Characteristics of Traditional Chinese Medicine Therapy Improve the Gynecologic Laparoscopic Postoperative Gastrointestinal Symptoms: A Review

Wenqin Kou¹, Miaolin Yang¹, Haifa Qiao^{2,*}

¹College of Acupuncture and Moxibustion, Shaanxi University of Chinese Medicine, Xianyang 71200, Shaanxi, China.

²The Affiliated of Shaanxi University of Traditional Chinese Medicine, Xian yang 712000, Shaanxi, China.

How to cite this paper: Wenqin Kou, Miaolin Yang, Haifa Qiao. (2022) Characteristics of Traditional Chinese Medicine Therapy Improve the Gynecologic Laparoscopic Postoperative Gastrointestinal Symptoms: A Review. *International Journal of Clinical and Experimental Medicine Research*, 6(1), 90-96.
DOI: 10.26855/ijcemr.2022.01.015

Received: December 4, 2021

Accepted: December 29, 2021

Published: January 26, 2022

***Corresponding author:** Haifa Qiao, The Affiliated of Shaanxi University of Traditional Chinese Medicine, Xian yang 712000, Shaanxi, China.
Email: 1511006@sntcm.edu.cn

Abstract

Laparoscopic surgery is becoming more and more widely used in gynecological surgery, but it may still cause many complications. Gastric dysfunction is a common symptom after gynecological laparoscopy. While extending the postoperative recovery speed of patients, it may also induce other serious symptoms. Therefore, improving the postoperative gastrointestinal function of patients is an important link to shorten the rehabilitation process and reduce the time of hospitalization. Traditional Chinese medicine characteristic therapy has unique advantages in promoting postoperative gastrointestinal recovery, which is worth learning from. To sum up, the author in recent years high recognition of traditional Chinese medicine characteristics to promote gynecological laparoscopic gastrointestinal function related literature review, mainly from acupuncture, ear acupoint pressure pills, acupoint application, Chinese medicine hot iron, moxibustion therapy, massage therapy, comprehensive therapy, in order to for the majority of colleagues in the postoperative gastrointestinal function recovery treatment choice to provide reference.

Keywords

Traditional Chinese Medicine, External Treatment, Gastrointestinal Function, Gynecology, Laparoscopy

With the development of science and technology, the surgical methods are constantly updated. Laparoscopic surgery is a new product in the field of medicine, has been widely used in clinical, most traditional gynecological surgery can be replaced by laparoscopic surgery, it presents tiny wounds popular with patients, but like all open surgery, minimally invasive surgery may still bring a variety of postoperative complications, such as surgical stump bleeding, adjacent tissue damage, gastrointestinal dysfunction and other [1]. Among them, gastrointestinal dysfunction is a common symptom after laparoscopy, its incidence is as high as 30% [2], often manifested as nausea, vomiting, abdominal pain, abdominal distension, no exhaust, no defecation or defecation habits change, serious, may lead to intestinal obstruction and other complications [3], which will prolong the postoperative recovery process and affect the quality of life. In recent years, TCM characteristic therapy has been widely used in the treatment of postoperative complications, and it has been clinically recognized with good curative effect and improving postoperative gastrointestinal symptoms without side effects. In recent years, the study of gastrointestinal dysfunction after gynecological laparoscopy in TCM characteristic treatment is reviewed, so as to better optimize the periopera-

tive treatment and further improve the acceptance rate of laparoscopic surgery in the population.

