

TMR Integrative Medicine

Submitted: 2 January 2019, Accepted: 1 February 2019.

Review

Research progress of traditional Chinese medicine nursing for pelvic inflammatory disease sequelae

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Highlights:

The knowledge of TCM syndrome differentiation of clinical staff should be strengthened to lay a foundation for clinical nursing, so as to provide individualized education programs.

Traditional Chinese medicine nursing













Pelvic inflammatory disease

Abstract

Pelvic inflammatory disease refers to a group of female genital tract on infectious disease, mainly including endometritis, tubal phlogistic, oviduct ovarian abscess, if not timely treatment of the disease is easy to become chronic, now called pelvic inflammatory disease sequelae, clinical manifestations in chronic pelvic pain, recurrent pelvic inflammatory disease, affect women's physical and mental health. TCM nursing based on the basic theory of TCM, apply the overall view, the nursing method of syndrome differentiation, the traditional Chinese medicine nursing technique is widely used in the disease, such as traditional Chinese medicine enema, Chinese medicine external treatment, moxibustion, ear acupuncture point buries a seed, methods of modern nursing, has the characteristics of simple and cheap effect, can reduce the swelling fights, promoting blood circulation to remove blood stasis, relieve the pelvic congestion, promote drainage in abdominal and pelvic cavity and the absorption of bag piece, adjust the viscera function, obvious effect and has unique advantages, further prove the uniqueness of TCM nursing and safety, provide the basis for clinical treatment.

Keywords: Sequelae of pelvic inflammatory disease, Down syndrome, TCM nursing techniques, Research progress

Abbreviation

PID, Pelvic inflammatory disease; SPID, Sequelae of PID; TCM, Traditional Chinese medicine.

Competing interests:

The authors declare that there is no conflict of interests regarding the publication of this paper.

DOI:

10.12032/TMRIM201903003

Citation:

Li PY, Zhao WW, Zhang CH, et al. Research progress of traditional Chinese medicine nursing for pelvic inflammatory disease sequelae. TMR Integrative Medicine 2019, 3: e19003.

Executive Editor:

Chang Liu

Introduction

Pelvic inflammatory disease (PID) is a group of diseases caused by inflammation of female upper reproductive tract. Its symptoms are mild or insidious, so it is difficult to make a correct diagnosis in time. However, delayed diagnosis and treatment may lead to the emergence of symptoms of chronic pelvic inflammatory disease, such as chronic pelvic pain, ectopic pregnancy and infertility. At present, we call it sequelae of PID (SPID). PID seriously affects women's physical and mental health, and increases the economic burden of family and society [1]. Studies have shown that the incidence of PID among women of childbearing age in developing countries is as high as 40% [2]. There is no record of this disease in ancient books of traditional Chinese medicine (TCM), and most doctors classify it as "abdominal pain" according to its clinical manifestations [3]. Jingyuequanshu-Furengui (1368~1644 A.D. Ming dynasty) recorded that woman years of blood stasis, resulting in cold temperature loss, weak spleen and stomach, menstruation, abdominal pain for a long time. According to TCM syndrome differentiation standards, the common syndromes are damp-heat accumulation syndrome, damp-heat stagnation syndrome, Qi stagnation and blood stasis syndrome, Qi deficiency and blood stasis syndrome, kidney deficiency and blood stasis syndrome, mainly damp-heat accumulation syndrome [4].

Modern medicine thinks, this disease basically happens at postpartum or the infection after abortive, period sanitation is bad, acute pelvic inflammation fails to cure thoroughly. Chinese medicine also attributed the cause of the disease to women's menstruation, postpartum blood room is open and ingestion immodesty, menstruation or surgical trauma caused by the invasion of damp-heat evil palace blocked blood. If the pathogen lingering for a long time does not heal, damage to the vital Qi, the fight between the positive and the negative, the virtual, will lead to the occurrence of chronic inflammation [5]. The main pathogenesis of abdominal pain in women is as follows: weak Chong-Ren meridian, pain due to insufficiency [6].

