

# Analyzing the sequelae of pelvic inflammatory disease from the theory of collateral disease

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**Abstract:** *The incidence of sequelae of pelvic inflammatory disease is based on deficiency of collaterals and marked by six evil qi, which has the characteristics of "easy stagnation and easy stasis, deficiency and deficiency inclusion, easy entry and difficulty in coming out". Following the basic treatment principle of "taking tonic of collaterals as the use", guided by "the most appropriate tonic of all collaterals and deficiency and deficiency inclusion", the actual patients mainly take tonic collaterals, the deficient patients take tonic collaterals as the purpose, and the deficient patients take tonic collaterals as the appropriate treatment. Attention is paid to the application of tonic collaterals. It provides many ideas for clinical use of sequelae of pelvic inflammatory diseases.*

**Keywords:** *Sequelae of pelvic inflammatory disease; Collaterals; Collateral disease theory; Dredging drug*

## 1. Introduction

Pelvic inflammatory disease (pelvic inflammatory disease, PID) is involving around the female genital tract, connective tissue and the pelvic peritoneum common kind of inflammatory bowel disease, due to women's menstruation, postpartum care, improper, or unclean uterine cavity operation, evil gas into the void, accumulated in the cell, damage chong Ren Qi and blood caused. If PID is not timely and accurate diagnosis and treatment, can cause pelvic inflammatory disease sequelae (sequelae of pelvic inflammatory disease, SPID) [1]. The symptoms are complex and diverse, most of which are manifested as chronic pelvic pain, lumbosacral pain, increased vaginal discharge, menstrual disorders, infertility, ectopic pregnancy, and recurrent PID attacks, etc. Therefore, traditional Chinese medicine classifies this disease in the categories of "women's abdominal pain" and "disease with lower body" [2]. In recent years, the incidence of SPID has been on the rise. Studies have found that 10.1% of outpatient patients in China are affected by SPID, and most of them are between 30 and 40 years old [3]-[4], which seriously endangers the reproductive health and daily life quality of women of childbearing age, and has become a difficulty to be overcome in gynecology. SPID has repeated symptoms. At present, Western medicine usually adopts symptomatic treatment such as anti-inflammatory, external application and surgery, which has high cost and low probability of complete improvement. The veins are graded layer by layer, extending to the depths of the pelvic cavity. The collaterals of the pelvic cavity are slender and tortuous, and the movement of Qi and blood is slow and easy to stasis. Evil gas from the outside into the inside, from the meridian into the collaterals, is vacuity evil love, lingering difficult to heal, and collaterals easy to enter difficult to turn the characteristics are similar [5].

Based on this, the author takes the collaterals disease theory as the guidance, strictly follows the basic treatment principle of "using collaterals for common use", and optimizes the treatment of SPID with Tongluo drugs, so as to achieve the purpose of relieving the pain of the disease and improving the prognosis.

## 2. The origin of collateral disease of SPID

"Huangdi's Inner Classics · Lingshu" cloud: "the meridians are inside, and the branches and horizontal ones are collaterals...". The choroidal veins follow the meridian, the branches of the veins are different, crisscrossing, penetrating up and down, such as a network such as Qu, widely distributed, flowing around the whole body, internal can irrigate the viscera, external can moisten the rationale, and help the meridians "line blood and Yin and Yang". Collateral disease is a kind of disease in which the human body is invaded

by internal and external evil, which leads to the main pathological changes of the complex vein obstruction and deficiency. The complex body is narrow and tortuous, throughout the whole body, communicating inside and outside, a place affected by evil will affect the distribution and operation of Qi and blood, involving a certain part or even the whole body, so that the disease continues to expand and deepen, and repeatedly advance and fall. In terms of female physiological and anatomical structure, there are criss-crossing pelvic veins between pelvic organs, with a large number of branches and sufficient blood transport, which together form the pelvic vein system. Qi-blood body fluid plays a nourishing role in the pelvic cavity through the vein, so as to maintain the normal operation of pelvic structure and function. Modern studies have found that SPID is a disease caused by infiltration, destruction and repeated stimulation of inflammatory cells, resulting in adhesion, hyperplasia, scar formation and ligament thickening between and around the pelvic organs and pelvic peritoneum, which affects the activities of pelvic organs. Its mechanism is consistent with the theory that Qi, blood and body fluid movement and distribution are abnormal, and there are numbness and stasis. Pathogenic factors such as dampness, heat and blood stasis blocking muscle vein can cause pathological state of choroid vein [6]. Based on the theory of collaterals of Chinese medicine, analyzing the pathogenesis of SPID is helpful to develop the clinical treatment of SPID.

