

A Case Report of Comprehensive Detumescence Therapy Combined with Traditional Chinese Medicine in the Treatment of Lymphedema After Endometrial Cancer

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Abstract: Background: Endometrial cancer is one of the most common tumors in the female reproductive system, and lower limb edema is one of the common complications after endometrial cancer. Long term lower limb edema leads to serious aggravation of patients' life dependence and affects their quality of life; It is difficult for patients to live independently without their families, resulting in psychological anxiety and even depression. Objective: to introduce the application of comprehensive detumescence therapy combined with traditional Chinese medicine in the treatment of lymphedema after endometrial cancer operation. METHODS: 1 Case of Lower Limb lymphedema after endometrial cancer operation was collected, and according to the specific swelling condition and degree of the patients, the reasonable comprehensive detumescence therapy and TCM treatment plan were made. The methods of treatment were manual lymphatic drainage, low-stretch elastic bandage, extracorporeal shock wave apparatus and pneumatic limb blood circulation therapy, combined with acupoint therapy and external application of traditional Chinese medicine. The patient was evaluated for recovery after 1 month of treatment. Results: The combined swelling therapy and internal application of traditional Chinese medicine relieved the swelling in the short time. Conclusion: The effect of postoperative lymphoedema swelling is definite and worth promotion.

Keywords: Comprehensive Detumescence Therapy, Postoperative Lymphedema, Medical Records, Case Report

1. Introduction

Endometrial cancer is one of the most common malignant tumors in women, and postoperative limb lymphedema is one of the common complications after breast cancer surgery and endometrial cancer surgery [1]. It is caused by the lymphatic system damaged by previous intraoperative or postoperative radiotherapy, and then the lymphatic reflux is blocked and the circulation is blocked. Once the edema is formed, it will bring great trouble to the patients' life, seriously affect the patients' daily life, endanger their mental health, and even cause family conflicts. If the limb swelling can be alleviated by non-invasive comprehensive swelling elimination method, and a certain limb function can be restored, the burden on the patient and the family will be reduced, and the social

instability factors will be reduced. The case in this study was a patient with postoperative lower limb lymphedema admitted to the Breast Department of Chongqing Hospital of Traditional Chinese Medicine (Nanqiao Temple Department). The main manifestation is that the foot of the right lower limb is significantly swollen compared with the left after endometrial cancer surgery. After systematic treatment, the patient had significantly reduced lymphoedema.

2. Case Summary

Patient, female, 57 years old, first diagnosis: December 6, 2021. He was admitted to the hospital because of

"lymphedema of the right lower limb after endometrial cancer surgery for 5 years". In June 2016, the patient underwent endometrial cancer surgery in a local hospital due to "endometrial cancer". One month (July) after surgery, the patient had no obvious inducement to appear edema in the right ankle, no obvious swelling, heat and pain, and no other accompanying symptoms. He had been to many hospitals successively, and his symptoms had not been significantly relieved after symptomatic treatment. After that, the symptoms worsened gradually. In August 2021, he went to a third-class hospital in Chengdu for B-ultrasound: 1) Bilateral great saphenous vein reflux (bilateral: portal) 2) Bilateral common femoral vein, right superficial femoral vein, left popliteal vein reflux. 3) Right lower limb soft tissue edema: lymphedema. CT showed: 1) Lymphatic drainage obstruction of the right lower limb; 2) The lymphatic reflux of the left lower limb was unobstructed; 3) No lymphatic leakage is found in chest and abdominal cavity; No obvious abnormality is found in inferior vena cava, bilateral common iliac veins and external iliac veins. There was no significant remission after treatment (details unknown). At present, the patient has no obvious inducement to appear redness, swelling and pain of the right lower limb, and is treated in our hospital. Diagnosis: the activities of both lower limbs are OK, without varicose veins of lower limbs, clubbing toes, and no abnormality of joints. Compared with the left lower limb, the right lower limb is obviously thickened like rubber swelling, the right lower limb is obviously swollen, showing non concave edema, the activity of the right lower limb is limited, the local skin of the right lower limb is thickened, skin elasticity is weakened, there is no obvious pain, no numbness, skin pigmentation and roughness of the right leg and below, there is no obvious swelling, no damage, no ulcer exudation, skin temperature is normal, the left lower limb is not obviously swollen, the muscle strength and muscle tension are normal, and the physiological reflex is normal, Pathological reflex was not drawn out, and bilateral dorsalis pedis arteries were accessible. The diet and sleep are ordinary, and the urine and urine are normal. The tongue is light red, the moss is white, and the pulse number is high. Indocyanine green lymphography of both lower limbs was performed on December 7, 2021. Traditional Chinese medicine looks, smells, and cuts: looking at it with spirit, normal expression, and a pale complexion; The language is clear, the response is free, and there is no shortness of breath, asthma, cough, too much breath, moan, abdominal sound; No abnormal smell; The tongue is light red, the moss is white, and the pulse number is high. TCM diagnosis: Edema (deficiency of both qi and blood); Western medicine diagnosis: lymphedema of the right lower limb after endometrial cancer surgery (lv146%, icc4 stage, severe). Treatment: tonifying qi and blood, activating blood and resolving phlegm, promoting water and detumescence. Treatment plan: Medical anti allergy, local magnesium sulfate and mirabilite external application, traditional Chinese medicine physiotherapy, massage and other treatment.

