

The Relationship between Menstrual Cycle Endometrium and Yin and Yang in Traditional Chinese Medicine

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Abstract: The dialectics of Yin and Yang in traditional Chinese medicine is the basic thinking method for us to understand the normal physiological structure and physiological function of the human body and explore the principle of pathological changes. From the perspective of traditional Chinese medicine, the changes of Yin and Yang in TCM exist in all organs and organs of our body. The periodic changes of the endometrium in a complete menstrual cycle can also be explained by the dialectics between Yin and Yang of traditional Chinese medicine. TCM believes that the endometrium is divided into menstrual period, proliferation period, and secretion period; the menstrual period and proliferation period are "Yin long Yang elimination", the secretion period is "Yang long stage, and the menstrual period is" Chongyang must Yin ", according to which the dialectics of Yin and Yang can more clearly guide the accuracy of clinical medication.

Analyzing the dialectical relationship between Yin and Yang of TCM can guide the idea of TCM clinical treatment with clinical symptoms to some extent.

Traditional Chinese medicine is one of the basic components of Chinese traditional medical culture. The theory of Yin and Yang in TCM is not only the core of the basic theory of TCM, but also the support of the theoretical framework of TCM. The interpretation of Yin and Yang is the key to understand the dialectical thinking of TCM [1]. The Yin-Yang and five-elements system of traditional Chinese medicine is the rise of metaphysical rationalism in this human body system, a combination of top-down integration [2]

At present, many researchers have conducted in-depth discussion and learning on the framework system of Yin and Yang of TCM, and based on this clinical experience. However, very few scholars have conducted specific analysis and research on the regularity of endometrial growth and stripping in the menstrual cycle. In traditional Chinese medicine, the uterus should belong to the category of "cell palace", which also belonging to the "heart of Qi Heng". The principle of menstruation mainly

stems from the periodic changes of the endometrium, and the periodic changes of the endometrium change in Yin and Yang in different stages. Professor Xia proposed that the change of menstrual cycle is related to the rhythm of the biological clock of Tai Chi. With Yin and Yang, the fluctuation and transformation are opposite, and the rhythm of Yin and Yang is in the form of round movement, thus causing the change of menstrual cycle [3-4]. The "Changes of Yin and Yang properties in each stage of the endometrium" and "Conversion of Yin and Yang of Traditional Chinese medicine Tai Chi" as shown in Figure 1 and Table 1 below:



Figure 1. Changes of Yin and Yang properties in each stage of the endometrium

Table 1. Conversion of Yin and Yang of traditional Chinese medicine Tai Chi

Endometrial stage	The Yin and Yang attribute change in each period
menstrual period	Yang in its extreme gives rise to yin
mnltiplication period	Yin long Yang disappear
progestational stage	Yin elimination Yang long extremely, double Ninth

1. The Staging of the Endometrium

Western medicine believes that menstruation is a marker of female sexual characteristics, and the endometrium produces periodic bleeding under the periodic action of the removal of various sex hormones produced by the ovary. The menstrual cycle is regulated by the hypothalamic-pituitary-gonadal axis, and the ovarian function changes periodically, going through four physiological periods [5]: follicular stage, ovulation stage, luteal stage and menstrual period. In traditional Chinese medicine, the menstrual cycle is specifically divided into late menstrual period, intermenstrual period, early menstrual period and early menstrual period[6]Traditional Chinese medicine believes that the kidney plays a leading role in the menstrual mechanism. Kidney essence is the foundation of human growth, development, and reproduction. Its effect on the menstrual production mechanism "kidney qi-day gui-chong cell" corresponds to the loop of "hypothalamic-pituitary-ovary-uterus" in western medicine. Perimenstrual changes correspond to periodic changes in the endometrium. A complete menstrual cycle is generally 28 days, and the periodic changes of the endometrium are generally divided into three periods, namely, the proliferative period,At present, the accepted theory is summarized according to the law of Yin and Yang transformation[7], secretory period, and menstrual period. According to the transformation rules of Yin and Yang in the plane Taiji diagram, Chinese medicine divides menstruation into four stages [8]: ① the menstrual period, with the basic body temperature changing from high temperature to low temperature, that is, the "double Ninth Yin" stage in the theory of Yin and Yang. In this period, the Yang is extremely long, with the stripping of the inner membrane and the discharge of menstrual blood, the Yin is long.② In the later stage, the inner membrane belongs to

the proliferation period, which belongs to the "Yin, long and Yang elimination" stage of the Yin and Yang theory. In this stage, the Yin gradually grows and the Yang gradually fades.^③ Interovulation period, this is the "heavy Yin and Yang" relationship, during which the Yin is extremely long.^④ In the early stage, the inner membrane in this period belongs to the secretion period, and according to the theory of Yin and Yang in traditional Chinese medicine, it belongs to Yang and gradually grows stage.

