

Professor Fengjie He's Experience and Method of Chinese Medicine in Treating Kidney Deficiency and Liver Depression Type of Infertility

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Abstract: *Infertility is a common gynecological disease among women of childbearing age and is one of the difficult gynecological problems. In this regard, traditional Chinese medicine (TCM) treatment has unique advantages and precise efficacy. According to Prof. He Fengjie, the main etiology and pathogenesis of this disease lies in kidney deficiency and liver depression, as well as the imbalance of Chong Ren. In treatment, the main focus should be on tonifying the kidneys and regulating the liver qi at the same time. In clinical practice, he specializes in the use of "Self-designed Pregnancy Preparation Formula", which has achieved unique results.*

Keywords: Infertility, Kidney deficiency and liver depression, Expert experience, Fengjie He.

1. Introduction

Clinically, men and women who do not use contraception after marriage, have normal sex life, and cohabit for two years without ever conceiving are called "infertility". According to incomplete statistics, the incidence of infertility among married couples in China is about 10%-15% [1], and the female factor is the main one. Clinical studies have shown [2] that the factors affecting infertility in female patients are complicated, and can be mainly categorized into genetic defects, anatomical abnormalities, endocrine disorders, systemic diseases, environmental factors, lifestyle and other related factors. The treatment of infertility in female patients needs to correctly analyze the causes of the disease and treat the symptoms; otherwise, it is difficult to achieve good clinical results.

Prof. Fengjie He is an academic leader in the Department of Gynecology at the Affiliated Hospital of Shaanxi University of Traditional Chinese Medicine. He has devoted himself to medical care, teaching and research for over 40 years. He has accumulated extensive experience in the TCM treatment of ovulation disordered infertility. Prof. Fengjie He has achieved certain therapeutic effects by tonifying the kidneys and regulating them throughout his clinical practice, and now he mainly summarizes his experience in kidney deficiency and liver depression type of infertility as follows.

2. Causes and Mechanisms of Kidney Deficiency and Liver Depression Type of Infertility

In the ancient times, when discussing infertility, it was often said that the male is dominated by the kidney and the disease is in the essence, while the female is dominated by the liver and the disease is in the blood, which is the program of the theory. The liver is the reservoir of blood and the main excretory; the kidney is the reservoir of essence and the main development; kidney deficiency leads to the decline of reproductive function, and liver depression leads to poor qi, which affects the uterus' function of regulating, thus

triggering infertility. The key to conception lies in the growth and maturation of the egg and the abundance and strength of kidney essence [3,4]. Liver and kidney essence and blood insufficiency, Chong Ren loss of nourishment, the uterus has no blood to time to the next, there is no way to become pregnant, tonifying the liver and kidney qi, nourishing the blood and regulating the menstruation can make the menstrual blood is sufficient, the Chong Ren vein is solid, and it is the fetus to become pregnant. If the menstrual disorder is not adjusted, there will be more evidence of infertility, the so-called "ten infertile, nine not adjusted", emphasizing the high incidence of irregular menstruation in infertility. The Essentials of Gynecology especially emphasizes: "When a woman is childless, it is all due to the irregularity of menstrual flow."

Kidney deficiency and liver depression type of infertility is a common type of infertility whose etiology and mechanism involves multiple aspects of physiologic dysfunction. Kidney deficiency refers to diminished kidney function or loss of kidney essence, leading to abnormal functioning of the reproductive system. Liver depression, on the other hand, refers to prolonged unreleased emotional stress, leading to liver qi stagnation, which affects the normal functioning of the reproductive system. The interaction of these two often leads to infertility symptoms.