3. Method

3.1. Comprehensive Detumescence Therapy

Including skin care, hand lymph drainage, bandage pressure bandage and functional exercise [2].

3.1.1. Skin Care

The primary premise of comprehensive detumescence treatment is to ensure the integrity of the skin: Patients with edema are easy to cause lymphatic infection, namely erysipelas, if their skin is damaged, injured or bitten by mosquitoes. At the same time, chronic streptococcal infection of the lower limbs can cause lymphedema [3], mainly manifested in recurrent cellulitis or lymphangitis. If the patient has a secondary infection, it will further aggravate the edema. It directly result in the subsequent bandage winding, shock wave and red light irradiation treatment.

3.1.2. Freehand Lymphatic Drainage

Opens the patient's lymph nodes and dredge the lymphatic vessels. The sequence principle is: the healthy side first and then the affected side, the trunk first and then the limbs, the local lymph nodes first and then the overall lymphatic drainage. Before the manipulation, instruct the patient to take a flat position, breathe deeply 5 times, and do 5 "m-breathing" with the fluctuation of the patient's breathing, so as to fully relax the patient's body and mind. Combined with the serious edema of the patient's lower limbs, the whole body lymphatic drainage method is selected: first, from top to bottom, press and knead the lymph nodes on both sides of the neck, the upper clavicle, the lower fossa and the axillary area in turn, and then from bottom to top, use the sliding forward push method to open up the access between the inguinal and axillary lymph communication branches and the inguinal lymph nodes on both sides: massage from the lower abdomen to the axillary area, and the principle is to massage from the affected side to the healthy side, The patient was treated by bilateral double masseuses at the same time in our hospital. After completing the above trunk lymph node drainage action, use rotation and massage to conduct limb lymph drainage from the distal end to the proximal end [4]: push the lymph of the outer, front and inner thighs of the affected limb to the inguinal lymph node area on the same side in turn, relieve the thigh edema and dredge the body fluid. Thus forming a complete lymph drainage pathway, namely: (i) emptying the downstream: 1) let the patient lie flat and breathe in M-mode. 2) open bilateral neck lymph nodes and bilateral axillary lymph nodes. 3) open the left inguinal lymph nodes. 4) open the water dividing lines between the left axillary and the left inguinal (ii) dredging the upstream: 1) do the lymph reflux manipulation of both lower limbs. 2) first break up the adhesion according to the method, Relax the muscles. 3) drain the anterior lymph to the lateral side, the medial side and the posterior lymph to the lateral side respectively according to the direction. 4) use with kneading, pressing and pushing to drain the lymph to the ipsilateral inguinal part. (iii) connect the water flow: 1) divert the edematous liquid: finally drain

the inguinal lymph to the axillary lymph nodes. 2) circulate again after the manual treatment.

3.1.3. Apply an Elastic Bandage to Increase Pressure

Choose low ductile stretch bandage over high ductile bandage. The main reason: it does not affect the basic activity function of the patient's limbs, can wrap the affected limbs for a long time, and can also be used during sleep. 1. Wrap the bandage around the ankle as the center, repeatedly wrapping the toe in place until the toe is evenly wrapped. 2. Wrap the ankle to the popliteal joint with the soft liner, wrap the affected limb [5] with 50% overlap, overlay the cotton pad properly at the joint, protect the popliteal joint with the prefolded foam pad, and finally make the wrapped affected limb cylindrical to ensure uniform pressure. 3. Then wrap the soft cotton pad upward from the popliteal fossa to the root of the thigh, and stop at the end of the edema of the patient's lower limbs. 4. Finally, wrap the low ductility bandage from bottom to top, fix the end of the bandage with adhesive tape, and fold the end of the lined tubular bandage outside the pressure bandage.