1. Etiology and pathogenesis

Laparoscopic preoperative and intraoperative operations and the patient's own status can affect their gastrointestinal function. Objectively speaking, Preoperative water fasting can usually directly affect the spleen and stomach function, Zheng Qin'an said in the True Biography of Medical Science: "Although the true gas exists, but by the essence of the water valley". After the spleen and stomach are the source of acquired qi and blood, insufficient Qi and blood production, to promote the operation of the viscera, Gastrointestinal peristalsis is relatively slow down; The anesthetic preparations used in the operation belong to the category of TCM "poison" [4], can inhibit the normal operation of the viscera, damage to human integrity; Laparoscopic incision is a metal blade wound, the air and blood stasis and the operation is not smooth, make the heart of the air is blocked, abdominal distension, intestinal paralysis and other diseases, extended the time of gastrointestinal recovery, at the same time, if the stasis is long to heat, Heat Sheng accumulates raw poison. It increases the risk of infection at the surgical site; Brustasis for a long time can also cause deficiency, damage to the human essence, qi and blood again. From the patient themselves, most patients' preoperative anxiety and negative emotions after surgery can cause liver qi discomfort, liver and spleen disturbance, which will further aggravate gastrointestinal dysfunction.

2. Traditional Chinese medicine characteristic treatment

2.1 acupuncture therapy

2.1.1 Single acupuncture therapy

Needle has a good two-way regulation of gastrointestinal related body fluids, gastric muscle activity and gastrointestinal motor nerve, so the acupoint is usually selected for acupuncture treatment in the treatment of gastrointestinal disorders. Li Zhuyan et al. [5] randomly divided 70 patients after gynecological laparoscopic surgery into two groups and gave standard postoperative care, including the acupuncture group on the first day of postoperative surgery. After 3d, the first anal exhaust time and recovery time of bowel sound in this group were earlier, which was significantly better than the control group. Ma Kaiqi [6] compared the effect of perioperative acupuncture and fake acupuncture on postoperative gastrointestinal function, and found that the incidence of nausea and vomiting in patients after gynecological laparoscopy was significantly reduced after receiving acupuncture. Chen Wei et al. [7] included 40 patients after laparoscopic total hysterectomy, divided into observation group (20) and control group (20). The observation group after acupuncture in the return ward, and nausea and vomiting were significantly less than in the posterior group within 48h.

2.1.2 Needle combined with electrical stimulation therapy

It was found that [8] electric needle can improve mesenteric microcirculation dysfunction, reduce intestinal sensitivity, be easy to operate, save manpower, and use it more clinically. Wang Xiaoqi [9] is equal to bilateral internal clearance and Zusanli in patients with preoperative stimulation of electric injection. The postoperative first anal exhaust time is shorter than that in the routine care group ($P < 0.05$), and the incidence of postoperative electrolyte disorder in the electric needle group is also lower. Zhang et al. [10] combined 30 patients in the observation group with electric needle stimulation of bilateral Zusanli and Liangyuan according to preoperative anesthesia. Postoperative evaluation showed that the postoperative gastrointestinal symptoms were effectively improved, and the mental state was better than the control group. In the study of laparoscopic gastrointestinal symptoms after preoperative intervention [11] and others compared electric needle combined with intravenous trospitron (trospitron) with simple drug and simple electric needle, and found that the effect of electric needle combined with drugs was the best, which affirmed the auxiliary role of electric needle in promoting postoperative gastrointestinal function.

2.1.3 Acupuncture combined with thermal moxibustion therapy

Feng Wendong [12] and others treated the observation group with acupuncture, upper deficiency and three Yin at 6h after surgery, and performed 30min from the above four acupoints for 30 min. The results showed that the first exhaust defecation time and bowel sound recovery time of the observation group were earlier than the single acupuncture group.

2.1.4 Needles combined with music therapy

The bad mood caused by any disease will affect the diarrhea function of the liver, and the liver and spleen phase

gram leads to temper weakness, and further prolong the process of postoperative gastrointestinal recovery. In the clinical study of gynecological laparoscopic patients with abdominal pain, Tu Lifang [13] with acupuncture treatment, in the first night before preoperative horn (liver), 2h postoperative uterine (spleen) sensory treatment, the results analysis shows that acupuncture group patients 6h and 24h postoperative pain is lighter, postoperative nausea and vomiting, gastrointestinal discomfort is lighter than acupuncture group.

