Journal of Clinical and Nursing Research, 2024, Volume 8, Issue 9
http://ojs.bbwpublisher.com/index.php/JCNR
Online ISSN: 2208-3693
Print ISSN: 2208-3685

Progress of Traditional Chinese Medicine Nursing Technology in Rectus Abdominis Diastasis

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Abstract: Rectus abdominis diastasis is a common condition in postpartum women, causing back pain, and in severe cases, it can result in abdominal wall hernias and downward migration of abdominal organs. At present, there is no clearly established optimal non-surgical treatment for rectus abdominis diastasis, but traditional Chinese medicine (TCM) nursing techniques have proven to be an effective intervention for postpartum rectus abdominis separation. This paper comprehensively analyzes the TCM nursing technology as an intervention for postpartum rectus abdominis separation, discusses the shortcomings and prospects of TCM nursing technology, and provides references for further exploring and optimizing the intervention program for postpartum rectus abdominis separation.

Keywords: Rectus abdominis diastasis; Postpartum; Traditional Chinese medicine nursing technology

Online publication: September 26, 2024

1. Introduction

Rectus abdominis diastasis (RAD) refers to the separation of the two sides of the rectus abdominis muscle from the linea alba, which is commonly seen in postpartum women and has an incidence rate of 35–60% in the early postpartum period and up to 100% in the late pregnancy and childbirth period [1,2]. This may be related to the continuous expansion of the abdomen of pregnant women during pregnancy and the contraction of the uterus during childbirth, which can cause damage to the abdominal muscles and fibers. While the damage may be self-healing, it is generally impossible to restore to the pre-pregnancy stage [3]. RAD can cause body image damage and back pain in postpartum women [3,4], and serious cases can lead to irreversible diseases such as abdominal hernia, abdominal organ descent, and pelvic floor dysfunction [5], causing serious psychological and physical trauma to the postpartum women [6,7]. Therefore, it is essential to raise the public's awareness of RAD and

strengthen its prevention and management. Currently, clinical practice often uses abdominal muscle training or electrical stimulation to treat these patients. Still, due to the individuality of postpartum women, these treatment methods cannot be widely applied [8]. Therefore, treatments with a high acceptance rate, easy operation, and fewer side effects are necessary, and traditional Chinese medicine (TCM) nursing techniques have obvious advantages in the rehabilitation care of women with RAD [9]. This article aims to review the current status of TCM nursing techniques in treating RAD, thereby enriching its intervention plan.

2. Overview of rectus abdominis diastasis

In 2021, the European Hernia Society introduced the "Management Guidelines for Rectus Abdominis Diastasis," defining rectus abdominis diastasis as an abnormal separation of the rectus abdominis muscles on both sides caused by thinning and widening, with the linea alba widening exceeding 2.0 cm [8]. The primary assessment methods for diastasis recti include finger measurement, ruler measurement, and ultrasound measurement, which are used to quantitatively determine the severity of diastasis recti [10-12]. Sperstad *et al.* reported that among primiparous women, the incidence of diastasis recti was 33.1% at 21 weeks gestation, 60.0% at 6 weeks postpartum, 45.5% at 6 months postpartum, and 32.6% at 12 months postpartum [13]. This indicates that RAD is a common postpartum complication in women and has the potential for spontaneous recovery. Furthermore, advanced maternal age, multiple pregnancies, macrosomia (large babies), obesity, history of cesarean section delivery, and diabetes are identified as high-risk factors for diastasis recti and may impact its natural resolution process to varying degrees leading to pathological diastasis recti [4,13-15]. Therefore, early screening and intervention in high-risk patients with diastasis recti can promote recovery and prevent pathological occurrences [4]. In addition to these findings from Europe's guidelines on managing this condition after childbirth, the Chinese Association of Aesthetic and Plastic Surgery published an "Expert Consensus on Diagnosis and Treatment of Postpartum Rectus Abdominis Diastasis" in which non-surgical interventions were proposed including expectant treatment, electrical stimulation therapy, exercise therapy, and traditional Chinese medicine therapy [3]. Among them, electrical stimulation therapy has certain limitations regarding population [16], while the efficacy of exercise therapy remains controversial [17]. Experts have pointed out that using traditional Chinese medicine nursing techniques to intervene in cases involving diastasis recti can yield better clinical application effects than other non-surgical treatment plans [3]. Given that research related to RAD started relatively late compared to other conditions, prevention strategies and care protocols for this condition must be further developed.