3. Treatment Emphasizes Chronotherapy

The Suwen - on the ancient theory of truth" said: "women seven years old, kidney gas, teeth more hair long; two seven and the day to the capricorn, Ren vein through, Taichong vein full, menstruation to the time down, so there is a son of....." Therefore, the way of the woman childbearing to the fullness of the kidney, the day to the capricorn, the Chong Ren passes for the prerequisites. "Yin and yang is the main" point of view that the essence of the menstrual cycle is the transformation of yin and yang. The cyclical transformation of yin and yang regulates the function of the uterus in hiding and draining, so that menstruation occurs rhythmically. A menstrual cycle can be categorized into four periods based on the waxing and

waning transformations of yin and yang: the menstrual period (heavy yang turns to yin), the late menstrual period (yin grows and yang wanes), the intermenstrual period (heavy yin turns to yang), and the premenstrual period (yang grows and yin wanes) [5]. By understanding the characteristics of these four periods, we can better understand the changes in the female physiological cycle, which helps to grasp the regularity of the menstrual cycle, then smooth menstruation will lead to fetal pregnancy. Specifically as follows:

3.1 The menstrual period, i.e. the period of menstruation, when the body's yang qi reaches its peak and the relationship between yin and yang is imbalanced to an extreme point, which needs to be regulated through the process of transformation. This period is the beginning of a new menstrual cycle, from yang to yin, the uterus is diarrhea but not hidden, the blood chamber is opening, the uterus needs to be opened to discharge menstrual blood, to correct the state of yang bias, so the emphasis is on eliminating stasis and generating new blood, so that the menstrual blood can be drained from the uterus, and the qi and blood flow can be smoothened. The tutor prepared the Shrinking Uterus and Expelling Blood Stasis Soup with the following formula: the formula consists of Angelica Sinensis 10g, Rhizoma Ligustici Chuanxiong 10g, Peach Kernel 10g, Liu Huannu 10g, Cannon Ginger 6g, Glycyrrhiza glabra 10g, Motherwort 30g, Hovenia Citri Reticulatae 10g, Hawthorn 12g, Chonglou 10g, Prepared Ground 12g, Paeoniae Lactiflorae 15g, Safflower 10g, Fairy Hedgerow 30g, and Chickweed Vinegar 10g, which will help the menstruation to drain smoothly and prepare for the period of the preparation for the latter part of the period.

3.2 The postmenstrual period, during which yin grows and yang disappears, the blood chambers are closed, the uterus hides but does not leak, and the yin essence is nourished through the role of sealing and nourishing the yin so that the menstrual blood grows, which is the "heavy yin" phase; this period can be subdivided into three phases: 1) the early postmenstrual period, which is the beginning of the yin period but the growth of yin qi is relatively slow, so it is necessary to emphasize on the nourishment of yin and the nourishment of blood, so as to ensure This stage is the beginning of yin growth, but yin qi grows more slowly, so it is necessary to focus on nourishing yin and nourishing blood in order to ensure the steady growth of yin qi, and to prepare the foundation for the subsequent cycle. 2) The middle postmenstrual stage, when Yin Qi has grown to a moderate level, is often accompanied by bringing down or a moderate amount of bringing down. At this stage, treatment should be based on nourishing Yin and nourishing Blood with Yang to balance Yin and Yang qi and promote coordination within the body. (3) The late postmenstrual stage, which is the ending stage of the late menstrual period and the pre-ovulatory stage. In the late menstrual period, yin and yang are gradually approaching the level of heavy yin, so it is necessary to pay more attention to treatments that nourish yin and help yang, and regulate yin and yang to ensure that the body is in an optimal physiological state, and to prepare the body for ovulation and conception. The instructor's own formula - Yuk Foam Menstruation Regulating Drink - consists of Ginseng 10g, Rhizoma Polygonati Odorati 18g, Rhizoma Polygonati Odorati 15g, Cornu Cervi Pantotrichum 15g, Fructus Lycii 12g, Semen Cuscutae 30g, Radix et Rhizoma Polygonati 15g,

Radix Rehmanniae Praeparata 12g, Radix Paeoniae Alba 15g, Radix Angelicae Sinensis 10g, Rhizoma Ligustici Chuanxiong 10g and other medicines. The herbs work together to enhance blood supply and energetic filling to strengthen kidney function and maintain estrogen levels in the reproductive system at an appropriate peak, thus promoting normal follicle maturation, which is also in line with modern medicine's understanding of the important role of estrogen.