2.2 Ear hole pressure pill

The pressure bean is to stimulate the corresponding acupoints, stimulate and dredge the qi, regulate the qi and blood function of the human organs. According to the meridian learning said: "the ear is the gathering of the veins, twelve classics through the ear", indicating that the meridians of the ear area in the whole body meridians into one. The stomach, large intestine, small intestine and Sanjiao in the ear point have the role of dredging the meridians, adjusting the viscera, qi and blood, and promoting the recovery of gastrointestinal function. Wang Wenli [14] included 50 patients who did not exhaust defecate 2 days after surgery and applied the ear point. Statistics showed that the gastrointestinal recovery of the ear point group at the four time points after treatment was stronger than the 50 patients with natural recovery. Wen Lina et al. [15] gave the control and study group, and the study group guided the upward ear acupoint pressure pills, and the gastrointestinal symptoms improved well. Wulina et al. [16] observed the impact of different ear points on postoperative improvement of gastrointestinal tract. The test group selected stomach, valve, cardia, and the control group took trifocal, endocrine and ear tip. The results showed that the stimulation site of the test group had a better effect on restoring gastrointestinal movement. Lin Xuanchen [17] took the ear point pressure bean stimulation before surgery, and told the patient to start the ear bean press for 1 min 5 times a day after waking up. The evaluation results showed that the ear point stimulation could significantly reduce the incidence of postoperative nausea and vomiting. Tao Tao [18] did a deeper step study, proving that earpoint pressure beans can keep the postoperative patient plasma act at high level within the normal range, while stimulating gastrointestinal peristalsis without causing intestinal over contraction and spasm.

2.3 Acupoint application

Acupoint application is a dual treatment, which is the active ingredient of the drug and the fundamental action of the acupoint. Chen Runqing et al. [19] recruited 80 patients with postoperative gastrointestinal dysfunction and divided them into two groups A and B, among which patients in group B (40) were applied acupoint application (mainly with gastric lowering) on the postoperative day, and replaced every 4h until exhaust. The results showed that the conventional postoperative treatment with acupoint application was more satisfactory, and the improvement of gastrointestinal hormones such as gastrin and gastrin was also better ($P < 0.05$). [20] applied the timing and third (stomach and spleen hours) to the postoperative patients, compared with the other two groups and placebo application, the patients had a better effect on gastrointestinal function improvement; and the application effect was better than the placebo group, which further affirmed the significance of rational selection of external drugs in acupoint application.

2.4 Hot ironing of traditional Chinese medicine

Hot iron is a treatment method combining the warm force, acupoints and massage, and its effect of intestinal tuning has been widely used. In the previous clinical practice, some scholars [21] studied the role of traditional Chinese medicine hot iron to promote the gastrointestinal function recovery after gynecological laparoscopy, and the effect was satisfactory. Liu Chunyan [22] and others integrated the meridian flow injection method into traditional Chinese medicine hot iron in the morning (the abdomen of stomach and stomach). After 48h, the degree of abdominal distension and gastrointestinal discomfort in patients with meridian flow injection hot ironing group were significantly lighter than those of the pure Chinese medicine hot ironing group. Cai Xiaoshan et al. [23] study the effectiveness of Chinese medicine hot iron for patients postoperative gastrointestinal recovery, hot iron medicine to Chinese medicine, clockwise overall massage abdomen (in qi hai, Tianshu, appropriate) and hot compress Shenque point, the above operation at 7:00-9:00 every day, after 1 week of treatment, observation group patients first defecation exhaust time and hospital time are shorter than the control group ($P < 0.05$).