3. Rectus abdominis diastasis in traditional Chinese medicine

Rectus abdominis diastasis belongs to the category of "muscle" in modern medicine, without the separation of the rectus in ancient books of TCM disease. *Huangdi Neijing* (*Yellow Emperor's Inner Classic*) recorded "Muscles are rigid," pointing out that human muscles play the function of tendons [18]. Rectus abdominis diastasis, characterized as a "muscles injury," is one of the diseases of TCM. In "Dictionary of Traditional Chinese Medicine," muscle injury refers to damage to the skin, subcutaneous fascia, ligaments, and other soft tissues, such as muscles, tendons, and synovial sheaths, caused by acute trauma or chronic strain [19]. Traditional Chinese medicine has always emphasized syndrome differentiation and treatment, but there is a lack of relevant syndrome-type research on the separation of rectus abdominis muscle. At present, there is a consensus that

the separation of rectus abdominis muscle is closely related to postpartum low back pain and pelvic floor dysfunction [20], and the TCM syndrome differentiation type of the two is mainly kidney qi deficiency syndrome. This is in line with the physical characteristics of postpartum women who are "prone to blood loss, blood stasis and internal resistance, and more deficiency and cold" [21,22]. Therefore, TCM nursing techniques are considered to focus on toning the kidney and qi, such as manual massage of the kidney area and abdomen, which can warm the kidney and tone essence and treat intractable diseases. It also has miraculous effects on the intervention of postpartum diseases such as rectus abdominis separation [23].

4. Progress in the application of traditional Chinese medicine nursing techniques in the separation of rectus abdominis

Traditional Chinese medicine nursing techniques, including acupuncture, moxibustion, cupping, acupressure, etc., have theoretical advantages of holistic and dialectic views and unique and convenient practical characteristics, playing an important role in postpartum rehabilitation [9].

4.1. Acupoint massage

It is recorded in *Golden Mirror of Medicine: Essentials of Bone-Setting* that massage is the main method for the treatment of tendon injury, which has the functions of relaxing tendons, activating collaterals, and releasing adhesions [18]. Abdominal massage is to massage the abdomen according to the meridians of the human body and stimulate the abdominal acupoints to promote local and overall health [24]. Studies have shown that TCM massage in the early postpartum period can accelerate blood circulation, relieve muscle fatigue, and increase ligament elasticity, improving muscle working efficiency and endurance, and finally achieving the purpose of easing the separation of the rectus abdominis after delivery and promoting the overall recovery after delivery [25]. Wei *et al.* [26] carried out seven-step massage methods including abdominal circular rubbing, abdominal pushing, kidney area massage, abdominal muscle pinching, point-rubbing, point-pressing, and point-acupoint massage on postpartum patients with separated rectus abdominis on the basis of electrical stimulation. The results showed that abdominal massage could effectively make up for the deficiency of electrical stimulation, dredge meridians, and enhance local blood circulation, providing contraction space for loose skin and muscles after delivery. The study results of Zhao [27] showed that the effect of abdominal massage was better than that of electric stimulation of rectus abdominis muscle, suggesting that abdominal massage can independently promote the recovery of rectus abdominis muscle. In addition, Luo [19] used a four-step massage method to intervene in patients with rectus abdominis separation, including acupoint, the release of abdominal muscle, adjustment of costal arch angle, and occlusion of fascia. The results showed that massage was beneficial to strengthen muscle groups and promote muscle retraction, and the distance between rectus abdominis was significantly shortened compared with that before treatment ($P < 0.05$). There have also been foreign studies on the use of visceral relaxation in the treatment of rectus abdominis separation, which effectively shortened the distance between rectus abdominals and improved bladder and gastrointestinal functions [28]. It can be seen that abdominal massage can effectively improve postpartum low back pain and repair rectus abdominis separation. However, the current clinical application of massage remains limited, with the long-term effects of massage on postpartum recovery still unclear. Additionally, the operational standards for abdominal massage lack consistency, and existing research findings are not easily translatable into clinical practice.

