

Progress of TCM Syndrome Differentiation and Treatment of Hypertension with Sleep Disorders

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Abstract: It has been discovered that the number of hypertensive patients with various types of sleep disorders is on the rise, which significantly increases the morbidity and mortality of cardiovascular diseases. Modern medicine has not reached a consensus on the mechanism and treatment of these diseases but relies on drugs to improve sleep disorders and blood pressure. We regard TCM syndrome differentiation as the breakthrough point, along with comprehensive modern and traditional medical methods based on dialectical thinking as means of holistic and symptomatic treatment of Western medicine integrated with the eight principles of TCM diagnosis, Zang-Fu organs, six meridians, Qi, blood and fluid, as well as other dialectical methods, in order to provide a broader idea for TCM treatment and lay a foundation for further and better development of integrated TCM and Western medicine treatment.

Keywords: Hypertension with sleep disorders; Syndrome differentiation

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1. Eight principles of pattern differentiation

The concept of Yin and Yang is the general principle of pattern differentiation. This disease is regarded as the disharmony between Yin and Yang as well as the mixture of deficiency and excess. Patients with this disease have constitution of Yang exuberance, Yin deficiency, or deficiency of both Yin and Yang due to Yin impairment involving Yang, which affects waxing and waning as well as the mutual rooting of Yin and Yang. Yang exuberance with Yin deficiency is manifested as Yang transforms into wind and does not enter Yin as Yin does not accept Yang, thus presenting as rising, excitement, and hyperactivity. This is manifested as dizziness, headache, shortness of breath, early arousal, snoring, red tongue with yellow and greasy moss, as well as string-like pulse. Through several studies ^[1-3], it was found that the use of Tianma Gouteng decoction on the basis of CCB improves SBP and DBP levels as well as PSQI scores; the use of GuizhiLongguMuli decoction nourishes Yin and Yang, which proved related to the increase of serum 5-HT. “Harmony, which balances Yin and Yang, divides day and night equally,” stated in the Yellow Emperor’s Inner Classic. The imbalance of all relations between Yin and Yang is known as the “disharmony of Yin and Yang.” Hence, the possibility of “treating different diseases with the same method” depends on the pathogenesis and syndromes determined.

2. Syndrome differentiation by viscera

The five viscera work together to restore their functions as normal as possible even in the pathological state. With the decompensation of physiological function of the five viscera, the diseases of different viscera may transmit to each other. Qiao Wei and other researchers found that it relieves symptoms, improves the apnea hypopnea index, increases nocturnal partial oxygen pressure, and controls nocturnal blood pressure to balance the Yin and Yang of the five viscera [4-6]. Some hypertensive patients are diagnosed with OSAHS (obstructive sleep apnea/hypopnea syndrome) or have a tendency to develop the condition. Xu Jing believes that the focus should be on regulating Qi and dispersing lung, regulating qi and resolving phlegm, as well as dredging and regulating water passage [7]. Several researchers have also pointed out that the respiratory system does not only participate in the process of internal and external gas exchange along with systemic blood circulation, but also regulate endocrine metabolism and immune functions, which are also the bases for the involvement of “lung governing Qi” [8-10]. The disease violates the heart and liver, invades the lungs and spleen, as well as injures the kidney in the long run. The liver and lungs regulate the rise and fall of the whole body’s Qi [11]. In the event where it goes wrong, vertigo, snoring, tinnitus, irritability, and sleeplessness may be manifested clinically; this is known as “liver fire invading the heart.” When the kidney water fails to control the heart fire, headache, vertigo, tinnitus, early arousal, snoring, red eye, flushed face, irritability, insomnia, and even sleep apnea may occur. Therefore, in managing the disease, it is crucial to consider the generating and restraining theory of the five elements as the principle.