2.5 Moxibustion therapy

The tonic effect of moxibustion is more used in clinical practice. Moxibustion acts on specific acupoints, the characteristics of the acupoints themselves (such as foot can supplement qi and blood) and moxibustion warm, to

promote [24]; and mugwort has tonic effect, can improve the body integrity, qi can produce blood, qi can produce blood, so complement, promote intestinal microcirculation. Wang Jianrong [25] observation 60 patients after 24h postoperative exhaust, observation group daily support after symptomatic treatment of suspension moxibustion, moxibustion site mainly to abdominal acupoints (zhongwan, day shu, pole, etc.) and bilateral Zusanli, 24h after the clinical evaluation results of moxibustion group is 90%, the total efficiency of 50%, significant statistical difference ($P=0.001$) [26]. After thermal moxibustion intervention patients, the first day after 9:00 PM began the first moxibustion, after every morning, evening moxibustion, specific intervention time range in the large intestine, stomach, three coke corresponding hours, statistical analysis after 3d showed meridian injection thermal moxibustion group intervention effect is stronger than ordinary moxibustion group, the regulation of gastrointestinal function is obviously better ($P < 0.05$).

2.6 Naprapathy

Naprapathy usually takes meridians or acupoints as the target point, in the treatment of gastrointestinal diseases, often by the point, kneading method, dredge qi and blood, adjust Yin and Yang. Zhang Yan [27] will be 180 cases of gynecological laparoscopic patients divided into observation group and control group, in the case of routine postoperative diet guidance, observation group patients from 6h postoperative acupoint massage (bilateral pass, three Yin intersection, zhongwan, Zusanli), the results show that the conventional diet guidance combined with massage technique can shorten the process of postoperative exhaust defecation and bowel sound recovery. Ding Yuxi [28] with acupuncture points (internal pass, three Yin intersection, Zusanli, etc.) combined with clockwise abdominal massage also effectively improved the gastrointestinal power of patients after laparoscopic gynecological tumor resection.

2.7 Comprehensive therapy

2.7.1 Warm acupuncture combined with meridian tamping mortar method

In the process of medical treatment, traditional Chinese medicine pays attention to the overall treatment and the unity of nature and man, believing that multi-angle, multi-level, grasps the opportunity to get twice the result with half the effort. Meridian tamping mortar method is a special technique to twist and lift insertion during needle. Fang Yuanzhi [29] and others included 60 suitable patients and were divided into control group and observation group. In addition to routine postoperative treatment of the observation group, bilateral Zusanli, three Yin, closed valley and too chong with meridian mortar acupuncture, and treated with warm acupuncture (two sides in three feet and three Yin intersection) until the first exhaust defecation. The results showed that the comprehensive conditioning effect of acupuncture, medicine and moxibustion was significant.

2.7.2 Acupoint massage combined with traditional Chinese medicine application

Yang Jie [30] to control group routine postoperative guidance, test group on this basis of acupuncture massage and Chinese medicine paste, specific operation first massage patients Zusanli, shen, que, Yongquan, then in the above three acupoints paste pills, drugs mainly gas and stomach, visceral pain effect (black medicine, rhubarb, fennel, etc.), found after 20h, test group first exhaust patients larger, after exhaust abdominal distension degree is lighter, significantly better than the control group ($P < 0.05$).

2.7.3 Chinese medicine hot iron combined with acupoint pressing beans

Tong Jian et al. [31] treated the gastrointestinal dysfunction after traditional Chinese medicine hot iron with ear-point pressing beans, and found that the total efficiency in the treatment group was 93.02%, compared with the total efficiency of 72.09% in the control group; gastrointestinal symptoms such as abdominal distension, abdominal pain, nausea and vomiting were lighter within 3 days after the treatment group were statistical significant.

3. The rule of selecting holes

In the treatment of gastrointestinal dysfunction after laparoscopic surgery, the acupoints run through it. The more acupoints selected during acupuncture treatment are Zusanli, internal pass, and Sanyan intersection. Zusanli is the foot Yangming stomach meridian point, not only can directly improve the postoperative abdominal distension and abdominal pain and other symptoms; as one of the strong points, but also can be straightened by growing stomach qi. At the same time, some scholars concluded in the experiment that the electric needle "Zusanli" can activate the beta-adrenaline receptor-mediated sympathetic nerve pathway to improve the colon dynamic in mice [32]. In the experimental study, Zheng Yang et al. also found that Zusanli acupoint can significantly improve the intestinal dy-

