

Treatment of Hematuria and Proteinuria of IgA Nephropathy from Li Dongyuan's 'yin fire' Theory

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Abstract: Li Dongyuan's 'yin fire' theory holds that yin fire is an endogenous fire pathogen caused by deficiency of spleen and stomach and damage of primordial qi. IgA nephropathy is mainly manifested by recurrent hematuria and proteinuria, and its clinical characteristics of 'correlation between pharynx and kidney' are consistent with the pathogenesis of yin fire rushing upward. In the clinical practice, Fan Ping found that some IgAN patients belong to the syndrome of 'spleen and stomach deficiency and yin fire rising', and the treatment from 'tonifying spleen and rising yang, dispersing fire and hemostasis' can achieve good results. Based on this, the pathogenesis hypothesis of 'spleen and stomach deficiency-yin fire rushing up-kidney collateral burning' is proposed, and the treatment rule of 'tonifying spleen and ascending yang, dispersing fire and stopping bleeding' is established, which provides a new idea for the differentiation and treatment of hematuria and proteinuria in IgA nephropathy.

Keywords: Li Dongyuan, Yin fire theory, IgA nephropathy, Hematuria, Proteinuria, Spleen and stomach deficiency.

1. Introduction

IgA nephropathy (IgA nephropathy, IgAN) is the most common primary glomerular disease in the world. The prevalence of IgA nephropathy in the Asian population is significantly higher than that in Europe and the United States, accounting for about 30%~50% of primary glomerular diseases [1,2]. The main clinical manifestations of the disease are recurrent hematuria and proteinuria. About 40 % to 50 % of patients may have gross hematuria synchronized with upper respiratory tract infection, showing typical 'pharyngeal kidney related' characteristics [3,4]. About 20% 40% of patients can progress to end-stage renal disease within 20 years after diagnosis. [5]. At present, western medicine treatment is mainly based on RAS blockers, glucocorticoids and immunosuppressants, but there are limitations such as high recurrence rate, poor efficacy, hormone dependence and adverse reactions [6]. Traditional Chinese medicine has unique advantages in improving clinical symptoms, reducing adverse reactions of western medicine and delaying disease progression [7]. Li Dongyuan systematically expounded the theory of 'yin fire' in the theory of 'spleen and stomach', pointing out that 'qi deficiency of spleen and stomach will flow down to the kidney, and yin fire can multiply its soil position' [8], revealing the internal relationship between spleen and stomach deficiency and yin fire rising. The theory emphasizes that 'fire and primordial qi are not separated' [9], and believes that yin fire is an endogenous deficiency fire caused by qi deficiency of spleen and stomach. The treatment should be based on 'tonifying the middle and ascending its yang', rather than bitter cold. Modern scholars believe that yin fire is an endogenous fire pathogen caused by the deficiency of spleen and stomach and the damage of primordial qi, which leads to the departure of ministerial fire and the inflammation of the heart through the pulse [10]. This theory is widely used in the fields of spleen and stomach diseases, internal injuries and fever. The pathogenesis of 'deficiency of spleen and stomach and upward rush of yin fire' is inherently related to the clinical characteristics of IgAN 'correlation between pharynx and kidney'.

As the chief physician of the Department of Nephrology of Shaanxi Provincial Hospital of Traditional Chinese Medicine and the postgraduate tutor of Shaanxi University of Traditional Chinese Medicine, Fan Ping has been engaged in the clinical work of nephropathy for more than 30 years. The author is fortunate to follow director Fan Ping to learn and benefit a lot. Now, Fan Ping's understanding of Li Dongyuan's 'yin fire' theory and hematuria and proteinuria of IgA nephropathy is summarized as follows, in order to provide new ideas and references for the treatment of hematuria and proteinuria of IgA nephropathy by traditional Chinese medicine.

