

# *Research Progress and Clinical Application of Chinese Medicine in the Treatment of Menopausal Syndrome*

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**Keywords:** Chinese medicine treatment; menopausal syndrome; evidence-based treatment

**Abstract:** Menopausal syndrome is a common gynecological disease, also known as perimenopausal syndrome. With the increase of the aging population in China, the prevention and treatment of menopausal syndrome have received more and more attention. Although menopausal hormone therapy in Western medicine has achieved some success, there are more adverse reactions, and the fear of hormone therapy has limited its clinical application. In contrast, the treatment of menopausal syndromes by Chinese medicine using prescription medicines, acupuncture, and qigong has lower adverse effects, obvious efficacy, and is easier to tolerate. The purpose of this paper is to discuss the etiology, pathogenesis, patterns and treatment options of menopausal syndrome, to summarize the effectiveness of TCM treatment, and to provide new ideas for clinical treatment.

## 1. Introduction

Menopause is the transition from fertility to old age. At this time, ovarian function gradually fades to complete disappearance, and the ability to reproduce ceases. Menopause includes pre-menopause (2 to 5 years before menopause), menopause (menopause age when menopause has reached 1 year), and post-menopause (the period of life after 1 year of menopause, which is about 6 to 8 years), as shown in Figure 1. The series of symptoms of endocrine disorders and phyto-neurological disorders that occur in some women during menopause is called menopausal syndrome, as shown in Figure 2. The onset of the disease occurs between the ages of about 45 and 55 years, and the duration varies from about 2 to 10 years, with about 2/3 of women showing symptoms. In addition, similar symptoms may occur in young women after surgical removal of both ovaries due to disease or after radiation therapy.

In terms of Chinese medicine, menopausal syndrome can be categorized under the category of "evidence before and after menopause", which is based on the deficiency of kidney qi, and the pathology of the liver and the spleen is also an important reason for the onset of the disease. Treatment is based on tonifying kidney qi, supplemented by dredging the liver, strengthening the spleen, activating blood circulation, and nourishing the yin to calm the spirit. In other ways, due to the natural consumption of menstruation, pregnancy, childbirth, breastfeeding and other physiological processes.

Or due to overwork, long-term mental depression, and the impact of many diseases, it results in the gradual decline of kidney qi, Chong Ren disorders, the loss of balance between yin and yang before and after menopause. The imbalance of visceral qi and blood leads to the occurrence of various diseases. Chinese medicine treatment can be symptomatic by using specialized prescriptions such as Cinnamon Twig Decoction, Oyster soup with cinnamon twigs and keel, Jiawei Xiaoyao Powder, Siwu Decoction, Qinghao Biejia Decoction, etc. , or based on the syndrome differentiation, such as Qingxin Zhishen Tang, Gengnian Ningxin Granules, and Bushen Shugan Tang.

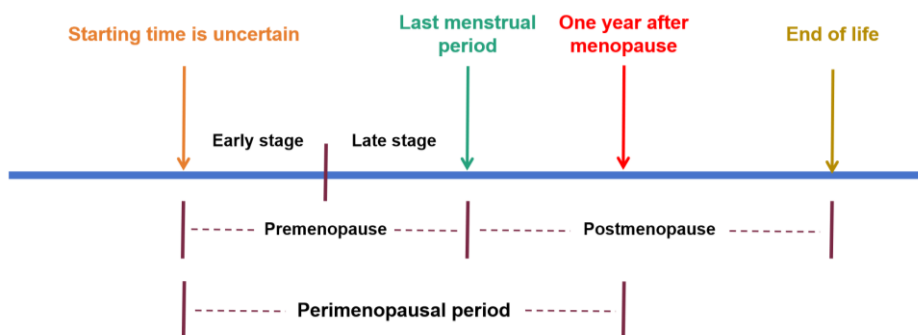


Figure 1: Menopause

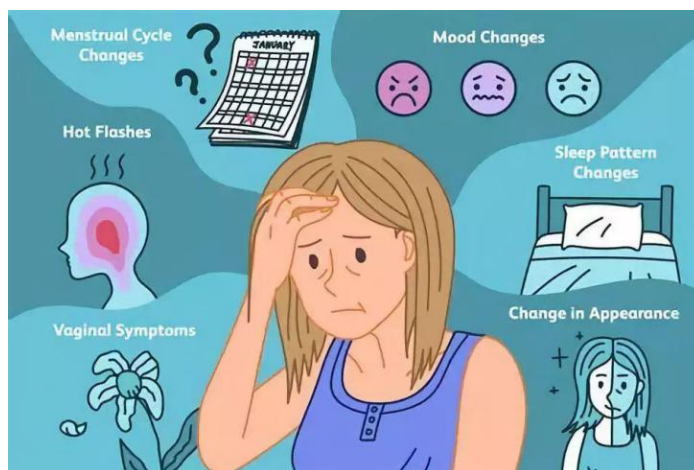


Figure 2: Clinical manifestation of menopause

## 2. Etiology and pathogenesis

### 2.1. The viewpoints of modern medicine

Menopausal syndrome is caused by the decline and disappearance of ovarian function, as well as a decrease in estrogen levels, as shown in Figure 3. The reasons for ovarian dysfunction and disappearance include following points.