### **3. Discuss SPID from the Angle of "collateral disease"**

#### ***3.1 Deficiency of collaterals is the foundation and evil is the standard***

The pathogenesis of SPID is based on the emptiness of the choroid veins. The deficiency of the choroid vein leads to the weakness of transport, the formation of pathological products of dampness-heat stasis toxin, which blocks the choroid vein and makes the deficiency of the choroid vein even worse, such as endless ring. The invasion of evil is the pathogenic factor of SPID. The choroidal vein is the channel of Qi-blood-body fluid operation, the internal accumulation of dampness-heat stasis toxin blocks the vein, leading to the curmudgeonly choroidal vein qi mechanism, the abnormal function of the change of the rise and fall, and the hair is SPID. Women's body is weak, and after menstruation, postpartum and uterine cavity operation, the blood chamber is open, and the healthy qi is not recovered, and the evil poison takes advantage of the opportunity to enter, stay and flush Ren's cell palace, and fight with Qi and blood, resulting in the obstruction of qi and cell pulse, resulting in this disease [7].

#### ***3.2 Collaterals and toxins accumulate and symptoms vary***

Smooth veins can exert the function of running Qi-blood-body fluid step by step. If evil invades the veins, Qi-blood-body fluid runs slowly, which is easy to cause various pathological manifestations such as blood stasis, inglorious and impotence [8]. Persistent lower abdominal pain, lumbosacral pain, dyspareunia, infertility, inflammatory mass and exudate formation are the most common clinical manifestations of pelvic inflammatory disease sequelae. Professor Deng Gaopi believes that the pathogenesis of SPID is "evil, vacuity, stasis and stagnation" [9]. From the point of view of collaterals disease, the cold and heat trapped in the pulse can cause pain, and the collaterals are closed due to pathogenic factors, pain is not generalized, and collaterals are also painful. Based on the characteristics of the sequelae of pelvic inflammatory diseases, many doctors make their arguments from "stasis". "Medical Xinwu" clearly pointed out that "the general rule is not painful, pain is impassable", the disease evil prolonged into the collaterals, resulting in the operation of the blood and qi in the veins, the blood stasis in the veins, the veins are not normal, resulting in pain, visible lower abdominal pain, lumbosacral pain or pain refusal. The choroid vein has the important function of blood and fluid exchange, if it is abnormal, it will lead to the production of exudate or the formation of disease. The operation of qi and blood is hindered, the water and grain delicacy from the spleen and stomach can not properly nourish the zang-fu organs, and the reproductive essence can not be filled over time, which will lead to infertility.

#### ***3.3 Easy stagnation and easy stasis, deficiency and accumulation***

Arteries are unobstructed, Qi-blood-body fluid distribution is normal, if the arteries are blocked, it will become a variety of diseases. SPID patients with deficiency of the body, the body's external health function decreased, and the onset of pathogenic agents. The choroid veins are all over the body, providing pathways for the generation, transport and excretion of body fluid metabolism. Once the accumulation of obstruction, it can form pathological products such as dampness, heat and blood stasis. At the same time, the choroid veins can also become a pathway for the transmission of pathogenic diseases. Pelvic

organs are narrow and thin in shape and deep in position. When evil qi attacks, it is difficult for Qi and blood to resist external evil and repair the damage, which is easy to make evil poison lie in the complex veins, resulting in the obstruction of Qi and blood movement and forming the image of qi stagnation and blood stasis. Endogenous dampness, heat and stasis toxin block the complex veins, making it difficult for Qi and blood to reach the deep pelvic cavity, and organic changes occur in pelvic tissue dystrophy [10]. Chronic diseases of meridians and viscera can be caused by qi and blood, blood injury into collaterals, or by meridians spreading collaterals and collaterals tiring blood, showing the common pathogenesis of choroidal block [11]. SPID patients not only have the deficiency of collaterals and inhonor, but also have the obstruction of complexions. The lesion is guided by the evil qi blood stasis, and then causes the operation of the viscera to be abnormal, the fine transport of water and grain is blocked, the transport of Qi-blood body is abnormal, the body will inevitably produce insufficient Qi-blood, and the loss of healthy qi. After a long illness, patients with SPID will be in a weak state, and if they are not deficient for a long time, they will be damaged. Therefore, patients with SPID will be in a pathological state of deficiency and accumulation for a long time.

