

# Advances in the Application of Traditional Chinese Medicine in the Rehabilitation of Gynecological Malignant Tumors

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**Abstract:** *With advancements in treatment methods such as surgery, radiotherapy, and chemotherapy, the survival rate of gynecological malignant tumors has improved. Rehabilitation therapy for complications caused by the tumors themselves and related treatments has gradually become a focal point in the comprehensive care of female cancer patients. Due to the unique anatomical location and physiological functions of the uterus and ovaries, as well as the cyclical fluctuations of female hormones, patients with gynecological tumors are more susceptible to complications such as tumor-related depression, postoperative lymphedema (particularly following pelvic tumor surgery), and radiation-induced vaginitis (especially in cervical cancer patients). These complications threaten women's physical and mental health and impact their recovery and resumption of normal life after surgery, radiotherapy, and chemotherapy. Leveraging its therapeutic principles of a holistic concept and syndrome differentiation, Traditional Chinese Medicine (TCM) has demonstrated favorable clinical efficacy in the rehabilitation treatment of complications associated with gynecological tumors. This article systematically reviews the recent advances (past five years) in the application of TCM in the rehabilitation of gynecological malignant tumors by retrieving relevant literature from multiple databases, aiming to provide a reference for the future TCM prevention and treatment of related complications.*

**Keywords:** Gynecological Malignant Tumors, Radiation-induced Vaginitis, Ovarian Cancer, Cervical Cancer, Traditional Chinese Medicine (TCM), Oncology Rehabilitation.

## 1. Introduction

Common gynecological malignancies include cervical cancer, endometrial cancer, and ovarian cancer, which pose a severe threat to women's physical and mental health [1]. Currently, conventional treatment modalities such as surgery, chemotherapy, and radiotherapy have yielded certain therapeutic outcomes. However, due to the anatomical uniqueness of the uterus and ovaries as well as their pivotal role in women's physiology and daily life, these therapies can also induce a series of treatment-related complications, which exert a profound adverse impact on women's physical health, mental well-being, and quality of life [2].

In addition to the depression, cancer-related pain, and fatigue potentially induced by the tumor itself, the administration of chemotherapeutic agents can cause severe gastrointestinal reactions (e.g., nausea and vomiting). Furthermore, the special anatomical location of the uterus and ovaries renders surgery and radiotherapy prone to specific complications, such as surgery-induced lymphedema, and postoperative intestinal obstruction, as well as radiation-induced enteritis and radiation vaginitis [3]. These complications not only severely impair the quality of life of female patients, undermine their treatment confidence and adherence, but also reduce the clinical efficacy of conventional tumor treatments and shorten their overall survival.

However, Western medicine lacks effective intervention strategies for these complications. In contrast, traditional Chinese medicine (TCM), based on the principles of the holistic concept and treatment based on syndrome differentiation, has achieved remarkable clinical outcomes in the management of gynecological cancer-related

complications and demonstrated favorable safety profiles [4]. In the rehabilitation of gynecological malignancies, TCM can fully leverage its advantages of high efficacy and low toxicity, helping patients restore their physical, social, psychological, and occupational functions to the greatest extent possible.

## 2. Traditional Chinese Medicine in Preventing and Treating Tumor-Related Complications

### 2.1 Cancer-Related Depression

Studies have shown that patients with gynecological malignancies have a higher prevalence of anxiety and depression compared to those with other types of tumors [5]. Due to the periodic fluctuations of sex hormones such as estrogen and the influence of social and cultural factors, women are more prone to psychological disorders such as anxiety and depression than men. Additionally, the tumor itself, as well as the damage to physical and physiological functions caused by surgery, radiotherapy, and chemotherapy, collectively contribute to a higher risk of psychological disorders in women with gynecological malignancies. Depression and anxiety in female patients can significantly affect their treatment willingness, reduce their quality of life, and hinder their return to work and daily life after conventional treatment [6]. Furthermore, studies have indicated that depression can also reduce the efficacy of conventional treatments, shorten overall survival, and promote tumor recurrence and metastasis. Therefore, the treatment of gynecological tumor-related depression is of great significance. Some scholars have pointed out that existing clinical guidelines and treatment concepts focus on eliminating the "form" of solid tumors, while often neglecting the mental and psychological "spirit" issues of cancer patients

