

Syndrome Differentiation and Treatment of Primary Ovarian Insufficiency Based on "Kidney Deficiency"

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Abstract: In recent years, the incidence rate of primary ovarian insufficiency has gradually increased and tends to be younger due to a variety of reasons. The onset of POI is hidden. Early detection and timely intervention are particularly important. Traditional Chinese medicine believes that the five zang organs are injured, and the poor must reach the kidney. POI is based on the deficiency of kidney essence, which is lingering and difficult to heal. A long illness leads to the imbalance of yin and Yang, the imbalance of Chong Ren, and menstrual disorder, resulting in the involvement of the heart, liver, and spleen. Therefore, the clinical POI is not simply the deficiency of kidney qi or kidney essence, but should be treated according to the patient's condition from multiple viscera.

Primary ovarian insufficiency (POI) refers to the decline of ovarian function in women before the age of 40, which is manifested by sparse menstruation or amenorrhea (> 4 months), and FSH level ≥ 25 iu/l twice (with an interval of more than 4 weeks) [1], which will lead to the decline of fertility and even infertility. In addition, due to the lack of estrogen, there will be hot flashes, night sweats, poor sleep, emotional instability, low sexual desire and other symptoms. Nowadays, with the gradual change of the younger generation's concept of marriage and childbearing, late marriage and late childbearing are becoming more and more normal, and the incidence rate of POI is also rising year by year, which has a serious impact on women who have fertility requirements. POI was proposed by the European Society for human reproduction and Embryology (ESHRE) and the International Menopause Society (IMS) [2] as early as 2016. Unlike prematureovarianfailure (POF), it focuses more on reflecting the early stage before ovarian failure. Early detection and early treatment of POF play a key role in protecting women's fertility.

1. Etiology of Traditional Chinese Medicine

There is no clear record of POI in the ancient literature of traditional Chinese medicine. According to its clinical manifestations, modern Chinese medicine scholars believe that POI can be diagnosed as "early termination of meridians" and "early exhaustion of heavenly Kui" [3]. "Su Wen ·ancient naive theory" says: "Ren pulse is connected, Taichong pulse is prosperous, and lunar events are at the present time", "Taichong pulse is declining, the sky is exhausted, and the tunnel is

impassable." The kidney is the foundation of Chong Ren, and the uterus is subordinate to the uterus through the Chong Ren two vessels. The uterus mainly conducts menstruation and pregnant fetus. If the uterus loses nourishment, the menstruation source is deficient, so the menstrual fluid is gradually deficient, and the clinical manifestations of primary ovarian insufficiency such as amenorrhea, blood stasis and infertility gradually appear. "The collaterals are tied to the kidney." The kidney and the uterus are interconnected through the cellular collaterals. When the kidney qi is abundant, the kidney essence is sufficient, and the essence and blood breed and transform each other. The blood produced by the kidney essence reaches the uterus through the cellular collaterals, and the monthly events are current. Therefore, traditional Chinese medicine believes that POI is mainly due to kidney deficiency. Tonifying the kidney should run through the whole process of POI treatment, and take tonifying the kidney as the basis for syndrome differentiation and treatment. At the same time, it can cooperate with other characteristic therapies of traditional Chinese medicine to achieve better curative effects.

2. TCM Treatment

2.1 TCM Syndrome Differentiation Treatment

2.1.1 Tonifying the Kidney and Regulating the Week

In traditional Chinese medicine, menstrual cycle is divided into late menstrual period, inter menstrual period, premenstrual period and menstrual period, which is the manifestation of Yin-Yang growth and decline and Qi and blood loss. Based on the overall concept of traditional Chinese medicine and the correspondence between heaven and man, different drugs are adjusted at different times and treated by stages. Li Jing [4] and others followed the principle of "tonifying blood deficiency after menstruation, and storing blood in the sea before menstruation is suitable for diarrhea". 40 cases in the observation group were given the self-made kidney tonifying sequential formula (formula I and II), and 40 cases in the control group were given hormone replacement therapy. After three months of treatment, the follow-up showed that the kidney tonifying sequential therapy can effectively improve the clinical symptoms and ovarian function of patients with POI, and it is safer to use it for a long time than hormone replacement therapy, It is considered that the sequential therapy of Tonifying the kidney is orderly and indefinite, and its application is more flexible and safe than the sequential therapy of estrogen and progesterone. If the symptoms of kidney deficiency do not improve, the patients can continue to tonify the kidney and replenish essence. In addition, the periodic rhythm of menstruation is the result of the balance between the growth and decline of kidney yin and Yang. If the growth and decline of yin and Yang is abnormal, there will be dysmenorrhea. Chen Xueqi [5] makes good use of *Eucommia Chuanduan*, tortoise shell turtle shell, *agastachys rugosa* and other drugs in regulating menstruation, and often uses "harmony" as the method to regulate Yin and Yang. Therefore, it can be considered that the balance of kidney yin and kidney yang can regulate the menstrual cycle, and the balance of the growth and decline of yin and Yang will lead to the balance of the axis work of kidney - Tiangui - Chongren - uterus.