### ***3.4 Long lingering disease, easy to enter and difficult to leave***

The main vein is the disease, the disease is lingering and difficult to heal. Ye Tianshi's Clinical Guide Medical Records said: "Evil transmission from the meridian into the collars", "the initial disease qi knot in the meridian, long disease into the collars into the blood" [12]. When pathogenic pathogens invade qi collaterals, they become dysfunctional, and when they continue to develop, they invade blood collaterals, developing from functional lesions to organic lesions [13]. The choroidal veins are widely distributed, and the pathogenic factors enter the collaterals from the meridian, not limited to a certain part, but go deep layer by layer and spread throughout the whole body. The complex is narrow and tortuous, slow flow of qi and blood, collateral-qi stasis resulting in fluid and blood exchange disorders, zang-fu dysfunction. After a long time, the pathological state of blood stasis is formed. Pelvic disease is deep, the course of disease is long, long is entrenched in the viscera of the collaterals, the disease lingering difficult to cure. "Zhang Yuqing Medical Records" said: "The straight is the meridian, the horizontal is the collars, evil is both into the collars, easy into the difficult to get out, the potential can not be removed without tiring" [14]. This is consistent with the characteristics of chronic disease course and repeated fluctuations of SPID. According to the theory of traditional Chinese medicine, the sequela of pelvic inflammatory disease is a disease caused by Yu evil and Chongren Qi and blood, stasis obstructs the uterine cell, prolonged and difficult to cure, depleting qi and blood, and finally seeing deficiency and excess. According to its development law, SPID is developed on the basis of SPD not receiving timely, standardized and thorough treatment [15]. A dynamic review of the development process of SPID from the core pathogenesis of collaterals theory "chronic disease into collaterals" can provide a new therapeutic idea for SPID.

## **4. For general use of SPID**

The core pathogenesis of SPID has two major aspects, namely, "vacuity" and "solid", and the lesions are mainly based on blood stasis, and eventually deficiency and solid inclusion, so the treatment should be "through" throughout the whole situation. The clinical syndrome of SPID is based on activating blood circulation to remove blood stasis and promoting qi to relieve pain, and follows the treatment principle of "using collaterals for promoting", distinguishing deficiency from deficiency and deficiency, and appropriately adding collateral-clearing drugs, such as occinia drug, insect drug, and tengma drug, etc. The main purpose for deficiency is to promote collaterals for deficiency and deficiency, and tonifying for deficiency and deficiency mixed with deficiency and insufficiency [16]. According to the accompanying symptoms along with the syndrome, it can not only remove the evil qi in the collaterals, make the qi and blood flow smoothly, but also introduce drugs into the collaterals, direct to the disease, improve the pathological characteristics of easy stagnation and easy stasis. Based on the theory of collaterals disease, according to the different effects of drugs, the commonly used drugs to treat SPID can be divided into Luo Xu Tong tonic, Xin Wei Tongluo, worm tongluo and rattan tongluo drugs.

### ***4.1 Choroidal vein dystrophy, to supplement as a way***

The course of SPID disease is prolonged for a long time, the blood is insufficient, and the veins are damaged without repair. Tongluo drug is more violent, good at walking and channeling, breaking blood and removing blood stasis, and easy to consume qi and injure blood for a long time, so it should be filled

