Ren Xiaofang's Experience in the Treatment of Pregnancy-induced Hypertension from ''Yin Deficiency and Ministerial Fire''

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Abstract: Ren Xiaofang, chief physician, national outstanding TCM clinical training talent, the successor of the Studio of Chinese medicine master Yang Zhen. She has been engaged in clinical work and science and education for more than 20 years, studying the theory of ministerial fire. She believes that the incidence of pregnancy hypertension is closely related to the theory of phase fire "Yin deficiency ministerial fire", and the causes can be divided into liver failure and ministerial fire. Yin does not control Yang, ministerial fire, inflammation and circulation, spleen and kidney are damaged. The main pathogenesis is liver and kidney Yin deficiency, wild movement of ministerial fire, upper obstruction of the head, mid-injury of spleen Yin, low injury of kidney Yin. The result was abnormal increase of blood pressure, proteinuria, edema and other pathological changes. Treatment should start from the disease position of the viscera, nourishing the Yin of the liver and kidney, regulating the qi of the liver and spleen, and the qi of the five Zang organs, balancing Yin and Yang. If the ministerial fire is returned to its standard and the biochemical power is active, Yin deficiency phase fire will self-dissipate, and rashly move ministerial fire back to its place. The prescription is Sisangvin plus or less, aiming at mediating qi, nourishing Yin, and reducing fire. Combined use of various medicines takes into account the effects of supplementing , softening and clearing the liver, regulating qi and removing dampness, and treating pregnancy-induced hypertension with satisfactory clinical effect.

1. Introduction

Pregnancy-induced hypertension (PIH) is a disease with abnormal elevation of blood pressure and pregnancy, which can also occur before or after pregnancy [1]. Its incidence is about 9.4% in our country [2], and it is a common disease in the department of obstetrics and gynecology. PIH can lead to proteinuria, edema, fetal growth restriction, placental abruption, and other problems in pregnant women, which seriously affect the health of pregnant women and fetuses, and even threaten their lives. It is the second leading cause of death in pregnant women [3]. Modern medical research shows that there are many causes of this disease, and the specific pathogenesis is not clear. It is generally believed that the occurrence of this disease is closely related to maternal nutritional factors, vascular intimal damage, abnormal trophoblast invasion, immune mechanism imbalance, and genetics [4, 5].

At present, western medicine is mainly based on symptomatic treatment, including antihypertensive treatment and reduction of proteinuria [6]. Although it can relieve symptoms, it is difficult to ensure the safety of patients and fetuses due to various side effects of western medicine (such as dizziness and fluster caused by antihypertensive drugs, electrolyte disturbance and increased uric acid caused by diuretics) and unclear effects on fetuses. Traditional Chinese medicine has accumulated rich experience in the treatment of this disease and has unique advantages, such as small side effects, good safety, and obvious efficacy [6].

Ren Xiaofang, the chief physician, engaged in clinical work and science and education for more than 20 years, studied the theory of ministerial fire, inherited the theory of traditional Chinese medicine master Yang Zhen and innovated the theory of "six types of ministerial fire" [7] based on the theory of Zhu Danxi ministerial-fire. The flexible using it in hypertension, coronary heart disease, and other cardiovascular disease etiology and pathogenesis analysis and treatment which has achieved remarkable results.

Combined with the clinical experience, Director Ren believes that the etiology and pathogenesis of pregnancy-induced hypertension syndrome are closely related to the "Yin deficiency ministerial of ministerial fire" in the "six types of ministerial fire". The treatment should be based on eight principles, four diagnoses, examination and cause, and advocate treatment based on the "Yin deficiency ministerial-fire fire" syndrome differentiation.

The word "ministerial fire" originated from the Neijing (Internal Canon), which states that "Jun fire is based on Ming, ministerial fire is based on position". "Jun fire" refers to the commander of all things to produce growth and change which is the source of power. "Ministerial fire" is the fire that specifically promotes the completion of change under the guidance of Jun-fire. Only with the role of ministerial fire can the Lord of Jun-fire be implemented [7]. Zhu Danxi believes that although ministerial fire acts on various zangfu organs, it originates from the liver and kidney organs, that is "the liver belongs to wood and the kidney belongs to water. "It can be seen that the ministerial fire is based on the blood of liver and kidney, which is the special department of the two zang organs.