[7]. In contrast, Traditional Chinese Medicine (TCM) adheres to the holistic concept and the unity of form and spirit, thus possessing unique advantages in the treatment of tumor-related depression. TCM holds that tumor-related anxiety and depression belong to the category of “stagnation syndrome” (Yu Zheng). Gynecological tumors such as ovarian cancer and cervical cancer are characterized by “root deficiency and branch excess” (Ben Xu Biao Shi) in TCM theory. In addition, the tumor itself and treatment methods including surgery, radiotherapy, and chemotherapy can injure healthy qi (Zheng Qi), impair the yang qi of zang-fu organs, leading to yang deficiency, poor circulation of qi and blood, and stagnation of qi movement, which ultimately results in depression. For female cancer patients, “stagnation is inseparable from the liver” (Yu Bu Li Gan), meaning that stagnation of liver qi leads to emotional distress, and the abnormal circulation of qi and blood over time affects the “heart governing spirit” (Xin Zhu Shen Ming). It can thus be seen that the key zang-fu organs involved in tumor-related depression are the heart and liver. The nature of the disease is divided into deficiency and excess: for excess syndromes, the treatment principles are soothing the liver and regulating qi, promoting blood circulation to remove blood stasis; for deficiency syndromes, the principles are nourishing the heart and tranquilizing the spirit, so as to comprehensively regulate the patient’s emotions.

A study analyzing 235 patients after ovarian cancer surgery found that the main TCM syndrome types of the patients were cold coagulation and blood stasis syndrome, qi and blood deficiency syndrome, and spleen-kidney yang deficiency syndrome, while the main constitution types were qi stagnation type and yang deficiency type [8]. In terms of age, gynecological tumor-related depression mainly affects middle-aged and young women under 45 years old [9]. A clinical study involving 67 patients with gynecological malignant tumor-related depression found that compared with escitalopram oxalate, modified Chaihu Jia Longgu Muli Decoction (Bupleurum Plus Dragon Bone and Oyster Decoction) has a certain clinical effect in the treatment of gynecological malignant tumor-related depression. It can significantly alleviate symptoms such as melancholy, bitter taste in the mouth and dry throat, insomnia, and dreaminess, improve the patient’s depressive state, and its mechanism may be related to 5-hydroxytryptamine (5-HT) and  $\beta$ -endorphin ( $\beta$ -EP) [10].

TCM medicines such as Guipi Wan (Restore Spleen Pill) and Shugan Jieyu Jiaonang (Soothing Liver and Relieving Depression Capsule) combined with antidepressants such as selective serotonin reuptake inhibitors (SSRIs) can reduce the scores of the Hamilton Depression Rating Scale (HAMD), Self-Rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS), and Pittsburgh Sleep Quality Index (PSQI) in cervical cancer patients, improve symptoms such as emotional distress and qi stagnation, alleviate anxiety and depression, and enhance sleep quality and quality of life [11]. Electroacupuncture combined with TCM rehabilitation nursing techniques can improve anxiety and depression in patients after cervical cancer surgery, reduce the scores of SAS and SDS, alleviate postoperative pain, and facilitate prognosis [12].

### 3. Traditional Chinese Medicine in Preventing and Treating Surgical Injuries of Gynecological Tumors

Surgery is the core method for the treatment of gynecological tumors, especially occupying a key position in early diagnosis and radical treatment. For example, for early-stage cervical cancer, ovarian cancer, and endometrial cancer, surgery is the preferred treatment, which can directly resect the lesion and significantly improve the survival rate. However, surgery can also bring about a series of complications such as intestinal obstruction, lymphedema, and lymphocyst, which not only increase the patient’s pain and affect the quality of life, but also reduce the patient’s oncological prognosis [13].

#### 3.1 Postoperative Intestinal Obstruction

Gynecological tumor surgeries (such as radical ovarian cancer surgery and extensive hysterectomy) often require separation of pelvic adhesions or resection of the omentum. During the tissue repair process after surgery, adhesive bands are formed, which compress or twist the intestinal tract, easily leading to adhesive intestinal obstruction. In addition, postoperative recurrence and metastasis of pelvic tumors to the perienteric area are likely to cause mechanical intestinal obstruction. Therefore, postoperative gastrointestinal dysfunction is one of the common complications after ovarian cancer surgery, with an incidence rate of 30% to 40% [14]. Its manifestations include nausea, vomiting, abdominal distension, delayed exhaust or defecation, intestinal obstruction, and gastrointestinal bleeding; in severe cases, shock and secondary multiple organ dysfunction may even occur.

