

Exploration on the Clinical Experience of Professor Liu Chunying in the Treatment of Membranous Nephropathy based on "Mingmen Theory"

Danyu Xia¹, Chunying Liu^{2,*}

¹Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China

²Affiliated Hospital of Shaanxi University of Chinese Medicine, Xianyang 712000, Shaanxi, China

*Correspondence Author

Abstract: *Membranous Nephropathy (MN) is one of the main pathological types of adult nephrotic syndrome and a common cause of chronic renal failure. The therapeutic effect varies from person to person. After years of clinical practice, Chief Physician Liu Chunying has accumulated rich experience, especially in the treatment of MN with integrated traditional Chinese and Western medicine. The purpose of this article is to explore the etiology and pathogenesis of membranous nephropathy from the perspective of 'Mingmen theory' and the clinical medication experience of Director Liu Chunying, in order to provide new prevention and treatment ideas for traditional Chinese medicine in MN.*

Keywords: Membranous nephropathy, The theory of life gate, Etiology and pathogenesis, Theory of traditional Chinese medicine, Clinical experience.

1. Introduction

Membranous nephropathy (MN) is a primary glomerular disease with the fastest growing incidence in recent years. Its pathogenesis is complex and the cause of high incidence is not yet clear [1]. MN is the main cause of nephrotic syndrome in middle-aged and elderly patients. Pathological biopsy is more common in stage II, and the trend of rejuvenation in China is increasingly significant. Therefore, early detection and prevention are particularly important. MN can be divided into primary and secondary membranous nephropathy, most of which are difficult to find a clear cause and can be classified as idiopathic membranous nephropathy (IMN). Western medicine mainly uses hormones, immunosuppressive agents, biological agents to inhibit renal inflammation and nutritional support and other symptomatic treatment, but the side effects of hormones are more, may lead to full moon face, buffalo back, acne, secondary diabetes, osteoporosis, secondary infection, low immunity, and even long-term malignant tumors and other hazards, and hormone reduction is too fast and easy to relapse, so that the disease is repeated, further aggravating the progress of kidney disease. In addition, due to MN is a chronic disease, long treatment cycle, expensive biological agents and patients can not adhere to the law of medication, review and other reasons, resulting in most patients with repeated illness, increased inflammation, complications, and repeated hospitalization, resulting in greater socio-economic burden, and ultimately may occur irreversible renal atrophy, progression to end-stage renal disease. In contrast, traditional Chinese medicine, based on the principle of holistic concept and syndrome differentiation, regulates the overall state of the human body, enhances the body's resistance, regulates emotions, reduces the side effects of hormones, and plays an important role in improving the prognosis of diseases. Director Liu, with many years of clinical experience, provides patient guidance for patients, reasonably reduces hormones, and takes the 'life gate theory' as the theoretical basis to warm and nourish life yang, improve symptoms, regulate psychological factors, enhance

patient compliance, and use traditional Chinese medicine to prevent secondary infection, improve quality of life, and prolong patient life. Therefore, this article will explore the clinical experience of Director Liu in traditional Chinese medicine.

2. Etiology and Pathogenesis of Traditional Chinese Medicine

The main clinical manifestations of membranous nephropathy are edema and foamy urine. Some patients also have symptoms such as hypertension and renal insufficiency, which can be classified into the categories of 'edema', 'urine turbidity' and 'low back pain' in traditional Chinese medicine. At present, most scholars believe that the nature of MN is deficiency in origin and excess in superficiality. Deficiency in origin is mostly related to spleen and kidney, followed by damage to lung, liver, heart and other organs. Standard real is given priority to with damp heat, blood stasis, water wet, wet turbidity, rheumatism, phlegm turbidity, toxic heat [2]. The life gate is the root of yang qi, the place of yin essence and the manifestation of gods, which is the origin of human life. The author believes that the failure of Mingmen fire and the deficiency of kidney qi are the important pathogenesis of this disease. Therefore, the treatment of MN based on Mingmen theory is discussed.

3. Mingmen Theory and the Theoretical Origin of Kidney

The theory of mingmen is mentioned in 'nanjing · 39 nan': 'five zang organs also have six zang organs, that is, the kidney has two zang organs. The left is the kidney, and the right is the life gate. The door of life, the spirit of the house,..... Its qi and kidney are connected. "Nan Jing · Ba Nan" points out: " The so-called origin of Qi is the root of the twelve meridians, the root of the twelve meridians, and the root of the twelve meridians..... He also believes that the life gate is the foundation of the human body, which is inseparable from the