SPID is easy to cause adhesion of surrounding tissues due to long-term inflammatory stimulation. Antibiotics are preferred for treatment in western medicine, which have quick effect. However, it is easy to cause adverse reactions such as bacterial imbalance and bacterial resistance, leading to reduced immunity of patients and repeated attacks of the disease. The treatment of TCM is characterized by treatment based on syndrome differentiation, following the principle of treating the same disease differently, and characterized by "simplicity,

efficiency and low cost". Jinguiyaolue points that internal and external treatment, or internal medicine, or acupuncture cream, can treat the woman's disease [7]. TCM nursing is based on the basic theory of TCM, and application of holistic, dialectical nursing methods, traditional nursing techniques, in the prevention and treatment of diseases rehabilitation has a unique advantage TCM nursing can reduce swelling and disperse knot, activate blood circulation and remove blood stasis, relieve pelvic congestion, promote mass absorption, and regulate viscera function. The disease as a dominant disease to form a TCM nursing program and carried out in clinical. The following is a summary of the research on the improvement of SPID symptoms by TCM nursing techniques in recent years

TCM nursing technique with TCM treatment

Chinese medicine retention enema and its nursing

TCM retention enema is the most common treatment method for the sequelae of pelvic inflammatory disease in China. It has the characteristic of simple operation method, good clinical efficacy and less adverse reactions, and it has a unique effect on the treatment of SPID. The drugs reach the pelvic tissue through intestinal mucosa absorption, promote local Qi and blood circulation, improve pelvic blood circulation, reduce the damage of drugs to liver and kidney function, and the drugs can be better absorbed and used [8]. At present, the ideal depth of intubation is 15-20cm, and due to long-term treatment, it is necessary to avoid anal stimulation and trauma. Paraffin oil and other lubricants should be used for tube-moistening operation, so as to guide patients to maintain the corresponding position during intubation and after enema, so as to improve the efficacy.

Studies have shown that enema with TCM can improve the treatment effect of patients with pelvic inflammatory disease and reduce the risk of recurrence of pelvic inflammatory disease [9]. Wu HM showed that local administration of TCM enema through the lesion can improve symptoms and pain and eliminate thickened tissue or mass [10]. Chen ZX used evidence-based medicine to systematically evaluate and Meta analyze the articles published from 2011 to 2015 on the efficacy of TCM enema in the treatment of pelvic inflammatory diseases [11]. The results showed that the long-term efficacy and safety of TCM enema in the treatment of pelvic inflammatory disease were not evaluated, and the evaluation criteria were not uniform. Therefore, in order to give full play to the curative effect of TCM enema, it is necessary to standardize the operation

methods of TCM retention enema and improve the evaluation criteria of curative effect.

External application of TCM and its nursing

The main purpose of external application of TCM is to make the effective ingredients of medicine absorbed and permeated through the skin to directly promote the local blood circulation of the disease, which makes the treatment more direct and has a good auxiliary treatment effect for SPID. During the operation, the patient's reaction should be closely observed. In case of allergy or skin damage, the treatment should be suspended, and the doctor should be reported for corresponding treatment measures. Chen HX et al. made a statistical analysis of articles on external application of TCM for PID [12]. Zhou OX used self-designed external application film package to treat the sequelae of PID [13]. The proportion of cured patients in the treatment group was 97.5%, and the proportion of cured patients in the control group was 87.5%, and the recurrence rate of the disease in the treatment group was zero. It can be seen that external application of TCM has a good therapeutic effect.