3. Syndrome differentiation of six meridians

The syndrome differentiation of six meridians was established by Zhong Jing in consideration of the pathogenesis and treatment rules of exogenous diseases. The theory is suitable for miscellaneous diseases of internal injuries, especially in cases of headache, vertigo, insomnia, and so on. “The occurrence of insomnia with snoring is due to the accumulation of Yangming meridian” is a well-known expression found in the Yellow Emperor’s Inner Classic (Huangdi Neijing). Research has shown that the curative effect of many intractable diseases can be improved by combining the theories of “solving the six meridian diseases” and “opening and closing pivots” with syndrome differentiation [12,13]. Bian Xianfei and other researchers found that when the disease is treated from the perspective of the six meridians with the use of corresponding prescription, the treatment group showed a higher effective rate with lesser side effects [14,15]. It is now understood that the “time of desire to recovery” of the six classics disease may not mean that the disease is getting better but rather, represents that it is easy to cure. Professor Gu Zhishan believes that the theory is based on the description of six gasification states of the human body based on the opening and closing of three Yin and three Yang [16]. He interpreted the “time of desire to recovery” as the time associated with the disease, which coincides with the Zi wuliuzhu method [17], in which the disease occurs from Haishi to Chenshi (9 p.m. to 9 a.m. the following day), suggesting that we should correspond the “time of desire to recovery” in relation to Taiyin, Shaoyin, Jueyin, and Shaoyang meridians.

4. Pattern differentiation of Qi and blood

Wang Qingren once said, “When blood vessels are lacking Qi, blood will stagnate, and stasis follows.” Qi governs blood, and Meridians are paths of Qi and blood. The deficiency and stagnation of Qi result in the blockage of fluid, and blood stasis gradually occurs. Fluid and blood share the same source. The superficial phenomenon of syndrome involves phlegm and blood stasis, but the essence involves the abnormal movement of Qi, blood, and fluid. Guo Xuesong and other researchers used the prescription of regulating Qi to resolve phlegm in order to improve patients’ positive symptoms and signs, inhibit the release of vasoactive substances, reduce blood pressure, increase nocturnal lung ventilation, and other aspects [18,19]. This may be related to reducing inflammatory mediators, such as tumor necrosis factor α , interleukin 6,

plasma endothelin 1, and vascular endothelial growth factor, which maintain the balance of ET-1/NO, protect vascular endothelium from injury, and regulate blood pressure, thus achieving the purpose of treating phlegm-stasis interaction in OSAHS with hypertension [20].

5. Discussion

Hypertension and sleep disorders are often the risk factors of each other, accelerating the progression and causing a vicious circle. Hence, the early diagnosis and prevention of hypertension are particularly important. Once hypertension is diagnosed, examinations related to sleep disorders should be carried out, with timely elimination or diagnosis, followed by corresponding measures to prevent target organ damage. Many scholars are committed to exploring the etiology and pathogenesis of this disease in relation to TCM treatment, which provides more possibilities for the treatment of this disease by combining traditional Chinese medicine and western medicine, thus promoting the development of both Chinese and Western medicine.

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References

- [1] Gong YL, 2018, Observation on Clinical Efficacy of Tianma Uncaria Decoction in Treatment of Essential Hypertension with Insomnia. *Chinese Journal of Clinical Medicine*, 30(08): 1481-1483.
- [2] Li M, Qi HB, 2021, Effect of Guizhi Plus Longbone Oyster Decoction on Hypertension and Insomnia. *Chinese Journal of Modern Pharmaceutical Application*, 15(14): 208-210.
- [3] Zhang H, 2021, Huanglian Wendan Decoction Combined with Levamlodipine in the Treatment of Hypertension Complicated with Sleep Disorder: A Summary of 30 Cases. *Hunan Journal of Traditional Chinese Medicine*, 37(01): 39-41.
- [4] Qiao W, Gao Y, Sun KF, et al., 2021, Clinical Study of Tianwang Buxin Dan Hejiao Tai Pill in Treatment of Perimenopausal Hypertension with Insomnia. *Journal of Guangzhou University of Traditional Chinese Medicine*, 38(09): 1840-1846.
- [5] Yuan J, Jiao FZ, Li S, et al., 2020, Professor Li Ping's Experience in Treating Postmenopausal Hypertension Complicated with Insomnia with Suanzaoren Decoction. *World Journal of Integrated Chinese and Western Medicine*, 15(10): 1801-1804.
- [6] Long X, Gu JX, 2021, Gu JX Experience of Treating Hypertension Complicated with Insomnia from "Depression", "Deficiency" and "Stasis". *Inner Mongolia Journal of Traditional Chinese Medicine*, 40(03): 95-96.
- [7] Xu J, Kong L, 2017, Clinical Discussion on Treating Hypertension from Lung. *Beijing Journal of Traditional Chinese Medicine*, 36(10): 923-925.
- [8] Zhong H, Lu X, 2010, Research Progress of Hypertension and Inflammation. *Progress in Cardiology*, 31(02): 203-205.