At present, the treatment of intestinal dysfunction caused by gynecological tumor surgery is mainly conservative, such as gastrointestinal decompression and nutritional support. In contrast, comprehensive TCM therapies, including oral administration of TCM medicines, acupuncture, TCM enema, acupoint application, and cupping therapy, can effectively promote the recovery of postoperative gastrointestinal function, reduce the incidence of complications, shorten the length of hospital stay, and lower hospitalization costs [15]. Studies have found that TCM emotional nursing combined with disease-specific characteristic nursing can effectively improve the postoperative recovery of ovarian cancer patients, shorten the time to first anal exhaust and defecation, gastrointestinal function recovery, ambulation, and initiation of eating, reduce the incidence of complications, and improve the patient’s quality of life [16].

#### 3.2 Postoperative Lymphedema

Lymphedema is a common complication after gynecological tumor surgery, mainly related to lymph node dissection and radiotherapy. According to statistics, the incidence of lower extremity lymphedema can reach 50% in patients with gynecological tumors (such as cervical cancer, ovarian cancer, and vulvar cancer) who undergo pelvic or inguinal lymph node dissection [17]. During the surgery for pelvic tumors such as cervical cancer and ovarian cancer, local lymph nodes are removed, which leads to inadequate drainage of lymphatic

fluid from the lower extremities. Subsequently, the colloid osmotic pressure increases, the capillary permeability enhances, and lymphatic fluid exudes. Lymphatic fluid rich in protein accumulates in the subcutaneous tissue spaces of the lower extremities, ultimately resulting in lymphedema. In addition, pelvic radiotherapy can also cause atrophy and damage to pelvic lymphatic capillaries and lymph nodes, leading to lymphatic drainage disorders and edema [18].

Lower extremity lymphedema is characterized by pitting edema of the affected lower limb. As the disease progresses, the patient's limb gradually thickens, hardens, and the skin becomes rough; in severe cases, it can lead to joint dysfunction. This not only affects the patient's postoperative quality of life and reduces their activities of daily living, but also brings severe psychological distress to female patients, leading to psychological disorders such as depression and anxiety. At present, the main treatments for tumor-related lower extremity lymphedema include lymphaticovenous anastomosis and vascularized lymph node transplantation, but these therapies have limited efficacy, high costs, and may cause more serious adverse reactions [19]. Therefore, there is an urgent need to provide safer and more reliable effective rehabilitation measures for patients with gynecological tumors.

Secondary lower extremity edema after gynecological tumor surgery belongs to the categories of "edema" (Shui Zhong), "vessel bi syndrome" (Mai Bi), and "phlegm-stasis" (Tan Yu) in TCM. Its etiology and pathogenesis are closely related to disorders in the movement of qi, blood, and body fluids, as well as imbalance in the functions of zang-fu organs. On the one hand, surgery directly damages local meridians (such as the Spleen Meridian, Liver Meridian, and Kidney Meridian), resulting in obstructed circulation of qi and blood. Secondly, postoperative qi and blood deficiency leads to insufficient driving force, abnormal transportation and distribution of body fluids, and retention of water-dampness, which ultimately causes lower extremity edema [20].

A study involving 46 patients with lower extremity lymphedema after radiotherapy for gynecological tumors showed that Yiqi Wenyang Tongluo Decoction (Qi-Tonifying, Yang-Warming, and Collateral-Dredging Decoction) can significantly improve the circumference of the affected limb, TCM syndrome score, and Karnofsky Performance Status (KPS) score of patients, and significantly downregulate the levels of serum-related inflammatory factors and vascular endothelial growth factor (VEGF). Thus, it alleviates the symptoms of lower extremity edema in patients and improves their quality of life [21]. In addition, the "nine-tonic and one-attack method" (Jiu Bu Yi Gong Fa) combining acupuncture and medication based on the theory of "strengthening healthy qi and eliminating pathogenic factors" (Fu Zheng Qu Xie) has also achieved good clinical efficacy in the treatment of lower extremity edema after cervical cancer surgery in patients with yang deficiency and water overflow type (Yang Xu Shui Fan Xing). It can effectively improve the symptoms and signs of edema in patients and enhance their postoperative quality of life [22]. A study involving 60 patients with lower extremity lymphedema after cervical cancer surgery found that Tongluo Xiaozhong Decoction (Collateral-Dredging and Edema-Reducing Decoction) based

on the "collateral disease theory" (Luo Bing Li Lun) can significantly reduce the circumference difference between the two lower extremities, improve the clinical symptoms and signs of patients, and decrease the serum fibrinogen content. It provides research data and new clinical treatment ideas for the clinical treatment of lower extremity lymphedema after cervical cancer surgery [23].