4.2. Acupuncture therapy

Huangdi Neijing (*Yellow Emperor's Inner Classic*), combined with the nine acupuncture points described in the *Neijing*, summarizes a set of basic theories and dialectics for the treatment of meridian tendon diseases. Acupuncture and moxibustion in TCM can often achieve unexpected results in the treatment of meridian tendon diseases [29]. Acupuncture combines electrical stimulation of the abdominal muscles, helps to strengthen muscle tone, and improves postpartum abdominal muscle mechanics balance adjustment. According to the treatment principle of "invigorating spleen, reinforcing liver and kidney," Zhong *et al.* [30] used bilateral symmetrical acupoints based on conception vessel, stomach meridian, spleen meridian, and belt vessel for four weeks. The results showed that electroacupuncture treatment of postpartum rectus abdominis separation could effectively promote the contraction of rectus abdominis, transverse abdominis, and oblique abdominis, enhance muscle strength, and improve the healing rate of rectus abdominis separation. Liao *et al.* [31] found that the recovery of patients with rectus abdominis separation was better by using acupuncture combined with massage at Zhongwan, Xiawan, Qihai, bilateral Tianshu, Guanmen, Shuidao, Daheng, and other acupoints, with an effective rate as high as 94%. Another study [19] believed that the treatment of "electroacupuncture before massage" can effectively activate muscles through low-frequency stimulation of corresponding acupoints so that patients can better relax muscles and cooperate with manual massage, and achieve twice the result with half the effort. In short, acupuncture combined with electrical stimulation of abdominal core muscle group can improve the elasticity and tension of abdominal muscle and has a good application effect. In the future, the follow-up time needs to be extended to observe the long-term effect of electroacupuncture. However, the accuracy of acupoint positioning during acupuncture will directly affect the curative effect. Therefore, it is necessary to strengthen the training of nursing staff and pay attention to patients' reactions at all times to avoid ineffective acupuncture.

4.3. Moxibustion therapy

According to the *Shuowen Jiezi*, the phrase "cutting, contracting, and unsolved knot" indicates that moxibustion is a commonly used therapeutic method. It functions to reinforce the body's energy, dredge the meridians, activate blood circulation, and provide various other healing benefits [32]. According to the survey, reinforcement moxibustion helps to improve blood circulation, reshape the abdominal muscles, and enhance stability [32]. Imitation bioelectricity stimulation treatment of 90 patients with postpartum rectus separation warmed the moxibustion belt put around the rectus part of patients. The results showed that, compared to independent training methods, the rectus abdominis separation distance in the intervention group was reduced by 6 mm [33]. Nong *et al.* [34] also drew a similar conclusion, suggesting that the warm stimulation of the warm moxibustion belt can effectively expand the local blood vessels around the abdomen, improve microcirculation and tissue edema, and play the role of warming meridians and dredging collaterals, promoting blood circulation and removing stasis, dispelling cold and dehumidification, and supplementing qi and blood [35]. In addition, Guo and Jiang [36] applied thunder-fire moxibustion combined with manual massage to 160 cases of puerperas with rectus abdominis separation. After treatment, the distance of rectus abdominis separation and the degree of low back pain in the two groups were lower than those before treatment and better than that of manual massage alone. Among them, the main components of fire moxibustion are medicinal powders such as frankincense, agilawood, and musk. Moxa sticks have strong drug penetration after burning, and the operation is relatively simple by using a special warm moxibustion box [37,38]. Above all, warm moxibustion belt and thunder-fire moxibustion are