3.3 intermenstrual period, this period of essence into gas, yin to yang, yang qi within the movement, dense shape of sprouting "the Hou" (ovulation) to come, this period is the seed of the Hou, the so-called "real opportunity" period [6]. Under the action of kidney qi, yin and yang begin to transform, yin essence into yang qi, creating conditions for the reproductive process. During this period, the waxing and waning of yin and yang is characterized by a shift from heavy yin to yang, and the purpose of this period is to discharge the egg in preparation for fertilization and conception, in order to help the body successfully complete the process of ovulation. In order to help the body successfully complete the ovulation process, the instructor adopted the treatment methods of tonifying the kidneys, detoxifying the liver, benefiting the qi and activating the blood according to the physiological characteristics of this period. Firstly, tonifying the kidneys, as kidneys dominate water and water produces wood, which helps the regulation of the reproductive system and the smooth progress of the ovulation process; secondly, detoxifying the liver, detoxifying the liver and invigorating the blood helps to regulate the emotions and reduce the stress, which is conducive to balancing the endocrine secretion and promoting ovulation; then benefiting the qi, as the sufficient amount of qi and blood can enhance the body's immune system and resistance to diseases, which is conducive to ovulation and conception; and lastly, invigorating the blood, which helps to optimize the Finally, activating blood, by promoting blood circulation, helps optimize the function of reproductive organs and improve the success rate of ovulation. Therefore, the formula is composed of 10g of ginseng, 15g of Chinese yam, 15g of cornelian cherry, 30g of cuscuta, 12g of wolfberry, 15g of chasteberry, 10g of angelica, 10g of Rhizoma ligustici Chuanxiong, 12g of ripened dioica, 15g of Paeonia lactiflora, 18g of Rhizoma Polygonati, 15g of eucommiae radix, 20g of deer horn, 30g of chickweed vines, and 10g of cinnamon.

3.4 Premenstrual period (PMS), the last phase of the menstrual cycle and the beginning of the luteal phase. During this period, the female body undergoes a series of physiological changes in preparation for conception or the arrival of menstruation. During this period, both Yin essence and Yang energy are in full bloom, and the uterus is full of Qi and blood, ready for conception. If conception has taken place, the fetus has become a Yuan, at this time, the kidney qi is sealed, the uterus continues to hide but not leakage, in order to protect the eggs that have been fertilized, to create a good environment for the growth and development of the fetus. If not conceived, in the yang qi drumming, the uterus cell veins through, menstrual blood can be excreted, so as to discharge the uterus accumulated waste and unfertilized eggs, for the arrival of the new menstrual cycle to prepare. At this time, the body secretes more progesterone and the basal body temperature begins to rise, all of which are among the signs of

conception. In Chinese medicine, this period of "yang growth and yin elimination", yang growth is established on the premise of yin growth to heavy, inseparable from yin: yin growth sperm and egg development and maturity, heavy yin must be yang, discharge the egg, secretion of progesterone, the beginning of yang growth, so yang growth is generated on the premise of yin growth, yang growth relies on the yin, yin is deficient, must be and its yang, resulting in the deficiency of yang [7]. Guicheng Xia team [8] according to the level of Yang long can be divided into: 1) the first half of the first half of the menstrual period: generally is the basal body temperature rises in the high temperature phase of the sixth and seventh days, Yang Qi gradually stretch. 2) the second half of the premenstrual period: this period focuses on the maintenance of "heavy yang", because yang grows to be heavy, so this phase is common premenstrual irritability, breast distension, headache and other symptoms of the heart and liver fire Qi bias. In this period, the physiological characteristics of tutor's self-proposed luteinizing and menstruation regulating drink [9], the formula consists of ginseng 10g, ripened rhizome 12g, black shun piece 10g cinnamon 10g, Chinese yam 15g, eucommia 15g, deer horns cream 20g cuscuta 30g, Chinese wolfberry 15g, Angelica sinensis 10g, Rhizoma Ligusticum Chuanxiong 10g, Cistanches 15g, epimedium 10g, bacophora tenuiflora 10g, radix Paeonia lactiflora 15g, cornelian cherry 15g and other medicines. Ingredients. Angelica sinensis, Radix Rehmanniae Praeparata, Rhizoma Ligustici, Rhizoma Chuanxiong, Radix Paeoniae Alba and Radix et Rhizoma Ginseng are believed to have the effect of tonifying qi and blood, which can help regulate the physiological balance of a woman and enhance the circulation of qi and blood in the body, thus contributing to the normal operation of the luteal function. When the function of the corpus luteum is normal or enhanced, the basal body temperature tends to show a high-phase state, i.e. a state of higher body temperature, which is one of the favorable conditions for conception. In addition, Epimedium and Bacopa monnieri are used to assist the growth of Yang Qi. When the Yang Qi in the body is full and reaches a state of heavy Yang, the body is more likely to undergo smooth transformation, discharge essence and blood, and prepare for the menstrual period.