#### 4. Traditional Chinese Medicine in Preventing and Treating Chemotherapy-Related Injuries of Gynecological Tumors

Platinum-based drugs, taxane-based drugs, and other chemotherapeutic agents are first-line chemotherapy regimens for postoperative recurrence and metastasis of gynecological tumors. Platinum-based drugs such as cisplatin and carboplatin are DNA alkylating agents; after entering cells, they form platinum-DNA adducts with DNA, inhibit DNA replication and transcription, and exert a cytotoxic effect, while paclitaxel and other taxane-based drugs act by interfering with microtubule assembly during cell division [24]. However, while these commonly used chemotherapeutic agents exert a killing effect on tumor cells, they also exhibit cytotoxicity to actively dividing normal cells in the body, such as intestinal epithelial cells and bone marrow hematopoietic stem cells. They not only induce varying degrees of toxic and side effects such as nausea, vomiting, and myelosuppression, but also severely affect the patient's quality of life and treatment willingness, and even threaten life.

##### 4.1 Gastrointestinal Tract Injury

Gastrointestinal dysfunction is the most common adverse reaction of platinum-based drugs, especially the first-generation cisplatin, leading to gastrointestinal reactions such as nausea, vomiting, diarrhea, and constipation. This not only reduces chemotherapy adherence, but also leads to a decline in the patient's nutritional status and quality of life, and affects the patient's survival period. TCM holds that chemotherapeutic agents belong to "fire toxin" (Huo Du), which is prone to damaging the spleen and stomach. The uterus is connected to the spleen and stomach through the Chong Meridian and Ren Meridian. After chemotherapeutic agents damage the spleen and stomach, the dysfunction of the spleen's ascending and stomach's descending functions occurs, resulting in symptoms such as nausea, vomiting, anorexia, and loose stools. In terms of treatment, the principles are invigorating the spleen and harmonizing the stomach, relieving adverse qi and resolving phlegm, replenishing qi and blood, and nourishing the stomach and yin, so as to regulate the middle jiao and improve the symptoms of gastrointestinal adverse reactions.

A study involving 62 ovarian cancer patients undergoing chemotherapy showed that compared with conventional antiemetic regimens such as azasetron, dexamethasone, and aprepitant, Xiao Chaihu Decoction (Minor Bupleurum Decoction) can better reduce the incidence and severity grade of nausea and vomiting. At the same time, it can improve symptoms such as emotional depression, anorexia, and hiccups in patients, and enhance their appetite and physical strength [25].

#### 4.2 Myelosuppression

Since bone marrow hematopoietic stem cells are often in an active phase of DNA replication, chemotherapeutic agents frequently induce the complication of myelosuppression. This is characterized by a decrease in neutrophils, white blood cells, platelets, hemoglobin, and other hematopoietic indices, leading to reduced immune function in patients, as well as symptoms such as coagulation disorders and anemia. It is also a key factor affecting the treatment success rate and prognosis of patients [26]. Clinically, treatments such as granulocyte colony-stimulating factor (G-CSF), macrophage colony-stimulating factor (M-CSF), platelet transfusion, thrombopoietin (TPO), and anemia correction are commonly used. In TCM theory, the spleen is the “acquired foundation” (Hou Tian Zhi Ben) and the kidney is the “congenital foundation” (Xian Tian Zhi Ben). The spleen governs blood homeostasis (Pi Zhu Tong Xue) and serves as the source of qi and blood production; the kidney governs bone and promotes marrow formation (Shen Zhu Gu Sheng Sui). Chemotherapy damages the spleen, stomach, and kidney yang, resulting in impaired blood production. Based on the TCM principle of “treating deficiency with tonification” (Xu Ze Bu Zhi), the therapeutic methods focus on “replenishing qi and blood, invigorating the spleen and kidney” (Yi Qi Bu Xue, Jian Pi Bu Shen) to promote hematopoiesis.