as tong, to Rong nourishing blood drugs. In clinical practice, it is necessary to master the safe dose, indications, efficacy and administration methods of such drugs, clarify treatment contraindications, combine syndrome differentiation and disease differentiation, and pay attention to compatible methods. Select the appropriate drug dosage for different constitutions and disease depth, stop the disease, strengthen and protect the healthy qi, and ensure the removal of evil without damaging the positive. Tonic deficiency and tonic collaterals method is often used to treat the syndrome of deficiency of the choroidal vein in nourishing and tissue loss in infiltration irrigation [17]. "Tonic tonic is the most appropriate for all kinds of deficiency of collaterals", so drugs of FuzhengGuben-Rongyang-choroidal vein will be added in the treatment. Patients with SPID can appear deficiency and damage for a long time, and must distinguish the deficiency of qi, blood and Yin and Yang and make up for the symptoms. The deficiency of collaterals and qi is supplemented with ginseng and astragalus. Blood deficiency of collaterals, with angelica, ejiao and other blood; The deficiency of collaterals Yin should be cooked rehmannia, Zhi mother and other Yin nourishing; The deficiency of collaterals should be treated with cinnamon and epimedium. Wu Yiling believes that the patients with the loss of the choroid vein "give the products of supplementing qi and blood, nourishing Yin and filling essence, honing and nourishing the choroid vein, and use the body of tonic medicine as the use of tonic medicine", defend and guard, rush like the choroid vein, drive away evil spirits, so that the choroid vein is connected without stagnation, and the blood collaterals are moistening without coagulation.

## **4.2 Collaterals and toxin accumulation, removing evil and clearing collaterals**

### **4.2.1 Treatment of collaterals bubuxin drug**

SPID patients with blood stasis as the pathological basis, multi-Qi-blood operation blocked, "disease in the blood, regulation of collagals", so the first attention should be paid to clearing collagals. "The disease is in the choroidal vein, the example is spicy", "attacking the fortified base, with spicy, is the main purpose of collaterals disease", advocating the use of Xin medicine. Xin is one of the five tastes of traditional Chinese medicine, the medicine is warm, the smell is fragrant, most of them have the characteristics of being able to disperse, be able to go, can enter the tortuous complexo, direct medicine to the disease, restore the complexo smooth. Sinically-flaved collaterals can be divided into sinically-flaved collaterals, sinically-warm collaterals and sinically-running-collaterals [18]. Ye Tianshi pointed out: "Turbidities are visible, non-spicy and can not enter the collaments", "the disease is in the vein, for the spicy fragrance to open also", such as wood fragrance, fennel, incense and other spicy walk channeling Qi drugs can direct to the disease, which incense into the liver meridian, walk less abdomen, is the blood drug in Qi, good at soothing the liver depression, regulating the menstrual pain, known as "the general department of Qi disease, the female head coach" [19]. "Qi is the shuai of blood, blood is the mother of Qi", the two are interdependent, can not be separated, so the combination of blood circulation and blood stasis drugs such as frankincense, myrrh, can increase the effect of removing blood stasis and Tongluo pain, the treatment of blood stasis Qi stagnation, vein obstruction. Ye Shi pointed out: "Discuss the blood collaterals moistening, do not throw dry heat rob liquid", so the syndrome of Yin injury, can choose the sinuous medicine and moistening dryness and collaterals drug used together, medicinal angelica, peach kernel, Yu Jin, etc., Tongcollaterals without damaging Yin. Cold evil will not disperse without warm, blood stasis without general rules will not dissolve, spicy and warm Tong medicine with promoting blood stasis and relieving pain, dispelling cold evil, blood stasis, can be used to treat cold evil into the collagglutinative stagnation or Yin cold hyperactivity in the internal caused by cold coagulation blood stasis, vein obstruction syndrome, such as dried ginger, black medicine, laurel twig, Qiang live, corydalis rhizome, Wu dogwood, saponiae sinensis, etc. Dry ginger taste xin, sex hot, good guard, warm in the cold, back to Yang Tong pulse. Pharmacological studies have found that dried ginger has anti-inflammatory and antioxidant effects [20]. Guo Yufei et al. proved through pharmacological experiments that octinated drugs such as fennel, angelica and ligusticum have the effect of regulating vascular activity and improving blood operation [21]. In clinical SPID patients after dialectical analysis, it can be used together.

### **4.2.2 Anti-evil medicine**

In view of the chronic collateral stasis of pelvic inflammatory disease sequelae and the solidification of pathogenic factors in subtle places, this non-plant product can work, it is necessary to use the walking and channeling nature of flesh and blood feeling drug worms, search for evil and pick up collaterals, go deep into the lesion, attack and eliminate the stasis of the intractable syndrome, so that the collaterals are blocked and the pathogenic factors go away. Insect drugs are good at wandering, omnipresent, reasonable application, can play a multiplier effect on chronic diseases and difficult diseases. The commonly used representative drugs of insect tongcollaterals in clinical diagnosis include scorpion, centipede, leech,