2.1.2 Tonifying the Kidney and Activating Blood Circulation

In Li Jimin's theory of kidney deficiency and blood stasis, it is said that "a long illness affects the kidney, and a long illness leads to deficiency... The deficiency of the kidney also means that" deficiency can lead to blood stasis, and blood stasis can lead to deficiency ". Sunhongyan et al. Treat POI from the viewpoint of blood stasis and heat. They believe that kidney essence deficiency

consumes Qi and blood, and blood stasis is caused by the sluggish operation of Qi and blood. After a long period of blood stasis, heat is turned into heat, and the kidney Yin is burned, resulting in the further decline of Guishui. Through the self-made Qingre Huayu Decoction [6], they play the effects of Tonifying the liver and kidney, activating blood circulation and dredging collaterals, and clearing heat and removing blood stasis. Professor zhunansun, a master of traditional Chinese medicine, believes that [7] women's menstruation comes on schedule as a result of the relative balance of movement and stillness. The coordination of movement and stillness results in the overflow of menstrual water, and kidney deficiency leads to the obstruction of their warm and promoting functions, making it impossible for the blood in the pulse to walk, stagnate and form blood stasis. Therefore, the Jingtiao recipe adds blood nourishing and blood activating products on the basis of Tonifying the kidney. Clinical observations show that it can significantly improve the ovarian blood supply.

2.1.3 Tonifying the Kidney and Calming the Heart

"Shen Zhai's suicide note" says: "those who want to tonify the kidney need to calm their hearts, so that their hearts can be lowered, the kidney can be solid, and stillness can generate water. The heart belongs to Yang, and the kidney belongs to water. The heart and kidney intersect, and water and fire are combined. Yin and yang are balanced, and menstruation comes on time. Professor xiaguicheng [8] believes that the heart kidney intersection is the core of the heart kidney uterus axis, and the regular retention and diarrhea of the uterus is the process of the intersection of the heart Yang and the kidney water in the body. In addition, Professor xiaguicheng also puts forward the heart Yin theory, which holds that the treatment of POI should first treat the heart. If the heart Yin is insufficient, the heart fire will be vigorous. The heart fire can not go down and interact with the kidney. If the heart kidney is not connected, it should nourish the heart Yin to reduce the heart fire. Chenwenjun et al. [9] selected 60 patients with primary ovarian insufficiency of heart kidney disharmony type and randomly divided them into control group and observation group with 30 cases in each group. The control group was treated with fenmotong, while the observation group was treated with Bushen Ningxin recipe (the basic recipe of Huanglian Ejiao Decoction) (6g of Huanglian, Huangqin and Lianzixin respectively, 15g of white peony and Beifang respectively, 10g of donkey hide gelatin, Rehmannia glutinosa, Poria cocos, Cornus meat and Uncaria hook vine respectively). The results showed that Bushen Ningxin recipe had a good effect on heart kidney incompatibility POI, which could not only achieve the effect similar to fenmotong, but also had no hormone related adverse reactions.

2.1.4 Tonifying the Kidney and Soothing the Liver

Women use blood as their body and Qi as their use. In the middle of the clinical guide to medical records, Tianshi said: "regulating menstruation is important, especially regulating the liver". The liver is the pivot of regulating qi, blood and emotions in the whole body. The liver blood pours blood into the uterus through the Chong Ren two veins to produce menstruation. Professor tengxiuxiang [10] believes that the normal function of the liver is closely related to the fullness of the blood sea of the Chong pulse, the smoothness of the Ren pulse, and the strength of the kidney qi. If the liver is too lax, the liver blocks the spleen and soil, and the biochemical source of Qi and blood is lacking, no blood is injected into the Ren cell palace; If the liver Qi release is not enough and the Qi mechanism is blocked, the menstrual blood cannot be injected. It can be seen that abnormal liver Qi release can lead to early disorder and early termination of menstrual fluid, and can not induce pregnancy. Professor Zhu Ling [11] started from the "kidney is the essence" in the internal classic, and believed that the liver and kidney are born from mother to child, and the