2. Yin and Yang Attribute Changes in the Endometrium during the Complete Menstrual Cycle

2.1. Yin and Yang Conversion in the Endometrial Proliferation Period (After Later Stages)

The endometrial proliferation period refers to the 5th to the 14th days after menstruation. During this period, the endometrium will gradually grow under the action of estrogen. According to the theory of Yin and Yang in traditional Chinese medicine, this period is the "Yin long Yang elimination" stage, during the proliferation period, menstrual blood has been excreted, the palace is empty: it is Yin blood beginning to be long, the palace is in the functional state of hiding but not discharge, Yin essence gradually increased, is Yin long. According to the theory of Yin and Yang in traditional Chinese medicine, Yin and Yang of each person is to maintain a dynamic balance of Yin and Yang balance, Yin gradually growth exceeds a balance restricts the growth of Yang Qi, there will be Yin gradually rise and Yang gradually decline, and continue to the heavy Yin stage, this period of gynecology is generally the 5th to the 14th day of the menstrual cycle. In a menstrual cycle, the endometrial proliferation period is an essential stage of Yin blood growth and storage, that is, "Yin long Yang elimination". Of menstrual blood can periodic surplus full, which depends on this period of Yin, blood is sufficient, so in this period if the Yin blood is not filled, the Yin and long Yang disappear, the dynamic balance will be a disorder, pathology will lead to endometrial thickening to the thickness of proliferation, in this period of treatment is the need to support Yin blood growth medication, therefore should focus on "kidney nourishing Yin, nourishing blood soft liver". Fang Xiaohong et al. [6] analyzed and summarized the theory of the later period (that is, the proliferation period), it is believed that the early period is the Yin blood long recovery period, when used mainly for Yin tonic drugs; the middle postmenstrual period is an important time for follicle growth and development, There should be drugs that nourish Yin blood, Encourage follicles to grow and develop normally, Traditional Chinese medicine also said, " Yang Hua qi, yin constituting the body ", A little Yang qi can better promote the growth of Yin essence, Therefore, with the Yang tonic medicine, Make the Yin Yang rise and spring inexhaustible; At the end of the postmenstrual period, we should pay attention to both Yin and Yang, During the recovery period of Yin and blood, Treatment should be used to nourish Yin nourishing blood, conditioning chong ren, warm kidney to help Yang medicine, Can help with the normal development of the ovarian follicles, Until the Yin essence blood gas gradually returned to the peak. Li Li [9] believes that the medicine of tonifying Yang and replenishing qi should be properly used in the later period, which can enhance the control of Yin and blood, enhance the function of the blood collection of the palace can run normally, promote the normal growth of Yin and blood gas, and the endometrium can reach the proliferation thickness as scheduled;the"Proliferation period" process analysis is shown in Figure 2:

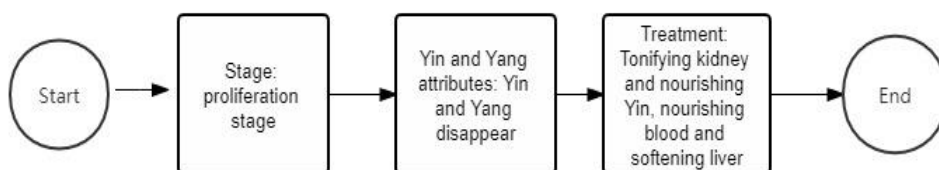


Figure 2. Proliferation period

2.2. Conversion of Yin and Yang in the Endometrial Secretory Period (Premenstrual Phase)

The secretory period is the 15th to 28th days of the menstrual cycle, when the blood qi of Yin essence gradually disappears, and Yang gradually grows to the double Ninth Festival. At this stage, Yin Sheng Yang is long, and the refined blood is gathered in the cell palace [10].

During this period, if pregnant, the blood is stopped to raise the fetus; if not, pregnant, Yang Qi gradually increases to the extreme to promote blood excretion. It is to warm the kidney to help Yang, regulate the medicine can promote the secretion of the length of Yang, traditional Chinese medicine believes that the kidney Yang is warm, this period of inner lining is thick, moist, moist and soft, and is the secretion of endometrial lining. Zhang Jingyue once said: "Those who are good at tonifying Yang must seek Yang in Yin, then the Yang gets Yin help and biochemical endless; those who are good at tonifying Yin must seek Yin in the Yang, then the Yang rises and the spring is inexhaustible." Therefore, this period can be appropriate to choose blood nourishing Yin medicine [11]. "Blood is the mother of gas, qi is the handsome of blood", Yin and Yang use each other, "Yang change qi, Yin forming", Yin blood deficiency, Yin and Yang are easy to imbalance. Therefore, on the basis of warming and tonifying the kidney Yang, the drugs of nourishing Yin and nourishing blood should be appropriately increased, to achieve the Yang and have infinite biochemical effects. The secretion period is extremely Yin and Yang growth, mainly the double Ninth festival. The medication should be "warm the kidney to help Yang, relieve the liver and regulate qi", and maintain the double Ninth festival is the main treatment to guide the treatment of this period. Only when Yang chang continues to the extreme can we achieve the transformation of periodic Yin and Yang balance. Secretion period of Yin and Yang to Yang long to chongyang Yin, proliferation period, Yin long to heavy Yin Yang, so form a complete menstrual cycle, the balance of Yin and Yang to make menstruation leakage, "Yin forming, Yang gas"[12] adjust the dynamic changes of Yin and Yang, follow the dynamic rules of endometrial cycle; the "Secretion period" process analysis is as follows Figure 3:



Figure 3. Secretion period

2.3. Endometrial Menstrual Period (Menstruation) of Yin and Yang Conversion

Menstruation is menstrual cycle 1 solstice 5 days, this period with the characteristics of "chongyang Yin", before this period, because the kidney gas, the palace is the Yang dense gas, so the period is cell leakage and not hide physiological function, the sun may be the spirit to promote

Yin blood diarrhea, congestion. This period is in the dynamic process of transformation, the promotion effect of Yang Qi makes the menstrual blood discharge smoothly, make the double ninth day of the secretion period gradually transformed into Yin blood, for what we call menstrual blood, also remove the residual turbid fluid and blood stasis, The dynamic process of reducing this Yin-Yang imbalance, Restoration the equilibrium state of relativity, Therefore, Yang Chang can reach the double Ninth festival and to the Yin stage transformation, At this time, there will occur menstrual discharge congestion, the new into the next new Yin and Yang growth movement, Can make the endometrium to undergo the cycle of peeling, proliferation and secretion of the cycle of the regular movement. In this period, Professor Xia Guicheng [13] advocated that the menstrual period should promote blood circulation and remove blood stasis, discharge the old Yin blood, conducive to the rebirth of Yin blood, enter a new cycle, and create favorable conditions for the proliferation period. At the same time, Professor Xia Guicheng also considered that the early menstruation is transformed from the double stage of the secretion stage, the endometrium peeling, should mainly focus on qi, to make the menstrual blood smooth discharge; menstrual period, we should mainly regulate blood drugs, with qi medicine; the late menstrual blood excretion only residue, immediately into a new stage of Yin blood, so this period should focus on nourishing blood and nourishing Yin, activating blood and removing stasis. Zhang Rui [14] et al. believes that the main treatment of the menstrual period is "tong". Professor He Fengjie commonly used the treatment drugs of blood circulation and development of qi to ensure that the menstrual period can enter the proliferation period. Liang Weiyong [15] et al. proposed that menstrual blood discharge, the body is relatively weak, should be based on the spleen, soup, spleen, and blood. The "Menstrual period" process analysis is as follows Figure 4:

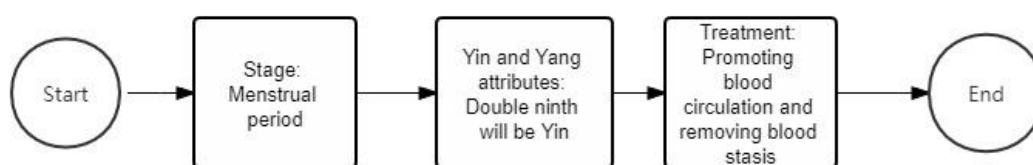


Figure 4. Menstrual period

3. The Significance of the Yin and Yang Properties of the Endometrium

Menstrual cycle of normal endometrial proliferation, secretion, and stripping process is the core content of physiological pathology of the department of Gynaecology, and the analysis of dialectical endometrial in each period of Yin and Yang, and in the complete menstrual period of "Yin long Yang", "Yin", "Yang long Yin", "chongyang" the relationship between Yin and Yang of traditional Chinese medicine, can help us to guide the analysis of different periods of different department of gynaecology. For different pathological changes in different stages, different treatments and dosages can be used based on the fluctuation and change of Yin and Yang, and the appropriate amount of drugs can be used according to different symptoms. During a complete menstrual cycle, enough menstrual kidney Yang for the "Double Ninth festival will be Yin" stage, treatment should be to promote blood circulation and develop qi, to regulate qi and blood, select to promote blood circulation and remove blood stasis, to regulate the medicine of qi and blood, Can select the blood house by blood stasis soup square to add and subtract; Proliferation period is " Yin long Yang elimination, Until the Double Ninth Festival ", Treatment should be tonifying kidney and nourishing Yin, nourishing blood and softening liver, Choose nourishing Yin and blood tonic medicine mainly; The secretion period is the "Yang long to the double Ninth festival" stage, Therefore, the kidney should be warm to help Yang, To regulate qi and blood, Appropriate selection

of tonifying the kidney to help the Yang medicine, In the later stage can be appropriately selected to promote blood circulation and qi drugs, So that it can successfully enter the "Double Ninth will Yin" stage, Prepare yourself for the next menstrual cycle, Ensure smooth menstrual blood excretion during menstruation. In the treatment of gynecological menstrual diseases, we should follow the changes of different stages of the menstrual cycle. The rules of medication should conform to the Yin and Yang attributes of the menstrual cycle, so that the transformation of each cycle is synchronized, the transition is smooth, and in line with the change of human body rhythm.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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