silkworm rigidity and turtle worm. Wu Jutong Yun: "To eat blood worms, fly to walk the collaterals in the qi division, walk the collaterals in the blood division, it can be said that there is no small, no firm can not break", scorpion and centipede together, with the effect of searching the wind and picking collaterals [22].Leeches, salty, bitter, flat, with small poison, return to the liver channel, with the role of blood stasis, dredging meridians, "Shennong Herbal Classic" recorded: "The main expel evil blood, blood stasis, moon closure, blood stasis accumulation.....Waterway."Modern studies have shown that leeches can improve immunity and reduce cell damage, and the common dose is 6g.Modern pharmacological studies have found that the protein contained in bombyx mori can increase the secretion of adrenal cortical hormones, which has anti-inflammatory and anti-allergic effects [23].Tuya worm, salty taste, cold, main blood syndrome, "Herbal classics of the notes" reported that its indications of "blood accumulation syndrome, breaking the solid, blood blocking", know Tuya worm has the ability to break the solid accumulation, remove blood stasis and create new, studies have shown that Tuya worm has anti-coagulation, anti-thrombosis and other effects.

#### 4.2.3 Take the medicine of elephant and vine

"Materia Medica read" said: "All rattan genus, can be channeled into the collaterals."Vines bend and intertwine, the strong ones are like bones and muscles, and the thin ones are like veins.Through the method of traditional Chinese medicine, the rattan stretch and spread like the choroidal vein, with the effect of relaxing tendons and channeling collaterals, can be "channeled into collaterals".Modern pharmacological studies have found that rattan drugs have various effects, such as analgesia, antibacterial, immune regulation, and promotion of inflammation dissipation, and can be widely used in the treatment of gynecological diseases [24].Commonly used clinical drugs are pueraria root, mulberry branch, blood rattan, blood rattan, honeysuckle rattan, etc., which can not only remove evil in collaterals, but also prevent external evil from entering collaterals.Clinically, symptomatic treatment can be carried out according to the efficacy of rattan drugs.SPID chronic disease into the collars, often dampness and stasis, and rattan drugs mostly have the effect of activating blood and clearing collars, dispelling wind and dampness, so according to different properties, the appropriate rattan medicine can be selected for symptomatic treatment.Big blood rattan has a strong effect of promoting blood circulation and removing blood stasis, and is good at removing blood stasis between collaterals and channels.Cauligaea spatholobi is known as the "holy medicine of blood", and pharmacology has shown that it has the effect of improving blood circulation [25].

### 5. Medical case in the corner

Ge, female, 38 years old, married.First visit on February 06, 2023.Chief complaint: lower abdominal distension pain accompanied by lumbosacral soreness for more than 1 year.History of present disease: 1 year ago, she experienced pain and discomfort in the lower abdomen and lumbosacral region after fatigue and cold. On January 17, 2022, B-ultrasound in the external hospital indicated that uterus (48+25) x41x30mm, clear boundary, regular shape, uniform parenchymal echo, endometrium 9.8mm, accessories:The size of the right ovary is 44x26mm, and two follicular dark areas can be seen in it, which is about 11x7mm. The other dark area of the sac is 34x26mm, and there is a flocculent echo inside.The left ovary is 32x17mm in size, and two follicular dark areas can be seen in it, which is about 10x8mm bursa dark area, and another 18x14mm bursa dark area, which shows a flocculent echo.Color Doppler ultrasound (CDFI) : No abnormal blood flow signal was observed.Hint: no uterine probe and obvious abnormal echo;Dark area of bilateral ovarian bursae.Diagnosed as pelvic inflammatory disease, after antibiotic infusion, gynecological Qianjin tablet, cefixime capsule oral treatment, the effect is not obvious, the disease repeated.Regular menstruation, 3-5d/28-30d, less amount, purple black, thick quality, blood clots, dysmenorrhea (+), warm relief, the last menstruation on January 20, 2023.Birth history: 2-0-2-2.Dark tongue, white fur, deep pulse.Engraved symptoms: small abdominal tingling accompanied by lumbosacral cold pain frequent, light when heavy, warm relief.Normal mood irritability, wake, sleep can, urine is normal, stool is normal.Specialist examination: normal vulvum, smooth vagina, a small amount of white fluid secretions, normal mucosal color, cervical hypertrophy, lifting pain (+), uterine posterior position, often large, medium quality, poor motion, tenderness (+), left adjunctive lamella thickening, tenderness (+), right adjunctive no obvious abnormality.