namics [33] of postoperative intestinal paralysis (POI) mice, which affirmed the significance of Zusanli acupoint extraction. Three Yin intersection is foot three Yin intersection point, can treat the disease of meridians, synonymous with three meridian qi and blood, in the early research also proposed to stimulate three Yin intersection can stimulate gastrointestinal peristalsis. Neiguan is the hand jue Yin pericardial meridian point, the pericardium experiences three coke, regulating the systemic air machine, and the vomiting point, which is used in many intraoperative and postoperative nausea and vomiting studies, and the inner Guan point has obvious clinical effect [34-35]. Acupoint application, traditional Chinese medicine hot ironing, moxibustion, massage and other treatment sites are mainly abdominal acupoints, such as Tianshu, Shenque, Zhongwan, which can more directly and effectively regulate the lesion parts.

4. Discussion

Clinically, patients take more drugs during the whole perioperative period, while the external treatment of traditional Chinese medicine is relatively safe, and has small side effects, which can relatively reduce the pain of patients. Therefore, we can according to the severity of the postoperative gastrointestinal response and the degree of the patient tolerance to the treatment method, refer to the treatment measures provided by your peers, with the most streamlined method to achieve the most considerable effect. However, there are still insufficient clinical trials: 1) has no unified network arrangement standard and evaluation standard for all clinical studies; 2) has different operating specifications, such as acupuncture depth, acupuncture time, electric needle frequency, acupoint selection, and 3) sample size estimation and test plan. Therefore, in the future scientific research, researchers should carry out large samples and multi-center clinical trials as far as possible; standardize and unify every step of the research plan, and pay attention to the research of the corresponding basic experiments, so as to provide more clear evidence for promoting laparoscopic gastrointestinal function.

Funding

National Natural Science Foundation Project, Regulation and Mechanism of acupoint sensitization by Calcitonin gene-related peptide (CGRP) (81873385).

References

- [1] Jalimeng, Du Jian, Ou Yunsong. (2017). Effect of laparoscopic cholecystectomy on the recovery of gastrointestinal function and complications in the elderly [J]. *Progress in Modern General Surgery in China*, 2017, 20(06): 465-467.
- [2] A. Venara, M. Neunlist, K. Slim, et al. (2016). Postoperative ileus: Pathophysiology, incidence, and prevention [J]. *J Visc Surg*, 2016, 153(06): 439-446.
- [3] Liu Rui. (2016). Clinical study on 62 cases of gastrointestinal dysfunction after abdominal surgery with integrated traditional Chinese and Western medicine [J]. *Chinese Journal of Integrated Traditional Chinese and Western Medicine*, 2016, 24(11): 880-883.
- [4] Sun Long, Li Juyun, Duan Beibei, et al. (2015). Effect of ear acupoint pressure at different time points on gastric function recovery in patients with gastric cancer [J]. *Chinese Journal of Nursing*, 2015, 50(07): 844-847.
- [5] Li Zhuyan, Wang Heng. (2019). Clinical observation of acupuncture for gynecological laparoscopic abdominal distension [J]. *Journal of Hubei University of Traditional Chinese Medicine*, 2019, 21(02): 94-96.
- [6] Ma Qiqi. (2018). Clinical study on the prevention and control effect of acupuncture and false acupuncture on postoperative nausea and vomiting in patients with gynecological laparoscopic surgery [D]. *Guangzhou University of Traditional Chinese Medicine*, 2018.
- [7] Chen Wei, Hu Bei, Lu Yanan, et al. (2015). Observation of the efficacy of preventing nausea and vomiting after gynecological laparoscopy [C]. *Compilation of the Annual Meeting [CSIA] of Chinese Society of Integrated Traditional Chinese and Western Medicine and the 2nd National Symposium of Integrated Traditional Chinese and Western Medicine and the founding Conference of Anesthesiology Professional Committee of Jiangsu Society of Integrated Traditional Chinese and Western Medicine*. 2015: 622-623.
- [8] Zheng Su, Xu Jing, Peng Li. (2018). Study on the effect of electroacupuncture and Zusanli on gastrointestinal function and CGRP, SP, and VIP in rats with IBS [J]. *Clinical Journal of Acupuncture*, 2018, 34(03): 66-69.
- [9] Wang Xiaoqiu, Wu Wenzhong, Zheng Man, et al. (2018). The randomized controlled pretrial of postoperative gastrointestinal dysfunction [J]. *Journal of Liaoning University of Traditional Chinese Medicine*, 2018, 20(06): 179-182.
- [10] Zhang He, Wang Lan, Zhang Min, et al. (2014). Effect of electricity on functional recovery in patients with gynecological laparoscopic surgery [J]. *Chinese Acupuncture*, 2014, 34(03): 273-278.