moxibustion therapies that are characterized by simple operation and good treatment effect; not only can they enhance muscle support strength but also facilitate partial fat decomposition, so as to improve rectus separation and reshape the abdomen form, which is worth clinical promotion [39]. However, the distance and duration of moxibustion, selection of acupoints, treatment course, and outcome indicators must take into account the patient's skin reactions and subjective sensations as equally important factors. Therefore, standardizing the operational protocol for clinical application is essential to prevent burns and other adverse events.

4.4. Cupping therapy

Cupping therapy enhances the diagnostic and treatment system for "muscle injury" and offers valuable insights for addressing tendon injuries [40]. Currently, the use of cupping methods for treating rectus abdominis diastasis is limited. It is important for women to recognize that rectus separation may be associated with kidney deficiency. Employing cupping therapy judiciously, incorporating techniques such as pushing cupping cans, can help reinforce and reduce symptoms effectively [41]. Tan *et al.* [42] used the pushing cupping method in 60 patients with rectus separation, the control group used biofeedback electrical stimulation and abdominal breathing training, and the intervention group also applied the pushing cupping method to the abdomen and chest and waist fascia. The results showed that the intervention group and control group effectiveness were 96.67% and 70% respectively, suggesting that the combined pushing cupping method has better curative effects. In addition, Zhao and Ma [43] performed cupping intervention in obese patients and found that the curative effect is distinct, restoring the patients' bodies. The pushing cupping method mentioned above is a collection of cupping, scraping, massage, and other methods. Moving and warming the skin can promote the balance and coordination of the skin and flesh, and effectively restore the maternal figure, which is worthy of clinical promotion. However, pushing cupping may bring pain, redness, and other discomfort to patients, so the implementation should focus on and respect the subjective feelings of patients. In addition, in applying the pushing cupping method, mastering factors such as speed, frequency, force intensity, and direction is crucial to effectively enhance its role in the prevention and treatment of diseases [44]. Therefore, future research needs to control the homogeneity of intervention measures and the meaning of the research evidence promotion.

5. TCM nursing technology application and prospects

TCM nursing technology refers to the traditional therapy of traditional Chinese medicine that was applied to nursing work, including acupuncture, moxibustion, cupping therapy, acupuncture point massage, etc., which plays a vital role in reducing the patient's pain and promoting rehabilitation [9]. Most studies have used abdominal massage to intervene in rectus abdominis separation, mainly including abdominal circular rubbing, abdominal massage and push, kidney area rubbing, abdominal muscle pinching, and acupoint kneading, which play an overall and local role in promoting postpartum rehabilitation [25,26]. The acupuncture and moxibustion method adheres to the principle of "balancing yin and yang" and the law of "regulating vital energy circulation and bodily functions." It involves selecting points on the waist and abdomen, such as Zhongwan, Xiawan, Qihai, Daheng, Shenque, Daimai, and Zusanli, to stimulate the abdominal core muscle group, promote the recovery of the rectus abdominis muscle, and address kidney qi deficiency in postpartum women [19]. However, the current practice of using acupuncture and moxibustion for rectus abdominis diastasis lacks standardization in acupoint selection and does not specify the criteria for choosing these points, leading to variability in

research quality. Research on the application of cupping therapy for rectus abdominis separation is limited, with Tan's study being one of the few focusing on the pushing cupping method for this condition. This may be because cupping therapy is primarily known for its reducing effects. Future studies could explore the use of additional agents, such as ginger or chili liquids, to enhance the reinforcing effects of cupping therapy. In *Lingshu: Jiuzhenlun* (*Miraculous Pivot: Nine Needles*) recorded that "excessive physical labor causes disease born in the tendon that can be cured by warm moxibustion," this means that diseases mostly occur in tendons in people who do excessive physical work, and warm moxibustion should be used in treatment [29]. The warm moxibustion method has shown some effectiveness in treating muscle injury diseases, but there is a lack of research confirming its benefits. Therefore, future research should focus on diversifying and standardizing TCM nursing techniques, as well as enriching rehabilitation methods for rectus abdominis diastasis.