2. The Connotation and Essence of Li Dongyuan's 'yin fire' Theory

Li Dongyuan in the 'internal and external injury differentiation theory' at the beginning of the distinction between exogenous and internal injury, pointed out that the exogenous disease is more than the disease when diarrhea, internal injury is insufficient disease when tonic [9]. The 'yin fire' actually refers to the fire of internal injury. 'Spleen and stomach theory · diet fatigue injury began to heat theory' cloud: 'heart fire, yin fire also. From the lower focal.... The heart does not command, the phase fire instead of', 'kidney by the spleen and stomach under the flow of dampness, blocking the next, causing Yin fire rushed' [8]. The so-called Yin fire, which originated from the lower Jiaomingmen, is the pathological state of ministerial fire leaving position and burning in the heart. The formation of this fire is mostly due to the deficiency of spleen and stomach, accompanied by dampness and turbidity, and the two are closely related. 'Discrimination of internal and external injuries · Discrimination of yin syndrome and yang syndrome' is: 'The qi of the spleen and stomach is insufficient, and the reverse is downward, and the fire of the pulse is reversed... The heart and lung in the upper Jiao are also' [9], and the Yin fire is reversed by the path of the pulse, which is manifested in the heart and lung. Modern scholars have summarized it as endogenous fire evil caused by deficiency of spleen and stomach, damage of primordial qi leading to the departure of

ministerial fire and inflammation of the heart through the pulse [10]. Li Dongyuan believes that the root of yin fire lies in the deficiency of spleen and stomach and the damage of vitality. 'Spleen and Stomach Theory · Spleen and Stomach Deficiency and Excess Transmission Theory' says: 'The abundance of primordial qi is caused by the qi of the spleen and stomach without injury, and then it can nourish primordial qi' [8]. The spleen and stomach are the foundation of primordial qi. The spleen and stomach are healthy, and the qi movement of the middle energizer is orderly, the primordial qi is abundant, and the monarch is in peace [10]. If improper diet, overworked, thinking hurt the spleen, resulting in spleen and stomach deficiency, the middle energizer qi machine lifts and falls, the vitality is not, the ministerial fire is out of position, the pulse is inflamed in the heart, and the yin fire is produced. [8]. Li Dongyuan summed up: 'The four seasons of the change of the different gas, and diet, improper labor, heart of likes and dislikes, all make the vitality is not, gasification for fire' [8]. The deficiency of spleen and stomach and the exuberance of yin fire are reciprocal causation, forming a vicious circle. The clinical characteristics of yin fire syndrome are deficiency in origin and excess in superficiality, mixed cold and heat [10]. The deficiency of the spleen and stomach is the weakness of the spleen and stomach and the damage of the vitality. The symptoms are laziness, defecate diarrhea, and weak right pulse. The standard is that the fire is blazing,

3. Based on the Theory of 'Yin Fire', Re-understanding of Hematuria and Proteinuria in IgA Nephropathy

3.1 'Pharyngeal-kidney Correlation' and 'Yin Fire Rising'

The most characteristic clinical manifestation of IgAN is gross hematuria 1-3 days after upper respiratory tract infection, which is clinically called 'pharyngeal kidney related' [4]. Throat is the portal of lung and stomach, spleen and stomach deficiency is easy to run through the throat. Li Dongyuan has discussed in 'Spleen and Stomach Theory · Spleen and Stomach Rise and Fall Theory': 'The spleen is injured by fatigue, labor is gas consumption, and the heart fire is blazing, the blood vessels are boiling, the blood disease and the Yang Qi is not treated, and the Yin fire is the only inflammation and the empty orifices' [8]. The throat is empty orifices, Yin fire inflammation is sore throat, dry mouth; yin fire burns the blood, then the blood overflows the vein, goes down with the urine, and becomes hematuria.

Fan Ping observed in clinical practice that many IgAN patients have gross hematuria when they have sore throat, and the two are highly synchronized, which is the evidence of Yin fire rushing upward. Clinical studies have confirmed that IgAN patients with spleen and stomach qi deficiency syndrome are particularly common, often accompanied by fatigue, abdominal distension, loose stools and other spleen deficiency symptoms, and the serum Gd-IgA1 level of such patients is significantly increased, suggesting that mucosal immune dysfunction is more serious, the condition and prognosis are worse [12,13]. This indicates that the deficiency of middle qi may provide a pathological basis for the pathogenesis of IgAN through abnormal mucosal immune

activation.