Traditional Chinese Medicine Diagnosis: Woman abdominal pain (syndrome of cold and damp qi stagnation and blood stasis)

Western medicine diagnosis: SPID chronic pelvic inflammatory disease

Treatment: warming channels and promoting blood circulation, clearing collaterals and relieving pain

Prescription: 9g of *Evodia officinalis*, 12g of *Angelica sinensis*, 10g of Peony, 10g of *Chuanligong*, 20g of *Astragalus officinalis*, 6g of Cassia twig, 12g of Moutan bark, 6g of ginger, 6g of liquorice, 6g of *Rhizoma saponicae*, 10g of *Rhizoma saponicae*, 10g of *Rhizoma saponicae*, 10g of *Rhizoma saponicae*, 15g of white art, 10g of mulberry armature, 10g of *saltcommia eucommia*, 7 doses, 1 dose a day, decoction in water, warm in the morning and evening.

Second visit: February 13, 2023. Lower abdomen, waist still feel cold pain, with reduced, can, night can rest, stool normal. The tongue is pale and dark, the fur is white and greasy, and the pulse is deep. On the basis of the original formula add: 10g of aconite. A total of 7 doses, 1 dose a day, decocted in water, warm in the morning and evening.

Third consultation: February 27, 2023. Abdominal pain, lower back pain, fatigue, cold still feel abdominal pain, increased diet, stool normal. The tongue is light and dark, the fur is white, the pulse string is smooth. Menstruation is coming, still keep above, add *Leonurus* 15g, a total of 7 agents, 1 agent a day, water decoction, morning and evening warm.

Fourth diagnosis: March 06, 2023. The last menstruation on March 01, 2023, dysmenorrhea was relieved, and there were occasional lumbosacral pain after menstruation, adding 10g of dog ridge, a total of 7 doses, 1 dose a day, decocting in water, warm in the morning and evening.

Five diagnoses: March 13, 2023. The patient's sense of abdominal and waist pain basically disappeared, the diet was normal, the sleep was OK, and the bowel movements were normal. Pale red tongue, thin white fur, heavy pulse.

After taking half a month, after stopping the drug, the hospital examination, the dull pain in the lower abdomen disappeared, the symptoms were not obvious, gynecological examination has no tenderness in the accessory area, and then the outpatient menstrual follow-up pelvic inflammatory disease did not recur.

Note: "On the pain of the question" said: "cold into the classics, and the delay, crying and not, the guest outside the pulse is less blood, the guest in the pulse is blocked, so the death but pain." In this case, the patient chooses antibiotics, anti-inflammatory drugs and other bitter cold drugs during the acute attack of pelvic inflammatory disease, resulting in cold coagulation of blood, damaging Yang in the body, making the weak warm fine substances, and gathering into phlegm turbidity-blood stasis blocking the pulse, not general pain, so see repeated cold pain or stinging pain in the lower abdomen. Phlegm stasis is not only a pathological product, but also a pathogenic factor, the course of disease for a long time, fatigue, cold, repeated attacks after sex. Patients with mild is slow, with a lot of lower amount, thin white matter indicates that the disease is cold syndrome. The patient has been ill for a long time, worrying about liver injury, collateral-qi stagnation, blocking the pulse, so the lower abdominal distending pain. Tongue diagnosis and pulse diagnosis are the symptoms of cold and damp qi stagnation and blood stasis. "Vegetarian Question": "Blood Qi, like warm and hate cold, cold qi can not do, warm will disappear." Therefore, the warm meridian decoction is added to reduce the heat of *WuZhuyu* in the formula, and the walking chong Ren enters the liver and kidney, dispersing cold and Qi to relieve pain; Cassia branch xin warm into the blood, warm blood. *Angelica*, *Chuanxiong*, *Paeonia* tonifying blood deficiency, blood stasis; Peony skin hard slight cold, big blood cane bitter flat, the two are compatible, direct to the disease, promoting blood stasis clear deficiency heat, and the warm and dry of *Cornus officinalis*, cinnamon, sufficient Qi and blood, then Chong Ren can be full, with *Astragalus*, white art, licorice Qi Jianspleen, to the source of biochemical, Qi Wang blood. Ginger is not only warm stomach qi to help biochemistry, but also help Wu Cornus, laurel branch warm meridian to dispel cold. *Gleditsia sinensis* supporting poison and discharging pus; *Corydalis corydalis* to promote blood circulation and relieve pain; Xiangfu soothing liver and regulating Qi, strengthening the effect of promoting blood circulation, dispersing stasis and eliminating phlegm; Mulberry parasite, salt *Eucommia* warm kidney dispel cold, tonifying liver and kidney, strong bones. Two lower abdomen, waist still feel cold pain and add black medicine to enhance the function of warming kidney and dispelling cold. Three diagnosis plus *Leonurus* can promote the discharge of menstrual stasis turbidity. There was occasional lumbosacral pain after the four examinations, which strengthened the strength of the dog's spine to strengthen the liver and kidney and the waist and knee. Before menstruation, warm menstruation and activating blood, clearing collaterals and relieving pain, mainly dispelling evil; After supplementing the liver and kidney regulate Qi-blood, Fuzheng-based. Combined use of various medicines, chong Ren Qi and blood harmonization, complexo vein Tongtonation, its disease healing.