The above studies show that TCM nursing technology has a good clinical effect on postpartum rectus abdominis separation. However, due to the lack of an international unified evaluation method of rectus abdominis separation and the lack of expert consensus on the best measurement tool, position, and posture, it is difficult to compare different studies, and the development of rectus abdominis separation research is limited [8]. In addition, previous studies mainly refer to the method of ruler measurement to evaluate the rectus separation distance, in which the reliability needs to be tested. Ultrasonic measurement is the gold standard for the diagnosis of rectus separation, future research can focus on more precise, effective methods of ultrasonic measurement evaluation of rectus separation distance, improving the quality of research [45]. Due to the possibility of self-healing of diastasis rectus abdominis, the public has insufficient awareness of its harm, leading to low attention to the disease by pregnant women and medical staff [15]. Therefore, it is necessary to include rectus abdominis separation assessment in the postpartum routine assessment, promote simple and feasible TCM nursing techniques for patients with rectus abdominis separation, and better popularize TCM nursing knowledge. Chinese and Western medicine nursing can improve the rectus separation and promote the overall rehabilitation of postpartum women [46]. However, at present, TCM nursing technology is not widely used in postpartum wards, with issues in personnel training and standardization of operation technology [9]. It is necessary to strengthen professional training and cultivate high-level TCM nursing talents, increasing TCM theory and clinical practice experience reserve [47]. In addition, strict control of TCM nursing technique practice standards is important to strengthen the management of nursing quality of TCM, and to further expand and promote the clinical application of TCM nursing technique [47].

6. Conclusion

TCM nursing techniques such as massage, acupuncture, and cupping therapy can invigorate circulation, remove stasis and analgesic effects, improve blood circulation and muscle contraction function, enhance the flexibility of the muscles and ligaments and contraction force, and promote the rectus functional recovery. In clinical practice, we should dialectically analyze postpartum rectus abdominis diastasis, explore personalized and precise TCM nursing plans, and give full play to the unique advantages of TCM nursing. However, there are many deficiencies in the related research of TCM nursing technology applied in rectus abdominis separation, both in the quality control of research and in the transformation of clinical practice. It is necessary to carry out high-quality empirical research and the summary of evidence-based medicine evidence to constantly enrich and improve the basis for the application of TCM nursing technology in rectus abdominis separation.

Disclosure statement

The authors declare no conflict of interest.

References

[1] Gitta S, Magyar Z, Tardi P, et al., 2017, Prevalence, Potential Risk Factors and Sequelae of Diastasis Recti Abdominis. Orv Hetil, 158(12): 454–460. https://doi.org/10.1556/650.2017.30703

[2] Sperstad JB, Tennfjord MK, Hilde G, et al., 2016, Diastasis Recti Abdominis During Pregnancy and 12 months After Childbirth: Prevalence, Risk Factors and Report of Lumbopelvic Pain. Br J Sports Med, 50(17): 1092–1096. https://doi.org/10.1136/bjsports-2016-096065

[3] Sun XL, Li H, Su YY, et al., 2021, Expert Consensus on Diagnosis and Treatment of Postpartum Diastasis Rectus Abdominis. Chin J Clin Ob & Gyn, 22(2): 220–221.

[4] Li L, Cui JH, Ouyang LP, et al., 2021, The Related Risk Factors for Postpartum Rectus Separation Analysis. Acta Scientiarum Naturalium Universitatis Sunyatseni (Medical Science Edition), 42(5): 790–795. https://qikan.cqvip.com/Qikan/Article/Detail?id=7105693602

[5] Qiu XJ, Xing ZT, Yan L, et al., 2020, Progress of Diagnosis and Treatment of Postpartum Rectus Separation. Academic Journal of Chinese Pla Medical School, 41(10): 1042–1045.