- [11] Yu Yanhong, Chen Ning. (2016). Observation of the effect of electric needle stimulation against nausea and vomiting after gynecological laparoscopy [J]. *China Maternal and Child Health Research*, 2016, 27(08): 1015-1017.
- [12] Feng Wendong, Guo Huimei, Cao Shuhua. (2016). Effect of thermal moxibustion and acupuncture therapy on gastrointestinal dysfunction after laparoscopy for non-traumatic gynecological acute abdomen [J]. *Chinese TCM Emergency*, 2016, 25(12): 2352-2354.
- [13] Tu Lifang, Chen Changqian. (2020). Effect of needle tone and acupuncture alone on pain visual simulation scoring scale score and interleukin-10, prostaglandin E₂, and endorphin levels in patients after gynecological laparoscopy [J]. *Liaoning Journal of Traditional Chinese Medicine*, 2020, 47(06): 167-169.
- [14] Wang Wenli. (2019). I want Huiping. Eicular decompression for laparoscopic gastrointestinal dysfunction [J]. *Western Traditional Chinese Medicine*, 2019, 32(06): 114-116.
- [15] Wen Lina, Sun Hua. (2017). Effect of ear acupoint pressure combined with early false feeding on gastrointestinal function recovery after gynecological laparoscopy [J]. *World Traditional Chinese Medicine*, 2017, 12(11): 2753-2756.
- [16] Wulina, Yu Jianbo, Gong Lirong. (2017). Effect of earpressing beans on gastrointestinal motility function after gynecoscopy [J]. *Chinese Journal of Integrated Traditional Chinese and Western Medicine Surgery*, 2017, 23(06): 626-629.
- [17] Lin Xuanchen. (2017). Effect of acupoint pressure on nausea, vomiting and analgesic effect after gynecological laparoscopy [J]. *Zhejiang Journal of Integrated Traditional Chinese and Western Medicine*, 2017, 27(02): 144-146.
- [18] Tao Tao, Chen Ting, Yang Aiming, et al. (2017). Effect of ear acupoint pressure on plasma actin in patients after gynecological laparoscopy under general anesthesia [J]. *Chinese Acupuncture*, 2017, 37(02): 171-174.
- [19] Chen Runqing, Huang Jieming, Chen Junyi, et al. (2017). Observation of the effect of gastric descending acupoint application on gastrointestinal function rehabilitation of patients after gynecological laparoscopy [J]. *TCM Guide*, 2017, 23(23): 96-99.
- [20] GuiPing, Ye Shuhua, Xie Yuying, et al. (2020). Effect of selected acupoint injection on gastrointestinal function in patients after gynecological laparoscopy [J]. *Chinese Nursing Journal*, 2020, 55(09): 1376-1380.
- [21] Wan Xiuying. (2019). Application of traditional Chinese medicine hot wrap in patient exhaust after gynecological laparoscopy [J]. *Heilongjiang Traditional Chinese Medicine*, 2019, 48(05): 163 + 166.
- [22] Liu Chunyan, Fang Xiaodan, Wang Tingting, et al. (2019). Observation of the effect of TCM thermal package to restore gastrointestinal function after gynecological laparoscopy [J]. *The Journal of Modern Integrated Traditional Chinese and Western Medicine*, 2019, 28(11): 1210-1213.
- [23] Cai Xiaoshan, Li Xiangping, Lin Zhaoli, et al. (2020). Application of meridian flow injection with traditional Chinese medicine heat package in patients after gynecological laparoscopy [J]. *Hainan Medicine*, 2020, 31(03): 336-339.