Under the normal physiological state, the ministerial fire in its position, functional, under the Jun fire guidance, so that the normal operation of the body, to complete the life activities, movement and restraint, vitality, for the "ministerial fire is normal"; on the contrary, of the ministerial fire moves in a wild way and consumes the Yin and essence, Danxi said, "The disease of a person is also caused by movement. If the movement is extreme, patients will die."

In this abnormal condition, ministerial fire cannot produce and maintain the functional activity of the human body, but harm the human body and cause pathological changes. Therefore, it is called "the change of ministerial fire", which produces different pathological products, namely "six types of ministerial fire".

Pregnant women are in a special physiological state, in which the Yin blood in the body is accumulated for the fetus to raise, which is easy to cause the deficiency of Yin blood in the mother [8]. Due to "liver storage of blood" and "homology of liver and kidney", such deficiency for a long time will cause Yin deficiency of liver and kidney, and ministerial fire will lose its source and cannot stick to its position, thus leading to one of the six types of ministerial fire -- Yin deficiency ministerial fire. "Yin deficiency ministerial fire" is often manifested as: dizziness, dry mouth and dry throat, irritability, hot hands and feet or low afternoon fever, tiredness and fatigue, tongue, sharp

red, tongue fur, pulse thin or string, etc.

2. Etiology and Pathogenesis

There is no name of pregnancy-induced hypertension in traditional medicine. According to the clinical symptoms, manifestations, and signs of this disease, modern TCM mostly ascribe it to the disease range of "zi yun", "zi zhong", "eclampsia" and so on [6]. The name of eclampsia was firstly recorded in the "Prescriptions of disease" writed by Chen Yanzhi in Jin Dynasty, "pregnancy woman suddenly unconscious, a moment later wake up, then have a relapse, also still out of consciousness, called "zhi" disease, or eclampsia."[9]

According to the theories of various schools and combined with the specific manifestations of the disease, it can be seen that "zi yun", "zi zhong" and "eclampsia" correspond to different stages of modern pregnancy-induced hypertension syndrome [10].

Director Ren thinks, "the females can take the liver as congenital", so the woman disease pathogenesis is related to the liver, pregnancy-induced hypertension syndrome due to liver and kidney Yin, blood deficiency, Yin does not subdue yang, ministerial fire impetuosity, dislocation of disturbance, resulting in patients with elevated blood pressure, dizziness, headache, and tinnitus.

The production of Yin deficiency ministerial fire will decoction and burn the body fluid, aggravate the Yin deficiency, and become a vicious circle, which not only affects the liver and kidney function, but also affects the coordination of other viscera. It is mainly manifested in the following three aspects [11]:

(1) Self-injury liver Yin, Yin does not subdue Yang, fire causes inflammation, disturbance, the head will appear dizziness, even dizziness; or fire evaporates fluid into the phlegm, carrying phlegm to block the clear orifices, resulting in dizziness, trismus, limbs spasms, and even coma, the internal meridian recorded "all winds fall dizzy belong to the liver", Danxi said "no phlegm no dizzy".

(2) The spleen Yin is damaged, the stomach Yin is insufficient, and the body fluid cannot be superior, resulting in dry mouth and red tongue. In Huang Yuanyu's "Four Sacred Heart Sources", it is said that "between clear and cloudy, it is called the middle qi, the middle qi, the pivot of Yin and Yang's rise and fall, the so-called earth". This earth is the spleen and stomach in the middle soil, and the hub function of qi is lost, which causes pregnant women to produce various kinds of qi mechanism blocked.

(3) Lower injury of kidney Yin, deficiency of kidney qi cannot store essence, resulting in refined substances in urine [12], proteinuria, etc. The spleen and kidney play an important role in fluid metabolism in the human body. If both the spleen and kidney are injured and fluid metabolism is blocked, edema will occur.

It is suggested that Yin deficiency of liver and kidney, frenetic stirring of the ministerial fire, and upper disturbance are the pathogenesis of this disease, and Yin deficiency of ministerial fire are the essence of the pathogenesis.