3.1.4. Functional Exercise

Proper exercise also plays a very important role in reducing swelling. Studies have shown that reasonable exercise can reduce the incidence of secondary disease in [6] by 58%, and it also has a good effect on antidepressant production. Therefore, we will teach patients to do a set of lymphatic detumescence gymnastics after breast cancer surgery. Patients can practice by themselves after completing the treatment and returning to the family. It usually needs to reach 30 min per day, which can also effectively reduce the psychological pressure of patients and improve their mental condition. There are no unified rules and methods for exercise. Patients can walk, climb stairs and other exercises according to their own conditions, follow the principle of flexibility, moderate, step by step, avoid excessive exercise, avoid long travel, standing for a long time, and do not lift heavy things. It must be done based on the use of pressure bandages or lymphedema pressure stockings with lymphedema for [7]. Elevate your lower extremities while sleeping.

3.2. Acupoint Therapy

Including ginger moxibustion: cut the ginger slices into 0.1cm thick, fill the holes with needles and put them on the acupoints, place the mugwort or mugwort, and then ignite the acupuncture [8]. (acupoint: Zusanli, three Yin, Guanyuan, Jinhai); ear point pressure pill (acupoint: stomach, liver, brain, spleen, god door, endocrine, subcortex, tumor area, occipital); acupoint application (acupoint: inner pass, Zusanli, three Yin); intracutaneous needle treatment (acupoint: zheng, long, blood sea).

3.3. Instrument Therapy

Including extracorporeal shock wave and pneumatic limb blood circulation therapy instrument.

3.3.1. External Shock Wave Therapy

Choose the appropriate size impact head, the frequency to

300 times / minute, apply certain pressure downward, ensure the pressure uniform, moderate, ensures continuous, uniform, and rhythm, according to the clockwise method, to the outer thigh, then to the calf ankle position, and then press the calf medial ankle position to the inner thigh, the first half of the circle adopts a certain force to press down, the second half of the circle is not implemented pressure, every 10 min, 1 times once a day. During the technique period, develop slowly and gently. Use the above way to accelerate the reflux speed of peripheral lymph to the central lymphatic system, to achieve the purpose of eliminating the swelling of the affected limb. Patients will be treated for 2 to 4 weeks. Release of lymphoid tissue adhesion, promotes lymphatic vessel patency, prevent lymphatic vessel adhesion, and also prevent the formation of thrombosis of shock wave [9].

3.3.2. Air-Pressure Limb Blood Circulation Treatment Device

Using the pneumatic limb blood circulation therapy instrument, successively inflatable from the distal heart end to the proximal heart end, it can push the accumulated lymphatic fluid back to the circulation to eliminate edema; and can also send the distal blood back to the heart to activate the pressure of lymphatic fluid and blood flow. The treatment instrument uses the arteriovenous air pressure treatment method, the duration of each time is 30 min, the parameters are well adjusted, and the repeated intermittent inflation treatment from bottom up from the foot, calf, knee, the thigh order, to promote the return of lymphatic fluid, reduce the patient's lower limb tissue edema and pain induced [10]. All the device treatment means must closely observe the patient's own condition during the treatment process, when the discomfort symptoms appear, timely stop and take effective measures to pressure [11].

3.4. TCM Treatment

3.4.1. Acupoint Therapy

(1) Auricular point sticking, Once the other day, The left and right ears alternate alternately: (stomach, liver, brain, God, endocrine, subcortical, tumor area, breast): reconcile qi and blood, Conditioning of sleep, endocrine, auxiliary anti-tumor; (2) Acupoint application, Once on the 1st: bilateral internal customs, Zusanli, three Yin intersection, Zhongwan, Shangwan, etc., Used to replenish qi and blood, Conditioning the spleen and stomach, promoting the blood circulation and resolving phlegm; (3) Warm moxibustion device moxibustion method, Once on the 1st: bilateral foot li, three Yin, Guan Yuan, qi sea, used to replenish qi and blood, Promote blood circulation, reduce phlegm and reduce swelling; (4) Intradermal needle, Once on day 1: (blood sea, Zusanli, three Yin to transport the spleen and stomach, toxifying Qi and blood; Kidney yu, spleen yu, life men tonifying qi and blood, water swelling; Zhi Zheng, Fulong, blood circulation and phlegm, inducing diuresis to alleviate edema), Used to replenish qi and blood, remove phlegm and remove the blood stasis, improve water and reduce swelling, conditioning the whole body Qi machine. The edema and swelling were

relieved, and the patient's condition was observed.