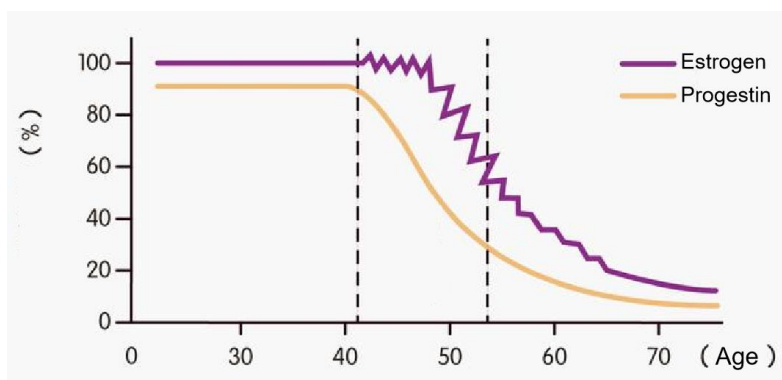


Figure 3: The relationship between hormone levels and age

### 2.1.1. Physiological menopause

Under normal circumstances, in women around the age of 47 to 50, the oocytes in the ovaries that respond to gonadotropins are almost depleted, and the concentration of estrogen decreases, resulting in a series of endocrine disorders.

### 2.1.2. Pathological menopause

The incidence rate is about 5%, among which menopause before the age of 40 is called early menopause (early ovarian failure), and menopausal symptoms can be caused in advance. Excessive pituitary gonadotropin secretion or insufficient follicle base in the ovary are the real reasons for early menopause; Postmenopause after the age of 55 refers to the late onset of menopause.

### 2.1.3. Artificial menopause

The menopause caused by surgical removal of both ovaries due to illness or permanent cessation of ovarian function by radiation is called artificial menopause, and the pathological changes produced are the same as the above.

## 2.2. The viewpoints of Chinese medicine

It is written in "Inner Canon of Huangdi" that "Under normal circumstances, when a woman is about 49 years old, the essence of the kidneys, which is responsible for reproduction, has been exhausted, menstruation has ceased, she has lost the ability to bear children, and her bodily functions have entered a stage of decline". This argument points out that female menopausal syndrome is mainly due to the phenomenon of dysfunction of the internal organs caused by deficiency of the kidney chakra, imbalance of qi and blood, weakness of the Chong chakra, and imbalance of yin and yang. Summarizing the clinical dialectical viewpoints of Chinese medicine scholars through the ages, menopausal syndrome can be summarized into the following five types of evidence: (1) Kidney deficiency; (2) Deficiency of liver and kidney; (3) Heart-kidney imbalance; (4) Spleen-kidney yang deficiency.

## 3. Syndrome differentiation

### 3.1. Kidney deficiency

Kidney is the foundation of the innate nature, when women reach the age of 49, the kidney gas is gradually weakening, tendon unactivated and the deca exhausted, the menstruation in the man for the

essence, in the woman for the blood, the menstruation is insufficient, the kidney yin is also insufficient, which may cause sweating out from heat, drying mouth and harding stools, lumbar debility, dizziness and tinnitus, red tongue with little coating, Pulse fineness and number of a series of evidence of renal yin insufficiency, Yin and yang are intertwined with each other, Yin insufficiency, the Yang is no way to turn, so there can be a deficiency of renal Yang or renal Yin-Yang deficiency of the evidence. Such as red cheekbones and red lips, deficiency, restlessness, and lack of sleep, hot flashes and night sweats, Cold body shape and cold limbs, lumbar debility, hyposexuality, absence of menses, hyposexuality, lingual parenchyma, weak pulse sinking and other symptoms. For patients with kidney yin and yang deficiency, Prof. Wang Xudong [1] advocates warming the kidneys and tonifying the yang, nourishing yin and reducing fire as the method, and formulates Gengnian Zishen Tang as the basic formula, together with emotional regulation to treat the disease; and for patients with kidney essence deficiency, which may resulting Chongren Loses Health. Li Likai [2] treats the patients by tonifying kidney and tonifying essence, nourishing Chongren and adopts the Bushen Yijing Tang for treatment. Achieved therapeutic effects are basically satisfactory.