kidney in function and integrates the functions of the two kidneys. 'Suwen · Yin and Yang Lihe Lun' records: 'Above Shaoyin, the name is the sun, the sun root starts from Zhiyin, and ends at Mingmen, the name is the yang in yin. " Introduction to Medicine " proposes that " the heart and the gallbladder are interlinked,... The lung communicates with the bladder, the kidney communicates with the triple energizer, and the kidney communicates with the life gate [3]. In the Ming Dynasty, Sun Yikui put forward in 'Yizhi Xuyu · Mingmen Tushuo': 'The right kidney is water, and the Mingmen is the dynamic between the two kidneys... That is, the congenital Taiji,' that people's Taiji lies in the gate of life, and the gate of life is the movement of qi between the kidneys [4] [5] [6]. Doctors in the past dynasties have put forward different opinions on the anatomical position and functional role of the life gate. Although the life gate and the kidney are different substances, there are similarities in function. They are connected by gas and their function is manifested by gasification. With the deepening of the study of Mingmen, the development of Mingmen theory is becoming more and more perfect. In the concept of traditional Chinese medicine, kidney yang is the fire of life gate, which is the foundation of yang qi of human body, and plays a role in promoting and warming the tissues and organs of the whole body. 'Source of disease · edema disease' states: 'Water disease is caused by deficiency of both kidney and spleen. The kidney is the foundation of the innate, the main essence, the main gasification, the opening and closing, the kidney yang is the foundation of the human body yang, the fire of the life gate is not extinguished, the human body yang is not endless. Kidney Yang deficiency,' the official of the state 'gasification without power,' the official of the decision' water channel is not smooth, the evil of water congestion in the body, hair for edema. The imbalance of yin and yang in the kidney, abnormal gasification, water production and other functions, manifested as wet turbidity betting, water overflowing skin [7]. The decline of life gate fire will lead to a series of symptoms of deficiency and cold in the human body, such as pale complexion, weak waist and knees, lack of spirit, fear of cold, clear and long urine, impotence and so on.

4. Mingmen Theory and Modern Research of Kidney

Modern research suggests that there is an inseparable relationship between the vital gate and the kidney. Zhang Hongying [8] pointed out that the function of Mingmen is the same as that of kidney in traditional Chinese medicine, and it is classified under the concept of 'kidney qi'. In the later stage of MN, most of them showed life gate fire failure and kidney qi deficiency. Chen Xinsheng [9] believed that Mingmen is adrenal cortex and its function. The pathogenesis of MN is mainly related to immune system abnormalities, genetic susceptibility, environmental pollution and other factors. It is the damage of immune complexes deposited in glomerular basement membrane and podocytes. Its main target antigens are anti-phospholipase A2 antibody and thrombospondin 7A domain. The adrenal gland secretes hormones and cortisol to regulate the immune response of the human body. Adrenal hormones may affect the immune-mediated disease process. The function of the adrenal axis needs to be evaluated when immunosuppressive agents are used to treat MN. The low level of adrenal cortisol is the main internal cause of repeated

recurrence of nephrotic syndrome. Correcting the low function of adrenal cortex, supplementing adrenocorticotrophic hormone can prevent recurrence [10], warming and tonifying kidney yang, and improving the state of low level of adrenal cortisol has become a public opinion. The life gate is the driving force of human life activities, and constitutes the congenital foundation of the human body together with the kidney. The function of the life gate includes the functions of kidney yin and kidney yang, which is called the house of water and fire. The fire of Mingmen, also known as Yuanqi, is the root of the functional activities of various zang-fu organs, while the water of Mingmen, also known as Yuanjing, is closely related to kidney yin. In the later stage of MN patients, spleen and kidney deficiency is the main, damp heat, blood stasis, phlegm turbidity and heat toxin are mixed. In the process of disease occurrence and development, Mingmen fire failure and kidney qi deficiency run through.