A Meta-analysis involving 14 clinical studies with 1150 samples showed that TCM treatment for ovarian cancer patients after postoperative chemotherapy adheres to the guiding ideology of “strengthening healthy qi and eliminating pathogenic factors” (Fu Zheng Qu Xie). The main types of TCM medicines used are tonic medicines, blood circulation-promoting and stasis-resolving medicines, and heat-clearing medicines. Combined TCM and Western medicine therapy can significantly improve various immune cell indices such as CD3+, CD4+, and CD8+ in patients after postoperative chemotherapy, and alleviate the degree of myelosuppression [27]. Studies have found that Jianpi Bushen Tongluo Decoction (Spleen-Invigorating, Kidney-Tonifying, and Collateral-Dredging Decoction) has a good therapeutic effect on patients with advanced ovarian cancer of the spleen-kidney deficiency with blood stasis type (Pi Shen Kui Xu Xue Yu Xing).

It can effectively improve symptoms such as soreness and weakness of the waist and knees, aversion to cold and cold limbs, abdominal distension, and fatigue, reduce the levels of leukopenia and neutropenia, alleviate the degree of myelosuppression, and thereby improve the patient’s quality of life [28]. A study involving 63 ovarian cancer patients with qi deficiency with toxin and blood stasis type (Qi Xu Du Yu Xing) undergoing chemotherapy showed that Tiaohua Decoction (Regulating and Transforming Decoction) combined with chemotherapy can significantly improve the patient’s leukocyte score and nausea/vomiting score, and enhance immune function [29].

#### 5. Traditional Chinese Medicine in Preventing and Treating Radiotherapy-Related Injuries of Gynecological Tumors

Radiotherapy is one of the core treatment modalities for gynecological tumors (especially cervical cancer and endometrial cancer), and it plays a significant role in local control, organ function preservation, and reducing the risk of recurrence. For example, for locally advanced cervical cancer (such as Stage IIB-IVA), radiotherapy (external beam radiotherapy + brachytherapy) combined with chemotherapy is the standard treatment regimen, which can achieve curative effects. However, since ionizing radiation is also cytotoxic to normal cells, radiotherapy can also induce a series of complications such as radiation enteritis (diarrhea, abdominal pain) and vaginitis, which seriously endanger the physical and mental health of female patients [30]. Therefore, rehabilitation treatment for radiotherapy-related complications is of great significance for improving patients’ quality of life and prognosis. Studies have shown that TCM has achieved favorable clinical outcomes in preventing and treating complications after radiotherapy for gynecological tumors [31], and can also enhance patients’ immune function, improve clinical symptoms, and quality of life [32].

##### 5.1 Radiation Enteritis

Radiation enteritis is a common complication after radiotherapy for abdominal and pelvic malignancies. Studies have indicated that 80% of patients with pelvic tumors may experience gastrointestinal tract injury after radiotherapy, and 50% will develop radiation enteritis (especially in the terminal ileum and distal colon). In TCM theory, ionizing radiation from radiotherapy belongs to the pathogenic factors of “heat toxin” (Re Du) and “fire toxin” (Huo Du), which are prone to damaging the body’s healthy qi (Zheng Qi). Since the tumor is located in the uterus and ovaries of the pelvic cavity, the fire toxin invades the adjacent large intestine, leading to excessive heat toxin in the large intestine, stagnation of qi and blood, blockage, and heat stagnation leading to tissue necrosis. The nature of the disease is characterized by “root deficiency with branch excess” (Ben Xu Biao Shi) and intermingling of deficiency and excess.

A study involving 76 patients with radiation proctitis induced by radiotherapy for cervical cancer found that modified Huanglian Jiedu Decoction (Coptis Toxicity-Removing Decoction) can effectively alleviate clinical symptoms such as diarrhea, abdominal distension, abdominal pain, and tenesmus, improve intestinal function, reduce rectal inflammatory response, and decrease the incidence of adverse reactions. At the same time, it can reduce the levels of inflammatory factors such as interleukin-1 (IL-1), interleukin-6 (IL-6), and tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ) in patients’ serum, thereby inhibiting inflammation [33].