3.4.2. Traditional Chinese Medicine Treatment

Initial diagnosis: (1) Apply hot packs of Chinese medicine for external use, and add or subtract Taohong Siwu Decoction. The prescription is as follows: Angelica sinensis 20g, Prunella vulgaris L 20g, rubra 15g, Ramulus Cinnamomi 15g, Rhizoma et Radix Notopterygii 15g, Saposhnikovia divaricata 15g, Bletilla striata 15g, Poria cocos 15g, Ramulus Mori 15g, Polyporus umbellatus 20g, Peri-carpi citri reticulatae viride 15g, Lu Lu Tong 20g, Radi-x astragali 20g, Cremastra appendiculata 20g. Top 16 flavor, a total of 5 doses, hot steam external compress, 1 dose daily, twice a day. (2) Take 15g, prescription: Angelica sinensis 15g, Radix astragali 20g, codonopsis pilosula 20g, Radix Rehmanniae Preparata 15g, Rhizoma Chuanxiong 15g, Bran stir-fried Atractylodes macrocephala Koidz 20g, Poria cocos 15g, radix paeoniae alba 15g, glossy privet fruit 15g, Semen Ziziphi Spinosae 20g, Honey-stir-baked Radix Polygalae 15g, caulis polygoni multiflori 20g, Amomum villosum Lour 15g, Pericarpium Citri Reticulatae 15g, Herba Lycopi 20g, Rhizoma alismatis 20g, Caesalpinia sappan L 15g, Safflower 10g, peach kernel 15g, Scrophularia ningpoensis 15g. Top 20 flavors, a total of 5 doses, 1 dose a day, twice a day, morning and evening divided to take.

Second diagnosis: On January 04, 2022. After comprehensive treatment, the patient had reduced skin roughness and relieved swelling, with no obvious pain, and improved movement limitation of the right lower limb. The continuation treatment remained unchanged.

The third diagnosis: on February 11, 2022. After the first two treatment, the effect was obvious, the skin thickening of the right lower limb was weakened, the swelling was relieved, and the skin temperature was normal. Treatment continued with the previous methods.

Later return visit, the effect is not more square, with the certificate plus or decrease. The arteriovenous color ultrasound of the right lower limb showed no obvious abnormalities.

3.5. Far-Infrared Exposure

Far-infrared irradiation improves the skin and lymphatic circulation. Far infrared therapy is a kind of hyperthermia, which uses the radiation effect, resonance effect and thermal effect, by promoting the microcirculation flow, the lateral lymphatic reflux [12], thus reducing the edema skin and subcutaneous tissue thickness induced. The operating temperature was set at 42°C and irradiated for 1h daily for 4 weeks. Avoid discomfort, pain and even blisters, infection and other adverse reactions.

4. Discussion

The records of "edema" first appeared in the work of Zhang Zhongjing at the end of the Eastern Han Dynasty, in which he put forward: " Water and gas are divided into five categories: feng shui, skin water, positive water, stone water and yellow