3. Rules and Methods

Dr. Ren Xiao-fang believes that the treatment of this disease should start from the viscera of the disease site, pay attention to nourishing and not damage Yang, prevent the impetuous movement of ministerial fire while not making ministerial fire passive, do not use heavy tranquillizing medicinals. The agents that nourishing and reduce heat are used to destroy earth qi [13]. It is necessary to nourish the liver and kidney, tonify the qi of the lung and spleen, harmonize the qi of the five viscera, balance Yin and Yang, and return the fire to its source. When the engender transformation is active, Yin - deficiency ministerial fire self - extinction.

In order to nourish the Yin of the liver and kidney, regulate the qi of the liver and spleen, and

remove dampness and blood stasis, Professor Yang Zhen's formula: Sisangyin (Bupleurum, Paeony, Fructus aurantii, mulberry leaves, chrysanthemum, Prunella vulgaris, hawthorn, licorice) is proposed.

In the prescription, Bupleurum enters the liver and gallbladder meridian, soothing the liver and relieving depression, raising the qi of the liver and spleen, to guide the normal operation of the ministerial fire and qi machine in the body. In the "Changsha Medicine Solution", Huang Yuanyu said: (Bupleurum) runs between Yin and Yang on the outside, and works in the cold and heat exchange, goes up the head and stop vertigo, down the chest and hypothecum to eliminate hardness.....stop the inverse of reducing the gallbladder and stomach, release the depression of the liver and spleen; Paeony collects Yin and nourishes blood and soft liver, "Bencao Zhengyi" records: "Tonifying blood, nourishing liver and spleen Yin, and collecting the scattered temper, then Paeony is also", Bupleurum and Paeony combined with nourishing liver and blood, comfortable liver qi, and avoid Bupleurum easy to burn Yin blood. Fructus aurantii helps Bupleurum to comb the force of Qi [14].

Mulberry leaves and chrysanthemum both belong to the liver meridian. It is said in "Integrating Chinese and Western Medicine" that "(mulberry leaves) can clear the heat of the liver and gallbladder". Mulberry leaves are cool and moist, while chrysanthemum flowers are spicy and cool. The combination of the two can fill the water of lung and kidney [15], to slow the vertigo of Yin deficiency and liver Yang hyperactivity.

According to the records in "Diannan Herbal", Prunella has the characteristics of "eliminating liver heat, regulating liver qi, and eliminating tuberculosis in the whole body". Modern pharmacological studies have shown that prunella can directly reduce blood pressure [16]. Hawthorn can be appetizing digestion, stagnation elimination, reduce phlegm, and promote qi.

According to the patient's condition, if the patient's tongue's sharp is red, endothelium corneum gigeriae galli clearing heat of the liver meridian can be added [17]. It can also be combined with Gastrodia and ophioglossus to strengthen the functions of calming liver Yang, refreshing breeze and stopping spasm. Parasitic osmanthus, eucommia, tonifying liver and kidney.

All kinds of medicines are compatible, taking into account the effects of tonifying, softening, clearing the liver, regulating qi, and removing dampness. According to the specific clinical conditions, flexible addition and subtraction it can be treated with liver and kidney Yin deficiency ministerial fire-induced hypertension syndrome.

4. Case Examples

Li, female, 31 years old. The first diagnosis was made on April 16, 2022, with the chief complaint of elevated blood pressure for more than 5 months. History of present illness: The patient had elevated blood pressure during pregnancy before 5 months (December 2021), with a maximum of 165/106 mmHg. The patient was diagnosed with pregnancy-induced hypertension and was treated with valsartan, but the blood pressure was poorly controlled.

First diagnosis: headache and dizziness at night, stiff hands in the morning, phlegm in the morning, white and easy to spit out, no cough, chills, obvious in lower limbs, no palpitations, chest tightness and shortness of breath, food intake, night rest in general, two stool tone. Tongue dark red, tongue coating is yellow, tongue edge, tooth mark, pulse heavy string thin stagnation.

TCM diagnosis: Ziyun syndrome of Yin deficiency on ministerial-fire, liver meridian, blood heat, qi deficiency, phlegm block.

Treatment: nourishing Yin and qi, clearing the liver, and reducing fire.