##### 5.2 Radiation Vaginitis

Radiation vaginitis is the most common radiotherapy-induced injury during radiation therapy for cervical cancer patients (accounting for approximately 30%). Its main clinical symptoms include vaginal dryness, swelling, and increased vaginal discharge; in severe cases, vaginal ulcers, pain, bleeding, adhesion, and stenosis may occur. This leads to a decline in patients’ quality of life, and may even result in treatment interruption, increasing the risk of recurrence and metastasis, and affecting patient prognosis [34].

In TCM theory, the basic pathogenesis of radiation vaginitis is Huodu Shiyun (fire toxin and dampness accumulation) and Qiyin Liangxu (qi-yin deficiency). TCM holds that ionizing radiation belongs to heat toxin, which burns body fluids, thereby causing vaginal symptoms such as dryness and atrophy, which are manifestations of fire toxin damaging yin. Therefore, the prevention and treatment of radiation vaginitis with TCM should adhere to the principles of replenishing qi and nourishing yin, cooling blood to stop bleeding, and clearing heat, detoxifying, and resolving masses.

External TCM therapies are commonly used for treatment. External application of TCM medicines can quickly penetrate into zang-fu organs and meridians through the skin and mucous membranes to exert therapeutic effects. TCM soaking decoctions (Ta Zi Fang) often use Phellodendri Chinensis Cortex (Huangbai) to clear heat and dry dampness, nourish yin and reduce fire, and Atractylodis Rhizoma (Cangzhu) to invigorate the spleen and dispel dampness. Clinical studies have found that TCM soaking therapy can significantly reduce the incidence and severity of radiation vaginitis, and decrease the occurrence of adverse reactions during the intervention period in patients [35]. A study involving 120 cervical cancer patients undergoing radiotherapy showed that TCM soaking therapy can reduce and delay the occurrence of radiation vaginitis, alleviate the severity of the disease, improve patients' anxiety and depression, and enhance their quality of life [36].

## 6. Conclusion

While conventional treatments (surgery, radiotherapy, and chemotherapy) for gynecological malignancies have improved survival rates, they are prone to inducing various complications, such as cancer-related depression, cancer pain, lymphedema, and radiation vaginitis, which severely affect patients' quality of life and prognosis. Based on the principles of "holistic concept" (Zheng Ti Guan Nian) and "treatment based on syndrome differentiation" (Bian Zheng Lun Zhi), Traditional Chinese Medicine (TCM) exerts significant therapeutic effects in alleviating symptoms, regulating immune function, and reducing toxic and side effects through multi-channel interventions (including oral administration of TCM medicines, acupuncture, and external application), which aligns with the requirements of the biopsychosocial medical model. TCM can improve depression and anxiety by soothing the liver and regulating qi, nourishing the heart and tranquilizing the spirit (e.g., modified Chaihu Jia Longgu Muli Decoction, Guipi Wan). It can also relieve cancer pain (e.g., Shaoyao Gancao Decoction) and improve cancer-related fatigue (e.g., Fuyuan Fuheng Decoction). Furthermore, TCM can prevent and treat postoperative intestinal obstruction and lymphedema caused by surgery. In addition, TCM combined with chemotherapy can mitigate chemotherapy-induced gastrointestinal tract injury and myelosuppression, while TCM combined with radiotherapy can prevent and treat radiation vaginitis and radiation enteritis, demonstrating favorable efficacy and safety.

Despite the remarkable progress achieved in the application of TCM in the rehabilitation of gynecological tumor-related complications, several issues remain to be addressed urgently. First, existing relevant clinical studies are limited by small

sample sizes, insufficient implementation of blinding methods, and a lack of long-term observation indicators. In the future, it is necessary to conduct multi-center, large-sample randomized controlled trials (RCTs) to enhance the evidence level and credibility. Secondly, TCM syndrome types and treatment methods for gynecological tumor-related complications have not been unified in clinical practice, and more evidence is required to support and improve relevant TCM clinical practice guidelines. Thirdly, TCM compound prescriptions possess the characteristics of multiple components and multiple targets, but basic research on their treatment of related complications is still insufficient, and the specific mechanisms of action have not been fully clarified. In the future, great efforts should be devoted to preclinical research, and advanced technologies such as proteomics and metabolomics should be utilized to explore their specific molecular mechanisms. Future research should fully combine the advantages and concepts of TCM and Western medicine, jointly promote the practice and verification of TCM in the field of rehabilitation of gynecological tumor complications, and ultimately achieve a comprehensive improvement in the quality of life and clinical prognosis of female cancer patients.

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