essence and blood are generated from each other. If the kidney water is deficient, the liver will lose its support, and if the liver is lax, the essence and blood will be damaged, resulting in the deficiency of kidney essence. He believed that the liver and kidney are both female congenital, and the liver is closely related to the onset of POI. Wangxiaowei [12] and others took 50 patients with POI of kidney deficiency and liver depression type as research objects, and randomly divided them into two groups. The control group was given fenmotong orally, and the observation group was given Yishen Shugan decoction (prepared radix rehmanniae, Huai yam, Cornus officinalis, Angelica sinensis, white peony, Ligustrum lucidum, Cyperus, Cortex Moutan, roasted Radix Polygalae, Albizia bark 10g each, bergamot 6G, roasted licorice 3G). After three months, the effective rate of the observation group was as high as 92%, and the symptoms of traditional Chinese medicine improved significantly, The importance of liver depression in the occurrence and development of POI was emphasized. Based on tonifying the kidney, combined with drugs for relieving liver depression, better curative effect could be achieved.

2.1.5 Invigorating the Kidney, Spleen and Blood

The secret collection of the orchid room says: "a woman's spleen and stomach are deficient for a long time, or her body is weak in both qi and blood, resulting in the failure to cut off menstruation." a woman is based on blood, and spleen deficiency leads to the lack of biochemical source of Qi and blood. Blood deficiency leads to the loss of nurturing in the uterus, and the sea of blood cannot be full on time, resulting in less menstruation, delayed menstruation and even amenorrhea. Professor youzhaoling created the "Iceberg Theory" [13,14], which holds that although the most primitive developing follicles in the ovaries of most patients with POI have declined, the primordial follicles of the ovaries are still deeply asleep under the iceberg. In terms of medication, the principle of "guiding the spleen and tonifying the kidney" is followed, and the innate kidney essence is nourished by transforming the valley essence through spleen transport, so as to nourish the primordial follicles and promote the development and maturation of follicles, Jianhuanling [15] believed that the treatment of POI should greatly replenish qi and blood essence on the basis of Tonifying the kidney. 90 patients with POI were randomly divided into the observation group (46 cases) and the control group (44 cases). Both groups were treated with Zigui Yijing decoction. On the basis of this, the observation group was combined with Zishen Yutai pill prepared by Professor luoyuankai to replenish the kidney and spleen, replenish qi and nourish blood, and the control group was treated with vitamin E. after 6 months of treatment, the results showed that, The effective rate of the observation group (68.9%) was better than that of the control group (51.3%). The observation group had a better effect in improving the clinical symptoms of POI, menstruation and hormone levels. Therefore, the condition of patients with POI developed to a certain extent, not simply kidney deficiency. We should strengthen the spleen and blood while tonifying the kidney, so as to achieve better curative effect.

3. Conclusions

Modern doctors believe that POI is the result of a variety of factors. It is a reproductive endocrine disease that cannot reverse ovarian function. Its etiology is complex and the course of disease is lingering. It is one of the main causes of infertility in women of childbearing age. Western medicine mainly adopts hormone replacement therapy, assisted reproduction and other technologies. Traditional Chinese medicine emphasizes the overall concept. Most traditional Chinese medicine experts believe that the onset of POI is mainly kidney deficiency. Kidney deficiency syndrome can include liver depression syndrome, blood stasis syndrome, Qi and blood deficiency syndrome, etc. kidney yin deficiency is often accompanied by heart kidney disharmony

and liver yin deficiency. However, there is still a situation of inconsistent syndrome differentiation and classification in clinical treatment. Based on the deficiency of kidney essence, this paper discusses the treatment of POI with traditional Chinese medicine, giving consideration to promoting blood circulation, tonifying the spleen, soothing the liver, calming the heart and calming the nerves, starting from the syndrome differentiation of the five internal organs, actively giving play to the advantages of traditional Chinese Medicine in the treatment of this disease, making the functions of the internal organs normal and orderly, achieving prevention before disease, enhancing the early intervention and treatment of patients with POI, and improving the protection awareness of women of childbearing age for ovarian function.

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