Moxibustion and its nursing

Moxibustion is used moxa suspended or placed in the acupoint or local, burning, warm ironing, in order to achieve the purpose of warm channel and expelling cold, promoting blood circulation to remove meridian obstruction. When cooperating with doctors for treatment, pay attention to avoid burns, closely observe the reactions of patients, and deal with any adverse reactions in time. Wang SM found that moxibustion combined with Guizhifuling decoction has a definite effect on PID patients, and its mechanism may be related to enhancing the immune function of the body [14]. Zhu HD et al. through moxibustion at the acupoints of Shengue, Guanyuan, Zigong, so as to achieve the effect of fixing the capital to support the Yang and regulating the meridians and regulating Qi to improve the clinical symptoms of chronic gynecological PID [15]. Moxibustion can still combined with other TCM nursing technology to treat PID, through combined use with Chinese medicine topical application, improve blood microcirculation, to achieve the effect of curing symptoms and curing the root [16].

TCM iontophoresis

TCM iontopheresis has been used in clinical treatment of sequelae of PID. Following the principle of "same poles repel each other, different poles attract each other", cationic and anionic ions in medicine are introduced into the human body through skin sweat ducts to achieve a method of

curing diseases. In the early stage, I did a good job in explanation, removed doubts and concerns, and could not leave the patient during the operation. The patient's reaction should be observed, and the appropriate electric flow should be adjusted in time to prevent burns. The effect should be evaluated after the operation.

TCM iontopheresis method, on the one hand, through skin penetration and absorption, drug ions directly to the lesion, on the other hand through physical stimulation to improve local blood circulation and metabolism, so that the adhesion tissue lax, scar tissue softening [17]. Danzhi decoction can regulate blood microcirculation by affecting the expression of angiogenic factors in endometrial cells of SPID patients [18]. Wang yanan **SPID** patients with enema-iontophoresis. After 3 courses of treatment, it was found that it could significantly improve the pain symptoms and local signs of patients, and it was safe and had no adverse reactions, which was worthy of clinical promotion [19]. Ma haowen et al. showed that the benign stimulation of warm through iontopheresis can promote local blood circulation in the pelvic cavity, improve the nutritional status of tissues and accelerate metabolism [20]. TCM theory technology, combined with modern iontophoresis has a good prospect.

Ear acupoints seed method

Huangdineijing (*B.C.* 220~211, Han Dynasty) said that ear is the rendezvous point of all meridian. The medicine seeds and cereals are put on the adhesive cloth and attached to the acupoints to stimulate the acupoints and reaction points on the auricle. The endocrine disorders are corrected and the autonomic nervous system is adjusted through the channels and collatuses to achieve the effect of disease prevention and treatment. It is characterized by long lasting stimulation, definite curative effect, convenient sampling and convenient operation, so it is widely used in clinical practice.

The method of ear point seed burying is often used in combination with enema, plaster and massage, and its effect is good. Zhong ZY showed that the treatment of pelvic inflammation with seed pressure at ear points combined with enema of covitis vaccaria can significantly improve the symptoms of lower abdominal pain and lumbosacral swelling pain [21]. Shi ZH *et al.* used the method of Chinese medicine internal administration combined with auricular sticking pressure to achieve the effect of dredge Qi machine, clear collaterals and relieve pain [22]. The method of burying seeds in ear acupoints can dredge channels and collaterals, regulate the functions of various zang-fu organs, and prolong the

absorption time of drugs in the intestinal tract. TCM enema can clear heat, detoxify, benefit dampness, activate blood circulation, remove blood stasis and relieve pain, and promote the softening of adhesion tissue and the absorption of inflammation [23]. The positions of acupoints commonly selected include pelvic cavity, internal genitalia, endocrine, sympathetic, liver, kidney and other corresponding parts.

Foot bath method of TCM

TCM foot bath method is a special external treatment method that can be used to treat systemic diseases by adding appropriate amount of TCM liquid in hot water of appropriate temperature for foot fumigation and washing. TCM fumigation is transdermal administration without gastrointestinal tract, which can reduce drug toxicity and side effects, maintain stable and lasting blood depth and improve curative effect. It has been accepted by the public because of its simple operation, health care and other characteristics, but pay attention to avoid too long time, too high temperature, to prevent ischemia and hypoxia. TCM foot bath method is more widely used in gynecology, it can promote foot blood circulation, so as to promote blood circulation, relieve pelvic congestion, promote abdominal, pelvic fluid seepage and mass absorption, and regulate the organs function, improve the ability of disease resistance [24]. Ye P achieved the effect of warming the meridians, regulating the viscera and improving the patients' physique through the external treatment of TCM foot bath [25]. The foot bath has the effect of health care, through the Chinese medicine foot bath to simply improve the patient's symptoms, has significance clinical meaning.