- [9] Guo T, Mou J, 2014, Research Progress on the Relationship between Immune System and Hypertension. *Chinese Journal of Hypertension*, 22(10): 924-928.
- [10] Lin Y, Jiang G, 2017, Clinical Effect of Moxibustion at Qihai and Guanyuan Points on Chronic Fatigue Syndrome and Its Effect on Immune Function in Rats. *Journal of Guangxi Medicine*, 39(10): 1546-1549.
- [11] Zhou SN, Yu B, Zhang Y, et al., Origin and Clinical Significance of the Theory of “Liver Is Born on the Left and Lung Is Stored on the Right”. *Journal of Traditional Chinese Medicine*, 36(12): 2535-2537.
- [12] Wang W, Liu S, 2020, Liu Surong’s Experience in the Treatment of Insomnia with the Theory of “Six Meridians to Solve the Time”. *Hunan Journal of Traditional Chinese Medicine*, 36(10): 76-78.
- [13] Xu H, 2020, Study on the Treatment of Insomnia Syndrome Based on the Theory of Six Meridians to Solve Time and Opening and Closing Pivots. *Chinese Journal of Traditional Chinese Medicine*, 35(08): 1623-1626.
- [14] Bian X, Jiang P, 2015, The Relationship between Hypertension and Six-Channel Differentiation. *Journal of Chinese Medicine*, 30(01): 68-70.
- [15] Zhou T, 2021, Clinical Observation of Wumei Pill in Treatment of Insomnia with Difficulty in Sleep Maintenance, Nanjing University of Chinese Medicine.
- [16] Wu Y, Ye G, Chen M, et al., 2019, From the Time of “Desire to Recovery” of the Six Classics Disease Introduction to Chinese Medicine Syndrome Differentiation of Space-Time. *Journal of Chinese medicine*, 2019(4): 1524-1526.
- [17] Gao J, Ge X, Wu C, et al., 2016, Clinical Efficacy of Ziwuliuzhu Wuxing Music Therapy in Anxiety Patients with Chronic Heart Failure. *Chinese Journal of Nursing*, 51(04): 443-448.
- [18] Guo X, Huang J, Xie H, et al., 2021, Hypertension Associated with the Pathogenesis of Insomnia and Associated with Qi Depression Qualitative Research Progress. *Journal of Chinese Medicine*, 2021(03): 467-469.
- [19] Wen FX, He JJ, Li FR, et al., 2020, Clinical Study of Yiping Tiaomai Decoction in Treatment of Obstructive Sleep Apnea Hypopnea Syndrome with Hypertension. *Journal of Hebei Traditional Chinese Medicine*, 38(4): 87-90.
- [20] Wen JL, Ji ES, Tian X, et al., 2021, Clinical Efficacy of Xiaotan Huayu Liqiao Prescription in Prevention and Treatment of Obstructive Sleep Apnea Complicated with Hypertension and Its Protective Effect on Endothelial Injury. *Journal of Hebei Traditional Chinese Medicine*, 4(02): 6-9.

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