3.2 Hematuria 'Yin Fire Burning Collaterals'

IgAN hematuria is recurrent, lingering and difficult to heal, often accompanied by sore throat, fatigue, and aggravation after fatigue. Yin fire is a deficiency fire. Although it is not as fierce as the real fire, it is lingering and easy to consume qi and yin and burn the veins. 'Spleen and stomach theory · diet fatigue injury began to heat theory' cloud: 'heart fire, yin fire... Its pulse is large, and thirsty drink, this is the spleen and stomach of the lack of vitality caused by also' [8]. Yin fire burns the kidney collaterals, and the collaterals break and overflow, resulting in hematuria.

Fan Ping believes that such hematuria patients with single use of cooling blood hemostatic drugs often have little effect, or blood after the rotation of the recurrence. The root cause of hematuria lies in spleen deficiency and yin fire: if the spleen does not control the blood, the blood is not fixed, and if the yin fire burns the collaterals, the blood overflows the vein. Therefore, the treatment of IgAN hematuria should not only focus on hemostasis, but also take into account the two levels of spleen deficiency and yin fire.

3.3 'Spleen Deficiency and Qi Collapse' of 'Proteinuria'

Proteinuria in traditional Chinese medicine is mostly classified as the syndrome of 'subtle betting', which is closely related to the spleen and kidney. 'Suwen · meridian theory': 'Drink into the stomach, overflowing essence, up to the spleen, spleen qi scattered essence, up to the lung' [11]. The spleen mainly ascends the clear, governs the essence, and the spleen and stomach are weak, and the clear qi does not rise, and the essence is slightly injected into the bladder, resulting in proteinuria. Li Dongyuan pointed out in the 'spleen and stomach theory · spleen and stomach rise and fall theory': 'spleen disease is lazy and addicted to lying, limbs do not receive, stool diarrhea' [8], diarrhea is the sign of subtle betting, and proteinuria is the same as it.

At the same time, yin fire not only consumes energy to hurt qi and yin, but also disturbs the subtle leakage, forming a pathological state of coexistence of 'spleen deficiency not taking' and 'yin fire disturbance'. 'Spleen and stomach theory · spleen and stomach deficiency can not be used to spit medicine theory': 'Yuanqi is not good, gasification into fire' [8], fire inflammation, disturbance of subtle, so that subtle can not be stored and discharged. Clinical studies have shown that IgAN patients with spleen and kidney qi deficiency have a higher level of proteinuria [13].

3.4 Spleen and Stomach Deficiency-yin Fire Rushing Up-kidney Collaterals Burns

To sum up, the deficiency of spleen and stomach is the root of the disease-deficiency of middle qi, dereliction of duty in transportation and transformation, no right to ascend the clear, see fatigue, anorexia, loose stools; yin fire rushing upward is the sign of the disease-the original qi is damaged, the ministerial fire is out of position, the pulse is inflamed, and the sore throat, dry mouth and upset are seen. Renal collateral burn is the result of the lesion-yin fire burns the renal

collaterals, causing hematuria, yin fire disturbs the essence, spleen deficiency does not take, and proteinuria.

The pathogenesis of the disease reflects the characteristics of 'deficiency in origin and excess in superficiality': spleen deficiency as the root, yin fire as the superficiality, kidney collaterals as the damage, interlocking, and mutual causality. This understanding is similar to the pathological process of "mucosal immune abnormality-Gd-IgA1 production-immune complex deposition-renal tissue injury" in the 'multiple hit theory' of modern medicine [14].

4. Treatment of IgAN based on the Theory of 'Yin Fire'

4.1 Jianyun Zhongzhou, Peitu to Disperse Yin Fire

Li Dongyuan put forward in the 'theory of spleen and stomach · theory of heat in the theory of diet and fatigue': 'Only with the agent of pungent, sweet and warm, tonic and raise its yang, sweet and cold to reduce yin fire is more' [8]. According to this, the basic therapeutic principle of 'invigorating spleen and ascending yang, dispersing fire and hemostasis' is established. The essence is that 'invigorating spleen is to disperse fire, and ascending yang is to stop bleeding', rather than seeing blood to stop bleeding and seeing fire to reduce fire.