### 3.2. Deficiency of liver and kidney

As early as in the "Inner Canon of Huangdi", the important role of the liver as an organ in women's physiological and pathological phenomena has been noted. For example, "Physiologically, women are prone to Liver-Qi stagnation, while Blood is prone to insufficiency. This is because women lose blood many times during menstruation, pregnancy, childbirth and breastfeeding, and so blood is always relatively deficient. "This means that a woman's life is closely related to "qi" and "blood", which also leads to the fact that a woman is more prone to be injured by emotions and feelings and to have liver qi stagnation; on the other hand, women are maintained by blood, and most of the diseases in women come from blood problems. Women are also most susceptible to blood loss during conception of the fetus and delivery of the fetus under the menstrual belt Ye Tianshi "Clinical Guidelines Medical Record" has also mentioned that "Women are born with the liver". The liver likes to be free and relaxed, not inhibited. Only the normal drainage of the liver, liver qi is not stagnant, free of emotion and will, blood through the two channels can be adjusted, to be able to maintain the basic physiological activities such as menstruation with the fetus to maintain the basic stability of the birth [3]. Menopause kidney essence, essence and blood are not enough to nourish the liver wood, liver loss of moistening, which leads to liver loss of excretion, liver qi stagnation. Kidney yin insufficiency, the liver and the kidney have a common source, resulting in liver yin deficiency, yin deficiency is no control of the yang. If the liver yang is hyperactive, symptoms such as insomnia, vertigo, lumbar and knee soreness and weakness, the cheekbones flushing, headache, depression and others will occur. Clinically we used Yiguan Jian, Dabuyin wan, Zuo Gui Wan and other formulas to nourish the liver and kidneys, with selection of modified formulas for treatment according to different diseases of patients. In addition, Xiong Lei [4] and others have also achieved good results in the treatment of Pubescent Angelica and Loranthus Decoction and Bu Yi Gan Shen Qiang Jin Jian Gu Tang to strengthen the tendons and bones. Chen Yuling [5] and others took self-proposed nourishing liver and kidney formula, compared with the western medicine nilestriol group, the total effective rate is up to more than 90%, the efficacy is accurate, and there is no obvious adverse reaction, the patient in the easier to accept at the same time, but also get a satisfactory therapeutic effect.

### 3.3. Heart-kidney imbalance

Mostly due to old age or prolonged illness, deficiency of kidney yin, cannot be up to the heart, the heart fire is over-exuberant; or too much work, or emotional depression and fire injury to the yin, the heart fire within the fire, can not be handed over to the kidney; or the heart fire is over-exuberant, can

not be warmed down the kidneys, the kidneys water is cold, can lead to water and fire dysregulation. As a result of the imbalance of water and fire, the heart and spirit are not nourished, so menopausal women are more likely to suffer from insomnia, palpitations, heartburn and other manifestations. Clinically, Prof. Xia Guicheng [6] treats by nourishing kidney, nourishing Yin, clearing heart, and calming mind. Liu Haihong [7] started from the heart and kidney organs, and used the formula of nourishing yin and lowering fire to treat menopausal syndrome of fire excess from yin deficiency, with remarkable therapeutic effect. Li Chenchen et al [8] used self-proposed menopause formula to treat 50 cases of perimenopausal insomnia patients with Heart-kidney imbalance, with an overall effective rate of 90.0%.

### 3.4. Spleen-kidney yang deficiency

"Spleen and stomach are the sea of water and grain, the source of qi and blood biochemistry." Which means the spleen and stomach are extremely important in all life activities of the human body. The weakness of the spleen and stomach, the deficiency of spleen qi, the loss of the right of the spleen to regulate, the loss of internal organs to moisten and nourish, resulting in spleen yang deficiency, which is mainly manifested as the patient before and after menopause, Lukewarm limbs, eating less and staying in a daze, the forgetfulness, the sadness and the depression, the tiredness, pale tongue with whitish coating, forceless deep pulse, etc. The clinical treatment is mainly to strengthen spleen and warm kidney, and to make the patients feel better. Clinical treatment is mainly based on strengthening the spleen and warming the kidney. Chen Zhi'an [9] and others used Guipi Decoction and Dragon Bone and Oyster Shell Decoction to treat 18 cases of menopausal syndrome, resulting in 13 cases cured and 5 cases improved, indicating that treating from the spleen also possesses good efficacy in the clinic.