Yingjie Zhang et al [10] proposed that the late menstrual period, intermenstrual period and early premenstrual period are the stages when Yin is gradually hidden and Yang is born to the extreme, during which the dominant follicle gradually matures, the egg is discharged, the corpus luteum is formed and has the ability to support conception, which are all reflective of the functionality of Yang. It can be seen that yang qi is crucial to conception, tonifying kidney yang, regulating the cycle, so there can be children.

4. Examples of Medical Cases

Patient Cheng Moumou, female, 33 years old, first seen on 04/29/2024. Complaint: Menstruation has been postponed for more than 2 months. 2 months ago, there was no obvious cause for menstruation to be postponed, the previous menstruation: 02/20/2024, 4 days net, the color of menstruation is as usual, and the accompanying symptoms of menstruation are as usual. Last menstrual period: 04/20/2024, 4 days net, amount in the middle, color dark red, abdomen

cool. Regular menstrual cycle, 30-60 days, 4 days, medium volume, dark red color, blood clots, dysmenorrhea, breast swelling and pain in the premenstrual period, abdominal swelling and coldness during menstruation, and lumbar and knee pain and weakness. She is usually impatient, sleeps well, and recently has poor appetite and digestion, and her bowels are in tune. Red tongue, white coating, slightly stagnant under tongue. Pulse is fine. There were no positive signs in gynecological examination. Auxiliary examination: ultrasound: anterior uterus, size about (4.3+2.6) cm×4.7 cm×3.5 cm, endothelial thickness 0.5 cm, no abnormality in bilateral adnexa. Sex hormone LH: 3.38 MIU/mL, FSH: 13.72 MIU/mL, P: 0.04 MIU/mL, E2: 32.65 MIU/mL, T: 27.06 MIU/mL, PRL: 3.73 MIU/mL; AMH:0.09ng/ml. TCM diagnosis: Late menstruation, infertility, evidence of renal deficiency and liver depression. She was in the postmenstrual follicular phase on the 9th day of menstruation, and the endothelial lining was 0.5cm thick, so she was given the formula of Yubaojingjing Drink with additional subtraction. The formula is as follows: ginseng 10g, huangjing 18g, yam 15g, cornelian cherry 15g, wolfberry 12g, cuscuta 30g, chasteberry 15g, ripened rhizome 12g, angelica 10g, chuanxiong 10g, acacia bark 30g, tulip jin 20g, chaihu 10g, vinegar sweetgum 12g, white peony 15g. 14 dosages, 1 dose per day, decocted twice with water, extract 300 mL of juice, take morning and evening, warm, dregs with water and another decoction at bedtime, and then add water to make the juice. The dregs of the medicine was added with water for another decoction, and the feet were soaked before going to bed. It is forbidden to eat spicy food during the period of taking medicine, and avoid wind and cold.

On May 13, 2024, the second consultation: the patient complained that after taking the medicine, the symptoms of poor appetite and natriuresis were reduced compared to the previous one, and there was no obvious discomfort for the rest of the patient, and now the appetite and natriuresis could be reduced, with a pale red tongue with thin white fur, and a sunken and slightly stringy pulse. Now the 23rd d of menstruation, in the premenstrual luteal phase. Therefore, the formula was given to Promote Yellow and Regulate Menstruation Drink with addition and subtraction. The formula is as follows: ginseng 10g, yam 15g, cornelian cherry 15g, cuscuta chinensis 30g, wolfberry 12g, chasteberry 15g, angelica sinensis 10g, chuanxiong rhizoma 10g, ripened rhizoma 12g, rhizoma jasmine 18g, eucommia 15g, deer antler cream 20g, henbane 30g, cinnamon 10g, huperzia bark 30g, yujin 20g, bupleurum 10g, vinpocetine 12g, white peony 15g. 14 doses, 1 dose per day, decoction of water, and then the formula was changed. 14 doses, 1 dose per day, water decoction 2 times, 300 mL of juice, morning and evening warm service, dregs of the medicine with water another decoction, foot soak before going to bed. It is forbidden to eat spicy food during the period of taking medicine, and avoid wind and cold.