TCM emotional nursing

In view of the characteristics of the psychological burden of patients with pelvic inflammatory disease sequelae, different emotions to give different nursing measures, eliminate their fear, worry, anxiety, worry and other emotions, promote the outcome of the disease and rehabilitation.

Shen W gave emotional nursing treatment to SPID patients on the basis of TCM enema. After treatment, physiological function, social function, psychological function, energy, pain and other aspects were significantly improved [27]. Huang WL *et al.* randomly divided the PID patients into the observation group and the control group, the control group was treated with external application of TCM, and the observation group was treated with external application combined with emotional therapy [28]. The results showed that the clinical treatment effect

of the observation group was significantly better than that of the control group [29].

Accordingly, nurse personnel should undertake communicating with the patient in time, relieve patients' emotions and maintain a good physical and mental state, so as to achieve the effect of disease prevention and treatment.

Prevention of sequelae of PID

The sequelae of PID are correlated with age, and 20~40 years old is the most common age. In addition, living environment, unclean sexual behavior, occupation, infection and sanitary conditions are all risk factors. Therefore, prevention is deserve to pay attention. Early detection, diagnosis and treatment should be carried out to minimize the adverse effects of risk factors on female patients.

Nursing staff should conduct health education for patients to improve their self-management ability. According to the risk factors, corresponding measures should be taken. For example, when patients are in menopause, menstruation, perinatal period, pregnancy and puerperium, women need to avoid sexual behavior, and need to do their own personal hygiene, improve the ability of anti-bacteria. When the woman appears vaginitis, acute PID, should be treated until recovery. Iud placement should be avoided as far as possible. If iud placement is needed, patients should be guided to use appropriate antibiotics and anti-infective drugs, and receive timely examination to avoid the occurrence of inflammatory diseases and reduce the incidence of diseases [30].

Conclusion

TCM nursing is widely used in China. PID as a dominant disease has its TCM nursing program and efficacy evaluation table, comprehensive content. The use of a variety of TCM characteristics of nursing technology, can improve the clinical efficacy and nursing satisfaction of patients and their families [31]. A number of studies have proved that the combined use of TCM characteristic nursing technology can significantly improve the physical condition of patients. Such as bigeminy therapy (Oral administration of TCM combined with rectal administration of TCM), triple therapy (Oral administration of TCM, rectal administration of TCM iontophoresis or acupuncture massage), quadri-combination therapy (Chinese medicine internal use, external application, retention enema and far-infrared physiotherapy), etc. It has the characteristics of simple method, obvious curative effect, low cost and little adverse reaction [32-36].

Although TCM nursing is applied in clinical practice, it still needs to be further studied and widely promoted. TCM foot bath therapy, ear seed therapy and moxibustion therapy have theoretical basis, but lack of strong clinical evidence basis. High quality, large sample and multi - center experimental research should be carried out. The theoretical knowledge of syndrome differentiation of nursing staff is weak, while TCM emphasizes that syndrome differentiation is the prerequisite for nursing, syndrome differentiation needs to be accurate, and nursing is targeted. Therefore, the knowledge of TCM syndrome differentiation of clinical staff should be strengthened to lay a foundation for clinical nursing, so as to provide individualized education programs. At present, the nursing methods of TCM are lack of unified standard, and the operation methods adopted in different parts of China have different effects, which seriously affect the evaluation of the effects and the implementation of the methods, further research should be carried out to standardize and standardize TCM nursing operations. We should focus on the research on the mechanism of external treatment, provide laboratory basis for clinical application, combine traditional theory with modern technology, and develop the cause of TCM.

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