jobs, eating less, eating too much, lighting status of sleeping places, excessive loss of body fluid, staying under the sun and hot air. 2) Involuntary causes of insomnia: Sensory anxieties such as sadness and fear, simple dry as well as warm and dry, material warm, dry, cold and dry brain dystemperaments, humidity of the brain bourgeois, fever, full stomach, inappropriate digestion of food, pain or nausea, the rise of rotten vapors into the brain, and cancer or cerebral melancholic congestion [4-5]. Various types of treatment include eliminating causes and modification of six essentials of health, especially sleep and awakening, which is done with dietary regimen and then herbal medicines and physical actions, if needed [3]. The following report describes a case of insomnia treatment based on the therapeutic principles of ITM, and which has undergone hypnotherapy during different time periods. In the last period of insomnia recurrence, ITM management and therapy was used on the patient, and a significant improvement and higher patient's satisfaction were obtained. The purpose of this report is to express various aspects involved in inducing insomnia and having a holistic view of this disorder for more effective treatment. Also, in the process of treating this case based on ITM, acceptable results and better therapeutic compliance were obtained.

Case Presentation

Medical History and Examination according to Modern Medicine

The patient was a 27-year-old female patient, a graduate with a bachelor's degree and a secretary at a health center. She was born and resides in Tehran. The patient's height and weight were 153 cm and 66.4 kg, respectively. She was diagnosed of insomnia about ten years ago. Her insomnia occurred every one to two years, and lasted for almost two weeks, and she couldn't sleep well during the last two weeks before visit. After bedtime, the patient experienced four to five hours of sleeplessness, and fell asleep for only two to three hours in the morning and was unable to sleep during the day. The patient has been periodically treated with zolpidem, fluvoxamine and triflupeazine by a psychiatrist over the past.
ten years. But the insomnia periods were long lasting from two years ago, and the duration of insomnia reached from two weeks to about two months. Her vital signs and all examinations were normal. In the Pittsburgh Sleep Quality, the patient scored 19 out of 21 points, indicating that her sleeping quality was extremely low.

**Medical History and Examinations according to Iranian Traditional Medicine**

The patient had insomnia at the time she was referred to the health center for traditional medicine. She was staring at a point at the time of her visit and was barely able to communicate because of insomnia, so, the history was taken with the help of her mother. He complained about struggling with falling asleep, disturbed dreams (fighting and seeing the golden palace!), reduced focus and self-talk (obsessive-compulsive disorder). According to her mother, she was disturbed in establishing social and occupational relations during periods of insomnia, and eventually disrupted daily performance, especially exercise. She had other symptoms, including burning eyes, frequent throat straightening, midnight hunger, thirst for cold water, drooling and borborygmi. She suffered from oligomenorrhea three years ago with menstrual periods every 4 to 6 months, as well as spotting in the first two to three days, then hemorrhaging 5 to 6 days later, without spotting at intervals between menstruation. She remarked that she had, during the last month before the recurrence of insomnia, abnormal vaginal discharge, which was treated with metronidazole (antibiotics) when referred to a gynecologist. According to ultrasound findings, the patient was suspected of having a polycystic ovary and used contraceptive pills for a limited time at the age of 13. The patient stated that regular aerobic exercise regulates her menstrual cycle. She also had frequent urination during the period of insomnia. She stated that she enjoyed cold weather, but also complained about the coldness of the ends. With regard to diet, the patient had the habit of eating breakfast in the middle of the day (at 10:00am), which includes bread, cheese and walnuts. Normally, her lunch includes a variety of foods with no restrictions or special recommendations. Snack includes fruits such as watermelon, apricots and greengage, and season fruits. Also, she consumes yogurt, pumpkin and cucumber together with her meal. With regards to sleeping and awakening habits, in normal conditions and insomnia periods, she goes to bed at midnight and falls asleep in the next hour. Her sleep duration was about 8 to 9 h, without cessation of nightly sleep and without nightmares. With regard to retention and vomiting, she suffers from frequent urination, increased urine volume and thirst right from the first menstruation. The patient quits her aerobic exercise at times of insomnia. With regard to psychological state, the patient suffered from the first insomnia period about 10 years ago when she had unsuccessful experience with the opposite sex, which gradually led to obsessive-compulsive thoughts about the disease and the future. With regard to inherent temperament, the patient was obese and had normal to slow activity in her childhood. In the family history, the patient was the first out of three children and had no family history of mental disease. In the examination on the basis of ITM, the patient was fat in terms of physical body and had dry hair and premature whiteness. She had a white face and fading facial angle. She had hot feeling in the upper extremities and cold in the lower abdomen and lower limbs. Her tongue was a bit furred with white, broad and round fur. The patient's pulse was weak (two finger touch). She was slow in movement and speech. Results of lab tests performed are shown in Table 1. In the ultrasound of the patient, the size of the uterus and ovaries was normal, but polycystic ovaries changes were evident. Para-clinically, no other procedure was done for the patient.