## 6. Conclusions

To sum up, the etiology, pathogenesis and pathogenesis of SPID in traditional Chinese medicine are consistent with the pathogenesis of collaterals. Therefore, combining the collaterals theory with the sequelae of pelvic inflammatory disease will promote further research on collaterals and optimize the diagnosis and treatment of the sequelae of pelvic inflammatory disease, providing more safe and effective new ideas for the clinical dialectical treatment of SPID and improving the quality of life of patients.

## References

- [1] Zhou Ying, LI Fengkui. Study on TCM syndrome differentiation and treatment of chronic pelvic inflammatory disease [J]. Yunnan college of traditional Chinese medicine, 2011, (02) : 48-53. DOI: 10.19288/j.carol carroll nki. Issn 1000-2723.2011.02.015.
- [2] Zhang Dai. Progress in diagnosis and treatment of pelvic inflammatory disease [J]. Journal of Clinical Pharmacotherapies, 2019, 17(12): 36-39+69.
- [3] Sun Xiaohui, Gao Cong, Zhang Hong. Zhang Hong's experience in treating the sequelae of pelvic inflammatory disease with warm-Tong method based on "Yang transforming Qi and Yin forming" [J]. Review of Traditional Chinese Medicine, 2019, 29(06): 190-193. DOI: 10.13862/j.cn43-1446/r.2023.06.038.
- [4] Wu Yiling. Collaterology [M]. Beijing: Science and Technology Press of China, 2004: 3, 5, 161, 162.
- [5] Zhu Yuyi, Lin Jie, PI Xixuan. Summary of Professor Lin Jie's experience in treating the sequelae of pelvic inflammatory disease with liver-stagnation and spleen-deficiency [J]. Chinese Modern Doctor, 2019, 58(07): 133-136.
- [6] Wu Lin, Li Hua, Li Chenxi and so on. Professor Qin Guozheng's experience in treating gout based on "collaterals theory" [J]. Rheumatology and Arthritis, 2019, 10(09): 54-57.
- [7] Wei S B. Ideas, methods and long-term management strategies of TCM prevention and treatment of pelvic inflammatory diseases and their sequelae [J]. Journal of Beijing University of Chinese Medicine, 2019, 46(09): 1204-1212.
- [8] Wang T T, Chen Z J. Application of Tongluo drug in the treatment of tic disorder based on collaterals theory [J]. Beijing Journal of Traditional Chinese Medicine, 2019, 42(02): 192-195. DOI: 10.16025/j.1674-1307.2023.02.016.
- [9] Hu Yunyun, Deng Gaopi. Introduction of Deng Gaopi's experience in treating chronic pelvic pain after pelvic inflammatory disease from the theory of collaterals [J]. Ploidy in the new medical, 2019 (6) : 336-338. The DOI: 10.13457/j.carol carroll nki JNCM. 2019.06.104.
- [10] Yu Sagui, LV Xiaodong, Pang Lijian et al. Using traditional Chinese medicine image thinking to talk about collateral disease and tonic drugs [J]. Chinese Journal of Traditional Chinese Medicine, 202, 37(02): 750-752. (in Chinese)
- [11] Gu Ling, XU Xiaofeng, GE Hua et al. Treatment of sequelae of pelvic inflammatory diseases from the theory of Women Medicine [J]. Jiangsu Chinese Medicine, 2015, 47(12): 72-74. (in Chinese)
- [12] Shi Yaxin, Yu Yue, Shi Wei. Based on the analysis method of t2dm with collaterals disease theory in the application of uterine adenomyosis [J]. China's basic medical journal of traditional Chinese medicine, 2021, 27 (8) : 1216-1219. The DOI: 10.19945/j.carol carroll nki. Issn 1006-3250.2021.08.007.
- [13] Wu Yiling. Pathogenesis and pathogenesis of collaterals disease [J]. Journal of Difficult Diseases, 2004(05): 282-284. (in Chinese)
- [14] Chen Jie, XU Xiaotong, FENG Ziqin et al. Based on complex epidemiology said briefly generalized anxiety disorder onset and treatment [J]. Journal of traditional Chinese medicine (TCM), and 2024, 52 (02) : 9-12. DOI: 10.19664/j.carol carroll nki. 1002-2392.240024.
- [15] Zhan Jie, Liu Hui, GUO Xingyao et al. Treatment of sequelae of pelvic inflammatory disease based on collateral disease theory [J]. D in henan, 2019, 33 (6) 6: 867-870. The DOI: 10.16367/j.i SSN. 1003-5028.2019.06.0216.
- [16] Xuan Da-Ke, LIU Yuan-Xian, LI Xu-Na et al. Study on the principle of allergic rhinitis and characteristics of drug use [J]. Chinese Folk Therapy, 2019, 29(15): 5-8. (in Chinese) DOI: 10.19621/j.cnki.11-3555/r.2021.1502.
- [17] Zhang Lankun, Guo Weifeng, XIAO Jing et al. Clinical application of Tongluo drugs from Ye Tianshi's theory of "Tongluo for use" [J]. Journal of Chinese Medicine, 2014, 55(09): 804-805+808. (in Chinese) DOI: 10.13288/J.11-2166/r.2014.09.023.
- [18] Zhang xz. Ye Tianshi treatment the clinical guidelines basis disease analysis [J]. Journal of medical in henan, 2014 (10) : 1890-1891. The DOI: 10.16367/j.i SSN. 1003-5028.2014.10.019.
- [19] Wang Fenfei, Han Yanhua, Zhou Lina et al. Han Yanhua's clinical experience in treating chronic pelvic pain [J]. Shanghai Journal of Traditional Chinese Medicine, 2019, 53(05): 38-39+49.