Fan Ping repeatedly stressed in clinical practice that Jianyun Zhongzhou is the primary link in the treatment of IgAN. When the middle gas is filled, the gas flow is unimpeded, and the Yin fire disperses. Li Dongyuan said, 'Jiaji Huatu, this wonderful method of Zhongjing' [8], Baishao Lianyin Rougan can help the spleen Yang lift, licorice flavor Ganbu spleen, the two compatibility can be spleen Yang. Representative prescriptions such as Buzhong Yiqi Decoction, Huangqi, Renshen, Baizhu, Zhigancao four flavors, Gongzhu Buyi Zhongjiao, Peiguyanqi; cimicifuga, bupleurum two drugs, good hair, help Qingyang qi up. Clinical studies have confirmed that Jianpi Yiqi method can reduce the level of serum Gd-IgA1 in IgAN patients and improve mucosal immune function [12].

4.2 Shengyang Uplift, Qingyang Sheng is Fire Falling.

For IgAN proteinuria, Shengyang Juxian is the core treatment. Proteinuria originates from spleen deficiency and qi depression, and misconduct in ascending the clear. Li Dongyuan treatment of yin fire syndrome, good at using wind medicine to raise the spleen yang: 'Only the fire in the yin, the taste of the thin wind medicine to raise the hair, to stretch the yang qi, then the yin qi is not sick, the yang qi is born' [8]. The nature of wind medicine, one is to help the spleen yang rise, and the other is to remove dampness and turbidity and Anzhong, so that the middle coke qi machine is unobstructed, and the stagnated fire disperses.

Shengyang Juxian can make Qingqi rise, subtle intake, proteinuria self-reduction; as the Qingyang rises, the yin fire drops, and the throat symptoms and hematuria can also be alleviated. If the first clinical diagnosis is effective, a small dose of cimicifuga and bupleurum can be added to promote yang and benefit the stomach, and further promote the

ascending of middle qi.

4.3 Shengyang Sanhuo, Buzhong is not Bitter Cold

Li Dongyuan treats yin fire with the core of 'tonifying the middle and ascending yang' and the result of 'ascending yang and dispersing fire'. In Shengyang Sanhuo Decoction, Shengma, Gegen, Qianghuo, Duhuo, Fangfeng and other wind-dispelling drugs, combined with ginseng, Baizhu, Zhigancao and other Ganwenbuzhong products, not only disperse the stagnated fire, but also do not hurt the healthy qi [8].

Although the appearance of yin fire (sore throat, hematuria) in IgAN patients is obvious, bitter cold should not be misused. Clinical visible part of the patients since taking coptis chinensis, scutellaria and other bitter and cold products, sore throat is not reduced, the increase of anorexia, loose stools. Li Dongyuan clearly opposed the bitter cold and purging fire in the 'spleen and stomach theory', pointing out that the bitter and cold products were easy to hurt the spleen and stomach, and the cold and Yin fire, and advocated the use of sweet and cold fire, such as Rehmannia glutinosa, Scrophulariaceae, and Anemarrhena asphodeloides. Buzhong Yiqi Decoction after injection due to yin fire disturbance chest diaphragm caused by the heart of the ruffian 'plus coptis one or two points' [8], that is, in the sweet and warm qi medicine with a small amount of bitter cold. If it is a syndrome of excess fire (severe sore throat, constipation, red urine, red tongue and yellow dryness), it is not suitable for the theory of yin fire.

4.4 Gubenuantu, Jianpiyiqi to Prevent Recurrence

IgAN recurrent, lingering refractory, remission 'Guben' is the key to prevent recurrence. Theory of Spleen and Stomach · Theory of Deficiency and Excess of Spleen and Stomach Yun: 'The Qi of Spleen and Stomach is injured, and the vitality can not be filled, and the causes of various diseases are also' [8]. Invigorate the spleen and replenish qi, so that the middle qi is filled, the fence is dense, the external evil is difficult to invade, and the yin fire is impossible to rekindle.

Li Dongyuan treatment of yin fire syndrome, emphasizing the 'appropriate four xiang', according to the relationship between the spleen and stomach and the heart, liver, lung, kidney four organs with the card to add and subtract medication [8]. Xiayue should fill the naive vitality, Qingshu Yiqi Decoction after the release of summer heat injury to Shengmaisan [9]; when autumn dryness, lung qi deficiency, yin fire inflammation, with ginseng, atractylodes, white peony tonic lung qi [8]. For patients with IgAN in remission stage, this method can be followed, and corresponding drugs can be added on the basis of invigorating spleen and replenishing qi. After the condition is stable, we should still adhere to invigorating spleen and replenishing qi to consolidate the curative effect. Buzhong Yiqi Decoction, Sijunzi Decoction and other prescriptions can be selected.