## 4. Acupuncture and moxibustion treatment

The value of acupuncture in the treatment of menopausal syndromes has been increasingly emphasized. Compared with hormone therapy in Western medicine, its adverse effects are lower and its acceptance by the public is higher. The commonly used acupoints in the clinic are Sanyinjiao, Taichong, Taixi, Baihui, Si Shencong, Shenmen, Anmian, Ashigaru, Neiguan, and so on. Meng Xuefen [10] added acupuncture treatment to the oral administration of Shuidi Tang, and compared with patients treated with the decoction alone, the effect of improving their clinical symptoms was more obvious and long-lasting. Zhan Guangzong [11] used the method of calming the liver and suppressing the hyperactive yang therapy for the symptoms of irritability, hot flashes, and sweating of palms and soles; and the method of invigorating the spleen and nourishing the stomach for the symptoms of lumbago, diarrhea, and abdominal distension.

In Chinese medicine point of view to explore, in fact, the role of acupuncture has the following basic three points: dredge the meridians, regulate Yin and Yang, and strengthen the body resistance to eliminate pathogenic factors. A large number of clinical studies have confirmed that traditional Chinese medicine treatments such as acupuncture, moxibustion, acupoint application, sunken cord, ear acupoint pressing bean and other traditional Chinese medicine treatments are able to effectively regulate the reproductive neuroendocrine system in the patient's body, improve the function of the hypothalamic pituitary ovarian axis in women, so as to achieve the purpose of enhancing the patient's ovary function, and elevate the role of the E2 content in the body [12]. Facing the insomnia problem often faced by menopausal women, Du Yunpeng [13] selected Guanyuan point, Zusanli acupoint, Shenshu point, Ganshu point, Shenting point, Sanyinjiao acupoint, Shenmen acupoint, Sishencong acupoint, Taichong point, and Hegu acupoint to treat their insomnia symptoms by using the flat tonic and flat diarrhea techniques, even reinforcing-reducing method, and the quality of their sleep was

significantly improved after the treatment.

## 5. Other Traditional Chinese Medicine Treatments

In addition to acupuncture and moxibustion, there are also traditional Chinese medical treatments such as chiropractic therap, and auricular acupuncture points, all of which can significantly improve symptoms. For example, Jia Meijun [14] chose to treat menopausal insomnia with auricular acupoint pressure beads, which is easy to operate, has rapid efficacy, is painless, non-invasive, economic and safe, and the therapeutic effect was satisfactory. Fang Caiping [15] choose sedative and tranquilizing Chinese medicine, vinegar and petroleum jelly mixed into a thick paste, made of ointment before bedtime paste on the Yongquan points and Shenque points, every other day 1 time, a total of 2 months of treatment. Compared with the traditional chinese medicine decoction patients with better efficacy, the total effective rate of its treatment group and the control group were 88.89% and 73.33%, respectively, the difference was statistically significant ( $P < 0.05$ ).

In addition to traditional Chinese medicine treatment, the special therapies such as affective therapy, life adjustment, Chinese medicine fitness exercise (such as qigong, Ba Duan Jin, etc.), diet therapy, etc. are also commonly used in the adjunctive treatment of menopause syndrome, and have certain efficacy for patients with relatively mild conditions.

"Inner Canon of Huangdi" says, "The will is to control the spirit, to collect the soul, to adapt to cold and warmth, and to harmonize with joy and anger." Emotionally stable people are more likely to get rid of sadness, nervousness, anxiety, dry and angry and other bad emotions on the physiological impact, and when a person's spiritual world becomes harmonious, serene, the body's qi and blood, yin and yang, internal organs and meridians will also tend to be peaceful. When the patient's emotional problems should be used to help them get out of the dilemma, such as the "channeling method, empathy" and so on, through the behavior of people around, or communication, or distraction and other ways to influence the patient's state of mind, lifting the psychological pressure caused by bad moods, to get rid of the evil out of the house, and to promote their own internal organs and functions! Recovery. Cultivate an optimistic and positive attitude towards life. As the saying goes, "when positive energy exists inside, evil can't interfere".

## 6. Summary

This article provides an overview of the etiology, pathogenesis and treatment of menopausal syndrome, aiming to provide more reference basis for clinical treatment of menopausal syndrome. However, summarizing the studies in recent years, there are still some problems in the treatment of menopausal syndrome with TCM, such as unclear mechanism of action, lack of uniform assessment criteria, lack of double-blind design, irregular observation time, and lack of long-term return visits. A series of problems brought about by it need to be further researched and solved.

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