DOI:10.16305/j.1007-1334.2019.05.009.

[20] Gao Liangliang, ZHANG Yanlin, ZHANG Peng et al. Quality evaluation of standard decoction of Dried ginger [J]. Chinese experimental formula tuition, 2019, 25 (5) : 161-166. The DOI: 10.13422 / j.carol carroll nki syfx. 20190317.

[21] Guo Yufei, Yang Hongjun, Wang Yanping et al. Apiaceae sheen of TCM antiplatelet aggregation effect research [J]. China foundation of traditional Chinese medicine medical journal, 2016, 22 (12) : 1629-1631 + 1693. DOI: 10.19945 / j.carol carroll nki. Issn 1006-3250.2016.12.018.

[22] Fang Yi, Zhang Qinshu, Chen Rong. Clinical application of Tongluo drugs of scorpion and centipede [J]. China Information Journal of Chinese Medicine, 2013, 20(01):88. (in Chinese)

[23] Li Guojun. Chinese Materia Medica [M]. Beijing: China Pharmaceutical Press. 1996.

[24] Chen Wanrong. Chemical composition and clinical application of rattan Chinese medicine [J]. Straits Pharmacy, 2019, 32(05):27-28. (in Chinese)

[25] Chen, Xi; Li, Qi; Kan, Xiao- Xi; Wang, Ya- Jie; Li, Yu- Jie; Yang, Qing; Xiao, Hong- Bin; Chen, Ying; Weng, Xiao- Gang; Cai, Wei- Yan; Zhu, Xiao- Xin . Extract of Caulis Spatholobi, a novel blocker targeting tumor cell- induced platelet aggregation, Inhibits breastcancer metastasis Oncology Reports, 2016. Doi: 10.3892 / or. 2016.