[6] Xie L, Wei HT, Yang J, et al., 2021, Postpartum Rectus Separate Clinical Research Progress. Chinese Journal of Rehabilitation, 36(2): 125–128.

[7] Vesting S, Olsen MF, Gutke A, et al., 2021, Clinical Assessment of Pelvic Floor and Abdominal Muscles 3 Months Postpartum: An Inter-Rater Reliability Study. BMJ Open, 11(9): 49–82. https://doi.org/10.1136/bmjopen-2021-049082

[8] Hernandez-Granados P, Henriksen NA, Berrevoet F, et al., 2021, European Hernia Society Guidelines on Management of Rectus Diastasis. Br J Surg, 108(10): 1189–1191. https://doi.org/10.1093/bjs/znab128

[9] Wang JJ, Yang YW, Wang LJ, et al., 2009, Investigation and Analysis of Clinical Application Status of TCM Nursing Operation Technology. Chinese Journal of Nursing, 44(11): 1020–1022.

[10] Ranney B, 1990, Diastasis Recti and Umbilical Hernia Causes, Recognition and Repair. S D J Med, 43(10): 5–8. https://pubmed.ncbi.nlm.nih.gov/2149203

[11] Beer GM, Schuster A, Seifert B, et al., 2009, The Normal Width of the Linea Alba in Nulliparous Women. Clin Anat, 22(6): 706–711. https://doi.org/10.1002/ca.20836

[12] Rath AM, Attali P, Dumas JL, et al., 1996, The Abdominal Linea Alba: An Anatomo-Radiologic and Biomechanical Study. Surg Radiol Anat, 17(4): 281–288. https://doi.org/10.1007/BF01627606

[13] Cavalli M, Aiolfi A, Bruni PG, et al., 2021, Prevalence and Risk Factors for Diastasis Recti Abdominis: A Review and Proposal of a New Anatomical Variation. Hernia, (25): 883–890. https://doi.org/10.1007/s10029-021-02468-8

[14] da Mota PGF, Pascoal AGBA, Carita AIAD, et al., 2014, Prevalence and Risk Factors of Diastasis Recti Abdominis from Late Pregnancy to 6 Months Postpartum, and Relationship with Lumbopelvic Pain. Man Ther, 20(1): 200–205. https://doi.org/10.1016/j.math.2014.09.002

[15] Wu L, Gu Y, Gu Y, et al., 2020, Diastasis Recti Abdominis in Adult Women Based on Abdominal Computed Tomography Imaging: Prevalence, Risk Factors and Its Impact on Life. Journal of Clinical Nursing, 30(3): 518–527. https://doi.org/10.1111/jocn.15568

[16] Kamel DM, Yousif AM, 2017, Neuromuscular Electrical Stimulation and Strength Recovery of Postnatal Diastasis

Recti Abdominis Muscles. Ann Rehabil Med, 41(3): 465–474. https://doi.org/10.5535/arm.2017.41.3.465

[17] Benjamin DR, van de Water ATM, Peiris CL, 2013, Effects of Exercise on Rectus Abdominis Diastasis Muscle in the Antenatal and Postnatal Periods: A Systematic Review. Physiotherapy, 100(1): 1–8. https://doi.org/10.1016/j.physio.2013.08.005

[18] Liu DY, 2019, "Jin" Theory of Traditional Chinese Medicine Research, dissertation, China's Traditional Chinese Medicine Academy of Sciences.

[19] Luo H, 2020, Clinical Effect of Acupuncture Combined with Acupuncture in the Treatment of Postpartum Rectus Abdominis Separation with Low Back Pain of Qi Deficiency and Blood Stasis Type, dissertation, Fujian University of Traditional Chinese Medicine.