**Treatment**

**Measures to Protect Health and Nutrition:**

The patient was advised to adhere to the principles of eating and drinking water in ITM. Some common foods in the patient's diet, including melancholic and phlegmatic foods were excluded and some foods, including pea soup (made of pea, mutton, onions, cinnamon, saffron, salt ) and honey syrup instead of water were recommended.
The patient and her companion were also asked to keep a timetable for eating, sleeping and waking hours, and menstruation status for two weeks. The first follow-up time was three days later and, when needed, was determined earlier by telephone.

**Pharmaceutical Measures:**
The use of brain boosters including almond extract (shir badam), enlivening foods and herbs (mofarrehat), including rose water syrup and saffron (jollab), as well as blend of apples, rose water and saffron (faludeye sib) were recommended. Onsoli tonic syrup and samghi capsule were prescribed.

**Treatment Results**
After one month of maintaining health and taking ITM medication -It is noticed that the patient herself did not want to continue taking chemical drug- the frequency of insomnia attacks reduced. The duration of sleep was longer and her satisfaction of sleep increased. The patient’s disturbed dreams completely disappeared and she was able to continue her daily activities, which was unpredictable for her and her companions, given that she was not satisfied with the psychiatric treatment courses.

**Discussion**
The patient presented on the basis of sleep disorder diagnostic criteria, DSM-5 and ICSD-3, was placed in the recurrent insomnia classification [6]. For the patient, common insomnia treatments, including the principles of sleep hygiene and the use of hypnotics were performed. Considering complications of these drugs and the unpleasant feelings, as well as the inadequate response, she was reluctant to continue these treatments, so she discontinued the medications. She was referred to the center due to daily dysfunction and severity of insomnia and for treatment based on ITM. In the first visit, the patient had no reliable signs of brain temperament due to heavy drowsiness caused by insomnia and sleep medications, which were not effective; however, recommendations were made in this regard due to other symptoms such as fatt body, white face color, cold feelings in the lower extremities, cold and wet touch, slowness in activities, bloating and drooling, borborygmi which were determined through an examination, with the possible diagnosis of moisture dominance and excessive weakness in the body. In a case study in 2016, a recurrent insomnia was noted in an encephalitis patient and an immunological basis was considered for it [7]. There was no evidence of autoimmune disease in the previous examinations in the patient at the time of referral. Another study has shown that, in general, many factors may play a role in the development of long insomnia, among which are the existence of anxiety, grief, loss, or any change in life and sometimes severe periods of mental disease, depression and physical diseases [8–9]. The study has shown that drug therapies are not sufficient

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for the treatment of insomnia and they should be accompanied by treatments such as cognitive and alternative therapies. When these treatments are used concurrently, not only therapeutic effect will be increased, the discontinuation or reduction of hypnotics will be easier also. This will have significant effects on the social, familial, educational and occupational dimensions of life of individuals and ultimately, the society [10]. Based on the principles of ITM, sleep is one of the six essential principles of healthy life, and its exclusion will lead to physical and cognitive degradation and ultimately, death [11]. A review study in 2013 attributed insomnia to increased dryness quality and warmth and/or dryness in the brain [5]. Detecting and eliminating cause is the most basic step in the treatment of all diseases, and brain dystemperament, full stomach, inappropriate digestion and the rise of rotten vapors to the brain are among causes of insomnia (Sahar) [5, 12]. Also, contributions, especially gastrointestinal contribution to the disease is of particular interest [12]. The patient's treatment was based on increased coldness and moisture in the gastrointestinal tract and phlegm excessive. Also, given that the patient's psychological events were initiators of her insomniac periods, the enlivening material were also prescribed and with the same basic precautions and treatments, the patient's sleep pattern improved significantly. The measures taken to correct the condition of the digestive system includes, the avoidance of phlegmatic foods, the administration of antiphlegmatic, including honey water and pea soap, as well as the removal of onsolí syrup and samghi capsules with moisturizers. It is important to note that without the special treatment of sahar (the use of hypnotics) in this patient, with the treatment of the underlying causes, a significant improvement was observed in insomnia, also, there was an acceptable reduction in the irritability of the patient during post-insomnia periods together with greater satisfaction with the outcome of the treatment for both the patient and her family. However, given the periodicity of the patient's insomnia, a longer time is required to assess its recurrence.

**Conclusion**

Having a different view at the disease may be the key to the treatment of chronic or unknown diseases. Sleep disorders in ITM can be influenced by many factors, all of which are not necessarily related to nervous system disorders. Attention on the participatory role of other members in causing disturbances in another members, as well as the disturbance of the temperament balance is one of the different points of view of ITM. The lack of attention and consideration of these in treatment may result in inappropriate treatment response or the patient's continuous dependence on medication.

**List of Abbreviations**

CBTI: Cognitive-Behavioral Therapy for Insomnia
ITM: Iranian Traditional Medicine

**Competing Interests**

The authors have no conflict of interest in the publication of this article.

**Contributing Authors**

Zohreh Pour-Saleh: Introduction of the patient and further follow-up, and participation in setting up treatment methods in writing the article.
Dr. Mina Mouudh: Presentation of treatment procedures and participation in setting the discussion and conclusion.
Dr. Fatemeh Yousefnia Babaki: Following up the patient, preparing a preliminary draft article and contributing to the introduction of the patient.

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