- [24] Chang Xiaorong, Liu Mi, Yan Jie, et al. (2013). Study on the mechanism of action and the law of the temperature-pass and temperature-tonic effect of moxibustion [J]. *World Traditional Chinese Medicine*, 2013, 8(08): 875-879.
- [25] Wang Jianrong. Observation on the curative effect of moxibustion on gynecological laparoscopic abdominal distension [J]. *Xinjiang Traditional Chinese Medicine*, 2017, 35(05): 39-40.
- [26] Rao Yun, Yu Ni Si, Cai Fangmin, et al. (2019). Effect of meridian flow injection and selected heat-sensitive moxibustion on gastrointestinal function recovery after gynecological laparoscopy [J]. *Journal of Jiangxi University of Traditional Chinese Medicine*, 2019, 31(04): 58-61.
- [27] Zhang Yan, Hou Cong, Soup, Strontium and Strontium, et al. (2020). Effect of massage manipulation on gastrointestinal function recovery and gastrointestinal hormone levels after gynecological laparoscopy [J]. *Journal of Modern Integrated Traditional Chinese and Western Medicine*, 2020, 29(08): 844-846 + 893.
- [28] Ding Yuxi, Li Shurong. (2016). Effects of acupuncture points and abdominal massage on urinary retention and gastrointestinal dysfunction after gynecological laparoscopy [J]. *Journal of Liaoning University of Traditional Chinese Medicine*, 2016, 18(08): 245-247.
- [29] Fang Yuanzhi, Yang Qianyi, Fan Maggie, et al. (2020). Effect of warm acupuncture and meridian tamping mortar treatment for laparoscopic abdominal distension [J]. *The Journal of Modern Integrated Traditional Chinese and Western Medicine*, 2020, 29(31): 3480-3483.
- [30] Yang Jie, Han Li. (2016). Nursing study of acupuncture massage and traditional Chinese medicine application to relieve gynecological laparoscopic abdominal distension [J]. *Xinjiang Traditional Chinese Medicine*, 2016, 34(06): 36-38.
- [31] Tong Jian, Zhao Xuehan, Wang Fan. (2018). Effect of Chinese medicine hot ironing with ear acupoint pressure on recovery of gastrointestinal function in patients after gynecological laparoscopy [J]. *New TCM*, 2018, 50(06): 206-208.
- [32] Okada Misaki, Itoh Kazunori, Kitakoji Hiroshi, et al. (2019). Mechanism of Electroacupuncture on Postoperative Ileus Induced by Surgical Stress in Rats. *Medical Acupuncture*, 2019, 31(2): 109-115.
- [33] Zheng Yang, Yang Nana, Yang Jingwen, et al. (2020). Effect of the electric needle “Zusanli” and its abdominal acupoint on the intestinal motility of mice with postoperative intestinal paralysis [J]. *Acupuncture in China*, 2020, 40(10): 1097-1102.

- [34] Lu Chao, Du Junying, Fang Jianqiao, et al. (2019). Effect of TEAS combined with wristband compression to prevent nausea and vomiting after laparoscopic cholecystectomy [J]. *Acupuncture in China*, 2019, 39(01): 9-15.
- [35] Ji Xiubo. (2018). Effect of percutaneous acupoint electrical stimulation on nausea and vomiting after gynecological hysteroscopic surgery [J]. *Jilin Traditional Chinese Medicine*, 2018, 38(06): 720-722.