[20] Benjamin DR, Frawley HC, Shields N, et al., 2018, Relationship Between Rectus Abdominis Diastasis Muscle (RADm) and Musculoskeletal Dysfunctions, Pain and Quality of Life: A Systematic Review. Physiotherapy, 105(1): 24–34. https://doi.org/10.1016/j.physio.2018.07.002

[21] Tang H, Zhang Y, You LJ, et al., 2020, Pelvic Floor Rehabilitation Therapy Apparatus Combined with Syndrome Differentiation of Traditional Chinese Medicine Treatment of Postpartum Pelvic Floor Functional Disorder of Clinical Research. Progress in Modern Biomedicine, 20(12): 2346–2350.

[22] Liu R, Huang L, He L, et al., 2020, Postpartum Nonspecific Low Back Pain Syndrome Characteristics and Physical Law the Study of Traditional Chinese Medicine. Clinical Journal of Chinese Medicine, 12(31): 73–75. https://qikan.cqvip.com/Qikan/Article/Detail?id=7103697347

[23] Jing FJ, 2008, Kidney Deficiency of Massage Literature Research, dissertation, Shandong University of Chinese Medicine.

[24] Xu DD, Gu RX, Zhou J, et al., 2021, Clinical Observation of Pelvic Floor Rehabilitation Training Combined with Tai Chi Massage in the Treatment of Postpartum Stress Urinary Incontinence. Lishizhen Medicine and Materia Medica Research, 32(6): 1412–1414.

[25] Deng WT, Yang TY, 2021, Effect Analysis of Massage Therapy on Postpartum Diastasis Rectus Abdominis. Traditional Chinese Medicine Rehabilitation, 12(16): 4–5, 8.

[26] Wei RM, Xiao X, Lv LQ, et al., 2016, Study on the Effect of Pelvic Floor Neuromuscular Electrical Stimulation Combined with Rehabilitation Massage on Promoting Postpartum Rectus Abdominis Separation. Maternal and Child Health Care in China, 31(21): 4361–4364.

[27] Zhao L, 2021, Clinical Observation of Different Interventions in the Treatment of Postpartum Rectus Abdominis Diastasis, dissertation, Zunyi Medical University.

[28] Kirk B, Elliott-Burke T, 2021, The Effect of Visceral Manipulation on Diastasis Recti Abdominis (RAD): A Case Series. J Bodyw Mov Ther, 7(26): 471–480. https://doi.org/10.1016/j.jbmt.2020.06.007

[29] Xiao Y, 2016, Ancient Nine Needles to Treat Diseases by the Reinforcement of Traditional Chinese Medicine, Theory Basic and Clinical Research, Compilation of Academic Seminar Papers on Theoretical Research and Application of Acupuncture and Treatment in 2016 Academic Committee of Chinese Society of Acupuncture and Moxibustion, 75–82.

[30] Zhong H, Zhou YT, Zeng MQ, et al., 2023, Postpartum Women Rectus Separation of High Frequency Ultrasound Assessment and Acupuncture Cupping Treatment Effect Analysis. Smart Healthcare, 9(11): 175–179.

[31] Liao BD, Liu YE, Lin LP, et al., 2018, Therapeutic Effect of Electroacupuncture Combined with Massage in the Treatment of Postpartum Diastasis Rectus Abdominis. Practical Clinical Journal of Integrated Traditional Chinese and Western Medicine, 18(7): 85–86.

[32] Cao SQ, Dong BQ, Lin XX, et al., 2019, The Reinforcement Moxibustion Combined Core Stability Training on Chronic Nonspecific Low Back Pain, Function and the Influence of Muscle Endurance. Chinese Archives of

Traditional Chinese Medicine, 37(4): 911–914.