sweat. Danxi in the "Danxi heart method *-oedema" mentioned [13]: "oedema points into Yin and Yang". "If the whole body is swollen, thirsty, urine red astringent, stool closed, this is Yang water. If the body is swollen, no thirst, loose stool, urine is not red astringent, this is Yin ". Compared with the medical case, the main disease of the patient was lower limb edema, rubber swelling thickening, obvious swelling, limited movement of the right lower limb, local skin thickening of the right lower limb, weakened skin elasticity, skin pigmentation and rough. The old disease is oedema. From the perspective of modern medicine, the principle of this case is to damage lymph nodes (tubes), making lymphatic reflux blocked, postoperative scar formation aggravates the compensatory pressure of lymphatic drainage, and secondary edema caused by improper postoperative exercise. In the category of traditional Chinese medicine, syndrome differentiation is one of the basic principles of understanding and treating diseases. Instead of treating it by speculating on the cause."Jingyue Encyclopedia -swelling article" pointed out: "where edema and other evidence, is the lung, spleen, kidney three viscera coherent disease. Cover water to lead, so it is originally in the kidney; water is used in gas, so it is marked in the lung; water is only in fear of soil, so it is made in the spleen. "Lung is the main water, through the water diversion channel. Lung principle section: conditioning body fluid metabolism. The spleen main body transport, the water valley water liquid essence slightly spread the whole body, spleen deficiency is water wet transport weak, stop storage overflow in the skin. That is, to drink. Kidney main water, the regulation to promote the metabolism of the viscera. Patients sick for a long time, evil qi accumulation appears the phlegm stasis. Gas can take jin, qi deficiency is not solid, jin stop day long phlegm, phlegm accumulation long time into stasis. Therefore, on the one hand, through the acupoint therapy: to improve the patients' qi deficiency, blood deficiency, thirst, dizziness and other symptoms [14], on the other hand, the use of traditional Chinese medicine to "replenish qi and blood, promote the blood circulation and eliminate phlegm, improve water and reduce swelling" as the method, the combination of acupuncture and medicine, specimens into account, the curative effect is remarkable.

For comprehensive swelling treatment, more attention should be paid to skin care to avoid affecting subsequent treatment and adverse reactions; use basic lymphatic drainage to open lymph nodes and disperse lymph adhesion to dredge lymphatic channels. Use low extension stretch bandage, gradient decompression from distal heart to proximal heart, reduce swelling and prevent tissue fluid backflow to distal heart [15]; conduct reasonable functional training, learn lymphatic swelling gymnastics, assist lymphatic canal unobstructed, prevent water accumulation again.

Traditional Chinese medicine treatment, water belongs to Yin, the choice of ginger moxibustion helps to warm and disperse cold. Initial diagnosis to the proposed eight Jane soup add and subtract. In line with the theory of traditional Chinese medicine, deficiency of qi and blood deficiency, deficiency to real, the blood stasis, qi deficiency and warm-reinforcing loss,

not enough to promote the gasification of water and liquid, then overflows in the skin, forming edema [16]. Therefore, clinical treatment uses large dose of qi and blood to reduce swelling, reinforcement and elimination in combination. Astragalus, Angelica tastes sweet and warm, the spleen, the main qi and the blood circulation, removing stasis and pain for the principal drug. Codonopsis pilosula tastes sweet, flat, into the spleen, lung, warm qi, spleen and lung; Radix Rehmanniae Preparata sweet taste, micro warm, into the kidney, kidney nourishing blood, help angelica nourishing blood; Rhizoma Chuanxiong promotes qi activates blood. All three were used as medicine for ministers. With atractylodes, tangerine peel, to induce diuresis for removing edema, invigorating spleen and replenishing qi. Radix paeoniae alba nourishing blood and spleen. *Semen persicae*, safflower and *caesalpinia sappan* L can be used to can be used to Promote blood circulation, remove blood stasis and relieve pain. *Fructus Ligustri Lucidi*, *Scrophularia ningpoensis* are used to nourish yin to supplement kidney. Supplemented with *Semen Ziziphi spinosae*, *Polygala tenuifolia* and *caulis polygoni multiflori* for nourishing qi and blood to calm the mind. The symptoms of patients diagnosed 2 and 3 improved significantly, and the patients were added and decreased in the basis of the original prescription, and the curative effect was obvious.

5. Summary and Outlook

We have formulated the corresponding treatment mode according to the specific situation of patients. Based on the basis of manual dredging, massage drainage, dredging lymphatic channels, unimpeded lymphatic flow, using low stretching bandage and pneumatic limb blood circulation treatment instrument, from the distal end to the proximal end, combined with the acupoint therapy and internal application of traditional Chinese medicine, limb swelling was significantly relieved in the short term. While the patient's mobility inconvenience was improved, the psychological pressure was greatly reduced, rebuilding the patient's confidence in the appearance. Follow-up treatment will be symptomatic treatment according to the patient's specific situation, until their normal life is no longer affected. Thus in a real sense to help many edema patients regain confidence, return to normal life and work. With the gradual precision of endometrial cancer treatment plan, the incidence of postoperative complications such as postoperative lower limb edema has also decreased accordingly. Although the use of comprehensive swelling elimination method and traditional Chinese medicine to relieve limb swelling is effective, it also has different effects because of individual differences, morning and evening discovery, swelling potential and other factors. Therefore, preoperative and postoperative-related health education is particularly important to prevent postoperative lymphedema. Not only that, increasing the publicity of women census, regular physical examination is also an important part to prevent the development of the disease.