5. Traditional Chinese Medicine for the Treatment of MN by 'Mingmen Theory'

'Su Wen · Zhi Zhen Yao Da Lun ' mentioned ' Zhu Han..... Take the yin, the heat.... In the annotation of ' Huangdi Neijing ', Wang Bing also mentioned ' the Lord of strong water to control sunshine, the source of fire to eliminate shade '. On this basis, Zhang Zhongjing created Zuogui Pill, Yougui Pill and other prescriptions based on the theory of mutual use of yin and yang and the theory of " yang disease cures yin and yin disease cures yang " in " Yellow Emperor 's Internal Classic. " The treatment principles are " seeking yang in yin, " " seeking yin in yang, " " generating qi in essence " and " generating essence in qi. " Based on years of clinical experience, Professor Liu advocates warming the vital yang and restoring the healthy qi of the human body to achieve the effect of disease resistance. In the ' Yellow Emperor 's Inner Canon ', it is mentioned that ' the healthy qi is in the body, and the evil cannot be dry; the evil of the together, the gas will be virtual '. Therefore, traditional Chinese medicine can resist the infringement of disease by adjusting the overall state of human beings. Director Liu used Yupingfeng Powder in the early stage to enhance the body 's immunity, commonly used Astragalus, Atractylodes, Saposhnikovia, Codonopsis and other drugs; astragalus membranaceus is an important drug for tonifying spleen and kidney. In the treatment of MN, it can not only strengthen spleen, strengthen kidney and produce sperm, but also benefit qi, remove blood and dredge vessels. Modern pharmacological studies have found that Astragalus membranaceus has the effects of anti-oxidation, anti-fibrosis, reducing proteinuria, increasing plasma albumin and improving anemia. At the same time, it can effectively prevent and treat glomerulosclerosis and tubulointerstitial fibrosis, reduce renal injury and protect renal function by inhibiting a variety of cell signaling factors. Among them, astragaloside IV can reduce renal damage by reducing the expression of transforming growth factor β 1 TGF- β 1 [11]; in addition, it can also achieve the effect of expelling wind and searching for ticks, astringing and consolidating essence, unblocking stagnation and removing excess, increasing efficiency and tonifying deficiency, and raising yang and lifting depression through compatibility of drugs [12]; codonopsis pilosula has the effect of tonifying qi and blood, harmonizing spleen and stomach, and can enhance the effect of tonifying when combined with Astragalus membranaceus.

At the same time but also to prevent infection, more with *Houttuynia*, dandelion, honeysuckle, forsythia, mint, blue root, etc., in the hormone dosage is larger, will appear in the face of acne, these drugs can heat detoxification, the treatment of acne most curative effect is very good [13]; When rhinitis occurs, Wumei, Xixin and Shichangpu can be added on the basis of the original prescription; when the tongue coating is thick and greasy, *Atractylodes* and dried tangerine peel are often used to remove dampness and turbidity; MN is easy to complicated with renal vein thrombosis, with *Salvia miltiorrhiza*, *Chuanxiong* blood circulation; considering the edema caused by MN, the course of disease is usually slow, and the condition is interlaced. Therefore, in clinical treatment, attention should be paid to warming and tonifying kidney yang rather than being too intense. It should be fundamentally regulated. In terms of traditional Chinese medicine, *Epimedium Folium*, *Morinda officinalis*, *Cistanche deserticola*, *Curculigo orchoides* and other medicinal materials with mild and warm tonic effects can be selected. These drugs can also improve the low level of adrenal cortisol and activate the function of HPA axis, thus enhancing the role of adrenal cortex. However, it should be noted that children are pure yang, so they should be used with caution [14]; cinnamon twig, aconite, dried ginger and other hot drugs, as little as possible to prevent heat evil in the body; Long-term medication of patients is easy to worry about depression. Director Liu mostly uses *Hehuanpi*, *Xiangfu*, *Yujin*, *Bohe*, *Chaihu*, *Gancao* and other drugs, which have the effects of soothing liver and relieving depression, nourishing heart and tranquilizing mind. For people with sleep problems, herbs such as *Suanzaoren*, *Fushen*, *Yejiateng*, calcined keel, and oysters can be added to improve symptoms and improve quality of life. When MN develops to the late stage, it is difficult for urine protein to turn negative due to the deficiency of spleen and kidney qi. In order to enhance the absorption of kidney qi and remove the protein in urine, the methods of warming and tonifying Mingmen and invigorating spleen qi can be adopted. Commonly used drugs include aconite, cinnamon, *Morinda officinalis*, *Cistanche*, dodder, *Codonopsis*, *Astragalus*, *Atractylodes*, *Poria cocos*, yam, etc. These drugs are beneficial to the kidney and spleen. At the same time, it can also be treated by the method of convergence and astringency, such as *Rosa laevigata*, *Euryale ferox*, *Schisandra chinensis*, *Galla chinensis*, *Sangpiauxiao*, Lotus seed meat, keel, oyster, *Tribulus terrestris* and other drugs. These drugs can not only astringe, but also tonify the kidney, strengthen the spleen and replenish qi. In clinical syndrome differentiation and treatment, do not forget the method of treating the root cause, otherwise the symptoms are not treated, and the condition is easy to relapse. Director Liu emphasized the combination of traditional Chinese and Western medicine in the treatment of MN. According to the needs of the disease, glucocorticoids, immunosuppressants, cytotoxic drugs, biological agents, etc. were reasonably selected to quickly control the rapid progression of the disease, achieve clinical remission as soon as possible, urine protein negative, and strive to control the disease within half a year. Modern treatment methods, through active intervention of Western medicine, effectively control blood pressure, blood glucose, blood lipids, blood uric acid and other indicators, in order to protect the remaining renal units and prevent hormone-induced osteoporosis, gastrointestinal ulcers and other side effects. Combined with traditional Chinese medicine to warm yang, regulate the

overall state of the human body, enhance resistance, reduce the side effects of hormones, and pay attention to psychological factors, give patients confidence.