[33] Xu J, 2019, Application Effect of Bioelectrical Stimulation Combined with Warm Moxibustion Belt in Postpartum Patients with Rectus Abdominis Separation. Chinese Clinical Nursing, 11(5): 402–404. https://qikan.cqvip.com/Qikan/Article/Detail?id=7100064831

[34] Nong XH, Xu CL, Lei ZW, 2020, Effect of Bioelectrical Stimulation Combined with Warm Moxibustion Belt on Postpartum Rectus Abdominis Separation. Contemporary Medical Symposium, 18(12): 87–88. https://qikan.cqvip.com/Qikan/Article/Detail?id=HS724622019006007

[35] Zhang JB, Wang LL, Hu L, et al., 2012, Effect of Moxibustion on Warming and Dredging and Theory of Reinforcing and Reducing. Journal of Basic Chinese Medicine, 18(7): 763–768.

[36] Guo LS, Jiang DX, 2022, Thunder Fire Moxibustion Combined Massage on the Curative Effect of Postpartum Rectus Separation Analysis. China & Foreign Medical Treatment, 9(29): 180–184. https://qikan.cqvip.com/Qikan/Article/Detail?id=7108971448

[37] Lan XM, 2020, Neuromuscular Electrical Stimulation Combined Thunder Fire Moxibustion in Treating Postpartum Abdominal Shape Recovery Application Effect. Guangxi Medical Journal, 42(14): 1905–1908. https://qikan.cqvip.com/Qikan/Article/Detail?id=7102546483

[38] Zhang HY, Liu LY, 2016, Scott Thunder Fire Moxibustion Study Elements of the Amount of Manipulation in the Treatment. Journal of Clinical Acupuncture and Moxibustion, 32(6): 92–95.

[39] Chang XR, Liu M, Yan J, et al., 2013, The Mechanism and Principles of Moxibustion WenTong Removing Effect Research. World Chinese Medicine, 8(8): 875–879.

[40] Du X, Chen ZL, 2019, Try to Talk About "Jin Like" and Degree of Muscle Differentiation of Cupping Therapy. Chinese Acupuncture & Moxibustion, 39(5): 541–544. https://doi.org/10.13703/j.0255-2930.2019.05.022

[41] Hong SH, Wu F, Lu X, et al., 2011, Cupping Therapy Mechanism Study. Chinese Acupuncture & Moxibustion, 31(10): 932–934. https://doi.org/10.13703/j.0255-2930.2011.10.028

[42] Tan LS, Duan XY, Sun XN, et al., 2021, Travel Pot Method Combined Electrical Stimulation in Postpartum Rectus Separation Repair Application Study. Journal of Liaoning University of Traditional Chinese Medicine, 23(12): 166–169. https://kns.cnki.net/kcms/detail/21.1543.r.20211011.0828.002.html

[43] Zhao BB, Ma ZH, 2015, Traveling Can Cooperate Acupuncture Point of Embedded Wire in the Treatment of Simple Obesity Research. Journal of Clinical Acupuncture and Moxibustion, 31(3): 47–49.

[44] Chen B, Chen Z L, Guo Y, et al., 2010, Research on Cupping in Cupping Therapy—Cupping in Three Parts of Heaven, Human and Earth. Chinese Acupuncture & Moxibustion, 30(9): 777–780.

[45] Beamish N, Green N, Nieuwold E, et al., 2019, Differences in Linea Alba Stiffness and Linea Alba Distortion Between Women with and Without Diastasis Recti Abdominis: The Impact of Measurement Site and Task. J Orthop Sports Phys Ther, 49(9): 656–665. https://doi.org/10.2519/jospt.2019.8543

[46] Yang X, Chen B, Xu XX, et al., 2019, Thinking and Outlook on the Cultivation of TCM Nursing Specialty Talents. Journal of Traditional Chinese Medicine Management, 27(23): 41–42. https://doi.org/10.16690/j.cnki.1007-9203.2019.23.018

[47] Huang XY, Zhang Y, Feng Y, et al., 2018, Application of Ke Model in Effect Evaluation of TCM Nursing Training in Hangzhou. Chinese Journal of Nursing, 53(1): 71–75.