5. Examples of Cases

Patient Li, male, 34 years old. The initial complaint: recurrent sore throat with gross hematuria for 4 years, aggravated for 1 week. Current medical history: The patient developed gross

hematuria after a cold 4 years ago. In 2022, a renal biopsy was performed in a local hospital to suggest IgA nephropathy (Lee grade III). Irbesartan was orally administered and hormones were intermittently used. The condition was repeated. One week ago due to fatigue after sore throat, gross hematuria recurrence, accompanied by fatigue, poor appetite and loose stools. Auxiliary examination: urine routine showed red blood cells (+++), protein(++); 24h urinary protein was 1.8g/24h. Engraved: sore throat, gross hematuria, lassitude, anorexia, loose stools, backache. Inspection: pale complexion, pale tongue with tooth marks, thin yellow fur, weak pulse. Western medicine diagnosis: IgA nephropathy. TCM diagnosis: hematuria (spleen and stomach deficiency, Yin fire on the Chong card). Prescription: Huangqi 45g, Dangshen 15g, Baizhu 15g, Zhigancao 6g, Shengma 6g, Chaihu 6g, Qianghuo 6g, Fangfeng 6g, Gegen 15g, Baishao 10g, Baimaogen 30g, Platycladi 10g. 14 doses, water decoction, 1 dose a day. The second diagnosis: after 14 doses of medication, sore throat disappeared, gross hematuria into microscopic hematuria (urine red blood cells 15 ~ 20 / HP), protein (+), fatigue improvement, increased food intake, stool formation. The tongue is pale red with thin white fur and thin pulse. The initial diagnosis is effective, the effect is not better, followed by 14 doses. Follow-up: The patient insisted on outpatient conditioning for 3 months, and the urine routine was negative. The 24-hour urine protein was 0.12 g, and no recurrence was followed up for half a year after drug withdrawal.

Press: patients with mental fatigue, poor appetite, loose stools, pale tongue with tooth marks, as the spleen and stomach deficiency; pharyngalgia, hematuria, thin yellow fur and weak pulse are the symptoms of yin fire rushing upward and burning kidney collaterals. Syndrome differentiation belongs to spleen and stomach deficiency, Yin fire rushing up, kidney collateral burning, which is consistent with Li Dongyuan's theory that 'spleen and stomach qi deficiency, then flowing down to the kidney, Yin fire can take advantage of its soil position' [8]. In clinical practice, if such patients only use cooling blood to stop bleeding, the blood is temporarily stopped and then relapses; overuse of bitter cold and heat, the spleen yang is more injured. This case follows the purpose of 'invigorating spleen and ascending yang, dispersing fire and hemostasis', and chooses Buzhong Yiqi Decoction and Shengyang Sanhuo Decoction. In the prescription, Huangqi, Dangshen, Baizhu, Zhigancao, ganwenbuzhong; cimicifuga, bupleurum, notopterygium, windproof, pueraria root wind medicine Shengyang; white peony convergence Yin and Ying; the roots of Imperata cylindrica and the leaves of Platycladus orientalis cool blood to stop bleeding. The whole specimen is taken into account, and the effect is good.

6. Summary

Based on Li Dongyuan's theory of 'yin fire', combined with clinical observation, this paper puts forward the pathogenesis hypothesis of 'spleen and stomach deficiency-yin fire rising-kidney collaterals burn', and establishes the treatment principle of 'invigorating spleen and rising yang, dispersing fire and hemostasis'. Clinical practice shows that this method is suitable for IgAN patients with spleen deficiency and deficiency fire, which can effectively relieve sore throat, hematuria, proteinuria and other symptoms. The introduction

of yin fire theory into IgAN syndrome differentiation and treatment system not only reveals the pathogenesis essence of 'correlation between pharynx and kidney', but also embodies the traditional Chinese medicine thinking of 'treating disease and seeking the root cause'. We are also continuing to study the clinical effect of treating hematuria and proteinuria of IgA nephropathy from the theory of 'yin fire'.

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