6. Summary

The onset of membranous nephropathy is insidious and not easy to find. Most patients see a doctor with edema as a manifestation, or even no clinical manifestations, it is difficult to find, the condition is complex and easy to repeat, and the course of disease is long. Most patients have different degrees of adverse reactions after hormone combined with immunosuppressive therapy. After a long period of treatment, the patient's mental and economic pressure is high. Therefore, the combination of traditional Chinese and Western medicine treatment, based on the theory of life gate, can play a better effect, increase patient compliance, and help the recovery of the disease. In summary, the failure of Mingmen fire and the deficiency of kidney qi are the core pathogenesis of MN. The clinical application of the method of tonifying kidney qi under the guidance of the theory of 'Mingmen theory' provides important ideas and methods for the treatment of MN. Warming and tonifying Mingyang is the basis, and the treatment of various syndromes is the standard, in order to better treat MN.

Fund Project

Seventh National Succession Project of Academic Experience of Elderly Chinese Medicine Experts (National TCM Number Letter No. 202276).

References

- [1] Xie Zhiyong, Li Zhilian, Dong Wei, et al. Evolution of chronic glomerular disease spectrum and epidemiological characteristics of membranous nephropathy [J]. *Clinical Journal of Kidney Disease*, 2019, 19 (07): 471-476 + 492.
- [2] Yan Lei, Zeng Qin, Wang Xinhui, et al. Literature Analysis of TCM Syndromes of Idiopathic Membranous Nephropathy [J]. *Chinese Journal of Integrated Traditional Chinese and Western Medicine*, 2021, 22 (03): 234-236.
- [3] Li Chan. *Introduction to Medicine* [M]. Beijing: People's Health Publishing House, 2006.
- [4] Wang Peng, Hong Jing, Wang Wei. The influence of Neo-Confucianism on Sun Yikui's theory of vital qi [J]. *Journal of Shaanxi University of Traditional Chinese Medicine*, 2017, 40 (5): 16-18.
- [5] Fang Li, Li Da, Tong Jiabing, et al. Sun Yikui's theory of vital qi [J]. *Clinical Journal of Traditional Chinese Medicine*, 2012, 24 (12): 1223-1224.
- [6] Liu Desheng, Chu Quangen, Dong Yanyan, et al. The influence of "Tai Chi Tu Shuo" on Sun Yikui's Mingmen theory [J]. *Journal of Anhui University of Traditional Chinese Medicine*.
- [7] Du Yiran, Chen Zhenjie, Zhou Jingwei. Experience in the treatment of membranous nephropathy based on the theory of 'kidney qi imbalance' [J]. *Beijing Traditional Chinese Medicine*, 2023, 42 (10): 1112-1115.
- [8] Zhang Hongying, Liu Baojun, Dong Jingcheng, et al. Hypothalamus is the gate of life [J]. *Liaoning Journal of*

- Traditional Chinese Medicine, 2010, 37 (07): 1246-1247.
- [9] Chen Xinsheng. Try to talk about the life gate. Harbin Chinese Medicine, 1965, 8 (8): 6.
- [10] Wei Lianbo, Chen Yanwen. Professor Ye Rengao 's experience in the treatment of recurrent nephrotic syndrome [J]. Chinese Journal of Integrated Traditional Chinese and Western Medicine, 2011, 12 (11): 949-950.
- [11] Yu Qinchao, Zhu Tongyu, Zhang Yongkang. Long-term protective effect of astragaloside on renal ischemia - reperfusion injury in rats [J]. Chinese Journal of Medicine, 2004, (17): 8-11.
- [12] Cao Boning, Wang Yaoxian. On the application of astragalus in the treatment of membranous nephropathy [J]. Journal of traditional Chinese medicine, 2024,65 (16): 1725-1729+1740.
- [13] Liu Chunying, Chen Leixin, Shang Cheng, et al. Analysis of integrated traditional Chinese and Western medicine treatment for children with hormone dependence and frequent recurrent nephrotic syndrome [J]. Chinese Journal of Integrated Traditional Chinese and Western Medicine, 2023, 24 (04): 352-354.
- [14] Zeng Jiahao, Zhu Huijian, Hua Qiaoli, et al. Professor Liu Xusheng 's experience in the treatment of hormonal side effects of nephrotic syndrome [J]. Chinese Journal of Integrated Traditional Chinese and Western Medicine, 2020, 21 (09): 756-758.