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References

- [1] Yang, Long laughs. Progress in the treatment of secondary lymphedema [J]. Journal of Medical Research, 2020, 49 (03): 170-174.
- [2] Zhang Huizhen, Zhang Lijuan, Zhong Qiaoling, et al. Application of manual drainage in patients with upper limb lymphedema after breast cancer [J]. China Medical Herald, 2021, 18 (22): 176-179.
- [3] Gulina Kuerban, Wang Peiliang. Current status of lower limb lymphedema after radiotherapy in cervical cancer patients [J]. Modern Oncology Medicine 2008 (08): 1430-1432.
- [4] Hu Jin, Liu Gaoming, Li Xuying, et al. Nursing care of 1 case of congenital simple lymphangiomas and lymphedema of the lower limbs [J]. Nursing and Rehabilitation, 2020, 19 (08): 89-92.
- [5] Jiang Liuya, Xie Na, Yuan Xuelin, et al. Case report of the application of low ductile stretch bandage in upper limb lymphedema after breast cancer surgery [J]. Journal of Rehabilitation, 2017, 27 (06): 35-40 + 58.
- [6] Liu Pan. Effect of family primary caregiver return method intervention on functional exercise compliance and quality of life in patients with postoperative lymphedema for breast cancer [J]. Clinical Studies, 2022, 30 (03): 179-182.
- [7] Liu Gaoming, Hu Jin, Liu Yuanyuan, and et al. Nursing of patients with secondary lymphedema after treatment of cervical cancer [J]. Journal of Nursing, 2019, 34 (09): 37-39.
- [8] Gou Yanhua. Summary and analysis of partition moxibustion [J]. Clinical Studies of TCM, 2022, 14 (07): 37-40.
- [9] Shu Qing, Hu Yan, Luan Chunliang, and et al. Efficacy of extracorporeal shock wave treatment in patients with moderate-to-severe breast cancer-related lymphedema [J]. Chinese Journal of Physical Medicine and Rehabilitation, 2020 (02): 166-167-168-169-170.
- [10] Meng Yingtao, Kong Ronghua, Wang Rongjuan, et al. Study on limb pressure therapy combined with freehand lymphatic drainage intervention for upper limb lymphedema in breast cancer patients [J]. Chinese Journal of Preventive Medicine, 2021, 22 (06): 471-473.
- [11] Rong Jieli, Zhang Yan, Guan Yixiang, etc. Clinical study on the effect of treadmill exercise combined with limb pressure therapy on lower limb venous blood flow in critically ill patients [J]. Chinese Medical Guide, 2019, 17 (10): 1-2.
- [12] Xiao Wentian, Li Ke, Zhang Zheng, et al. Efficacy observation and mechanism study of far-infrared ray in the treatment of chronic limb lymphedema [J]. Journal of Tissue Engineering and Reconstructive Surgery, 2019, 15 (06): 408-412.
- [13] Sun Peng. Analysis on the treatment of edema in Zhudanxi [J]. Jiangsu Traditional Chinese Medicine, 2021, 53 (05): 18-19.

- [14] Zhao Tiantian, Cheng Xiaoping, Liu Ahui. Treatment of oedema [J]. Sichuan Traditional Chinese Medicine, 2022, 40 (02): 21-24.
- [15] Feng Xuewei, Zhong Hongli, He Chunxia. Effect of comprehensive detumescence treatment combined with home rehabilitation training on upper limb function in upper limb lymphedema patients after cancer resection [J]. Clinical Medical Engineering, 2022, 29 (04): 459-460.
- [16] Ma Yuehai, Hu Ying, Li Qiuhua, et al. Clinical study on the efficacy of lower limbs combined with lymphatic drainage in the treatment of lymphedema in middle-aged and elderly malignant tumors [J]. Practical Medicine and Clinical, 2017, 20 (05): 520-523.