Prescription given Sisangyin prescription: Bupleurum, Paeony, Fructus aurantii, radix achyranthis bidentatae, hawthorn, endothelium corneum gigeriae galli, rhizoma zingiberis, teasel root, Chuanxiong rhizoma, asarum, Angelica dahurica each 10g, mulberry leaves, chrysanthemum each 15g, Prunus vulgaris 20g, Eucommia ulmoides 30g, parasitic loranthus 12g, oyster 20g, licorice 6g, aconite 4g.7 doses, decocted with water, one dose daily, oral in two divided doses.

On April 23, 2022, the home blood pressure monitoring showed that the fluctuation of blood pressure was 110-148/75-97mmHg, dizziness and headache were relieved, and chills were relieved. There were still white phlegm and stiff hands in the morning. The blood pressure was 124/98mmHg. The tongue is dark, the tongue coating is thin yellow, the tongue edge is toothed, the pulse is heavy string and thin.

Above prescription wipe out rhizoma zingiberis aconite, and 12g of gastrodia elata and rhynchophylla each. A further 7 doses were given.

At the third visit on April 30, 2022, the patient's headache and dizziness were significantly improved, white phlegm was reduced, fat and hand stiffness were relieved, sleep was alleviated, and bladder and stool were normal. The blood pressure was 124/78 mmHg. The tongue is light, the tongue coating is thin and yellowish, and the pulse is heavy and thin.

The last prescription added rehmannia, Radix Puerariae, each 30g. Another 14 doses were given to consolidate the curative effect.

During follow-up, the blood pressure was stable.

Comments: During pregnancy, blood of the patient accumulates and raises the fetus, which is easy to cause the depletion of Yin and essence. After the induction of labor, the Yin blood has been injured, the liver and kidney are deficient, and the ministerial fire loses its source at the base and causes vertigo. Yin blood is insufficient, Yin at night is not subdued Yang, and the pain is obvious when the head loss nourishment. In the "Su When", it is said, "The liver governs the fascia of the body." In the "Systematic Compilation of Internal Classics", it is said, "The tendons of the body are all born of the liver."

The liver and tendons grow together, and the form and function of tendons depend on the nourishment of the liver and blood and the elevation of liver qi [18]. If the liver fails to nourish the tendons, the hands will be stiff.

"Su Wen" said: "The earth got the wood to dredged. "This shows that the spleen soil can only operate when gaining wood qi [19], the patient's liver qi is deficient, and the wood does not dry the soil. Moreover, because "the spleen is the source of phlegm", the spleen is the main transport of water liquid, but the function is lost, and the body fluid is fried by fire, resulting in a lot of phlegm.

TCM believes that the protein belongs to subtle substances, and its normal distribution is closely related to the rise essence of the spleen [20]. "Su Wen"recorded: "Kidney, storing, the place of essence." Now the deficiency of kidney qi, loss in storing spleen does not rise essence, causes proteinuria.

The treatment is based on Sisangyin prescription, which is used to nourish the liver, kidney, lung, and spleen, add parasitic loranthus to nourish the liver and kidney, Eucommia ulmoides nature is warm and tastes sweet, and return to the liver and kidney meridian, which has the effect of nourishing the liver and kidney, strengthening muscles and bones. Combined use can enhance the effect of nourishing the liver and kidney, which is in line with the principle of mutual birth, and increase the function of nourishing, the liver and kidney acquire Yin, the pulse is unobstructed, the clear orifice are nourishing [21].

After the second diagnosis, the patient's symptoms such as chill were relieved, and then the herbs like rhizoma zingiberis and aconite warm Yang were removed, rhizoma zingiberis and aconite were added to enhance the effect to pacify the liver and subdue Yang, soothing the wind and preventing the dizziness. After the third diagnosis, the patient's symptoms were improved, and Radix Puerariae was added on the basis of the former prescription to promote meridian circulation and unchoke vein.

5. Conclusions

Director Ren Xiaofang summarized many years of clinical experience and believed that pregnancy-induced hypertension was closely related to the "change of ministerial fire", mostly due to the insufficiency of the liver and kidney, the lack of liver and kidney, the impetuousness of the

ministerial fire, leading to the disorder of qi and blood in the human body. The treatment should nourish the Yin of the liver and kidney, regulate the qi of the liver and spleen, reconcile the five zang organs, and ministerial fire can be stable in the position. Clinical application of Sisangyin prescription is satisfactory.

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