

Transcranial Micro Current Simulation Therapy for Insomnia

By Jheng Ran-Shi

40-year-old Chen suffered from severe depression for a long time. She had been taking more than 10 sleeping pills for many years. However, these medicines did not help her get sufficient

sleep. During the worst times, she would sleep less than three hours a night and constantly wake-up. Even worse, long-term use of the medicine made her emotional. Eventually, she was sent to



Dr. Lee Jia-Fu, physical and mental medical ward of Taipei Tzu Chi Hospital, reminds patients with sleeping disorder for a long period of time, consult our physician to find the correct treatment.



Transcranial micro current simulation therapy is to apply electric current, through ear clips, attached to earlobes, transmitted to the brain. The strength of the current can be adjusted to suit the patient's condition.

the physical and mental medical ward of Taipei Tzu Chi Hospital for treatment. Dr. Lee Jia-Fu of the Tzu Chi Hospital adjusted Chen's prescriptions. In addition, Dr. Lee applied transcranial micro current simulation therapy to improve her sleep. After six weeks of such treatment, Chen's sleep condition was significantly improved. She would sleep up to seven hours a night. In addition, she would only wake up less than twice a night, rather than four times as before.

Sleep is an important function for the human body; during that time our brain is in a repairing phase. During sleep, our brain cells normally shrink, so that cerebrospinal fluid can flow between cells and wash out the damaging

proteins. This process restores the normal function of the brain to get ready for the next day's activities. Dr. Lee says, "If a person has trouble sleeping and/or wakes up frequently during sleeping, he/she would be diagnosed for 'Insomnia'. Insomnia significantly influences the brain functions. When brain waste cannot be washed out, emotional and cognitive functions are influenced, which causes melancholy and decreased concentration."

Statistics from the Taiwan Sleep Medicine Association show that the insomnia rate in Taiwan is about 10.7%. It affects all age groups and could be caused by stress from study or work. If not carefully treated, insomnia may result in cardiovascular diseases, memory loss,

and endocrine disorders.

The traditional treatment of insomnia usually involves sedative sleeping pills. But Dr. Lee points out that the side effects of long-term use of these pills can cause drug dependence. Eventually, patients would lose their ability to sleep naturally. Lately, thanks to modern technologies, a more advanced approach of transcranial micro current simulation therapy has become an adjuvant treatment. The basic principle of this approach is to apply very low and safe micro ampere electric current to the patient's brain. Electric current is applied through ear clips to induce the brain to produce endorphins and serotonin, which control the psychology and emotions of the patient. Therefore, the patient's emotional cognition can be properly adjusted, resulting in better sleep. Dr. Lee also says, "Micro current treatment is a physical therapy. The electric current amplifies the effects of the Alpha wave of the brain. This way the pressure of the brain is reduced and relaxed. Through a treatment period of four to six weeks, the result is obvious." Research results indicated that the approach is highly safe, not addictive and has no side effects. This therapy is suitable for most insomnia patients who

have been using sedative sleeping pills without much improvement. However, it is not suitable for patients with epilepsy or persons with pacemakers.

Finally, Dr. Lee reminds us that prevention is better than looking for a cure for insomnia. He suggests that we should "eat healthy, sleep worryless, and exercise happily." He recommends eating more bananas, nuts, soybeans, and various foods rich in tryptophan. Also, we should have our fixed daily routine, and enjoy frequent outdoor activities under the sunshine. Upon experiencing any symptom of insomnia we should consult a physician, and do not arbitrarily take any sedative sleeping pills.