After a follow-up phone call, the patient gave feedback that she was pregnant on May 13, 2024, and her blood chorionic gonadotrophin (HCG) value was measured at 187.6 iu/ml and progesterone was 11.6 MIU/mL on August 28, 2024. Her late status was good.

Synopsis: Patient, 33 years old, middle-aged woman. In a

woman's life, blood is the basis for her menstruation, and blood is stored in the liver, which is responsible for the smoothness of the menstruation, and the coitus of blood and sperm can lead to pregnancy. The essence of menstruation is to regulate blood, blood line smooth, is the way to educate the heir. Ancient Chinese medicine books pointed out that: "birth due to the blood, blood due to the feelings, quiet and not smooth, the Chong Ren is not full, the fetus pregnancy is not. Solitary melancholy, not smooth, liver gas stagnation, resulting in the excretion is not normal, qi and blood is not and Chong Ren is not adjusted, not to take in the essence into pregnancy." [11] And the woman to the liver for the innate, if the regulation of menstrual blood must first regulate the liver. The patient's premenstrual breast distension and pain, her temperament is impatient, and her mood swings are frequent, which affects the liver's function of excretion, leading to obstruction of qi and blood, and a decrease in the amount of menstruation. The waist is the capital of the kidney, the patient's waist and knees are sore and weak, and the abdomen is cold, this is the lack of kidney essence, the waist and internal organs have lost sufficient nourishment. Comprehensive tongue diagnosis and pulse diagnosis, can be concluded that the diagnosis of "kidney deficiency and liver depression", of which kidney deficiency is the root, liver depression is the manifestation. Treatment should be based on tonifying the Kidneys and dredging the Liver, combined with the laws of yin and yang, qi and blood changes in the menstrual cycle.

5. Summary

In Chinese medicine theory, Chong is the sea of blood and Ren is the main organ of the uterus; the uterus is the main organ of menstruation and conception of the fetus. Fullness of Liver Blood and Kidney Qi are the prerequisites for conception and implantation of the fetus, and they work together to ensure the normal function of the uterus and normal menstruation of the uterus. It is only under these conditions that a woman can successfully conceive and implant a fetus, thus realizing normal reproductive function. Only then can the uterus be able to "carry out the menstruation in a timely manner" and have the function of conceiving a fetus.

Clinical treatment of infertility begins with regulating menstruation, tonifying the kidneys and regulating the menstrual cycle throughout the process, and treatment is carried out in stages, with remarkable efficacy. Prof. Fengjie He takes tonifying and regulating the kidney as the basis, and the treatment mainly focuses on tonifying the kidney and essence, regulating qi and blood, and adopts different treatments according to different stages of the menstrual cycle. During the menstrual period, "diarrhea" is the main treatment, focusing on activating blood circulation and regulating menstruation to eliminate blood stasis, in order to promote normal menstruation. In the latter part of the menstrual cycle, emphasis is placed on nourishing Yin and nourishing Blood, as well as regulating Kidney Qi to provide a material basis for follicle development. At this time, it is necessary to add the use of ripened rhubarb, cornelian cherry, deer horn cream and other drugs, together with the warming of kidney yang in order to promote "yang growth and yin birth", so as to restore ovarian function, which is known as the "restoration of yin"

method. The intermenstrual period is considered the best time for conception, so treatment focuses on nourishing yin and tonifying yang, as well as regulating qi and blood to promote transformation. The treatment of PMS focuses on "seeking yang", emphasizing on nourishing the kidneys and assisting yang to maintain the function of the corpus luteum so as to make the patient's kidney qi strong, ensure that there is sufficient essence and blood, and that the Chong Ren and Liver qi are well-funded, so as to maintain the normal function of the female reproductive system and to ensure that the menstruation period is carried out normally.

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