Clinical Research Progress of TCM Treatment of Postpartum Sacroiliac Joint Misalignment

Falian Pan¹, Wangzhu Xie¹, Meng Wang²,*

¹Guangxi University of Chinese Medicine, Nanning, Guangxi, China.
²Ruikang Hospital affiliated to Guangxi University of Chinese Medicine, Nanning, Guangxi, China.

Abstract

Sacroiliac joint misalignment (SJM), also known as sacroiliac joint subluxation, sacroiliac joint disorder and sacroiliac joint injury, this disease often occurs in young and middle-aged women after childbirth, and is a common cause of postpartum low back pain. Postpartum sacroiliac joint misalignment (PSJM) is a disease caused by aseptic inflammation such as congestion, edema, adhesion, etc. due to postpartum sacroiliac joint tissue changes, which can cause persistent low back pain and lower limb dysfunction. About 76.7% of sacroiliac joint pain is caused by the lesions of bone structure and tissue. At present, the conservative treatment of PSJM in China has a remarkable curative effect, mainly including massage reduction, acupuncture and comprehensive treatment with various methods. This paper analyzes the clinical research data of postpartum sacroiliac joint misalignment from the aspects of acupuncture, massage reduction, traditional Chinese medicine, etc., in order to provide theoretical basis and new research ideas for the study of traditional Chinese medicine treatment of bone and joint diseases.

Keywords

TCM Treatment, Postpartum Diseases, Sacroiliac Joint misalignment

1. Introduction

The stability of the anatomical structure is closely related to the occurrence of the disease. For example, the structural disorder of the cervical vertebrae in cervical disease can cause cervical heart syndrome [1], dizziness and migraine etc [2]. Staggered sacroiliac joints can also cause abnormal menstruation in women, lumbosacral buttock pain, women's uterine disease and other obstetrics and gynecology diseases [3]. Lumbosacral buttock pain is a common symptom during pregnancy and postpartum. The pain is often attributed to pelvic joint disorders caused by fetal development and uterine expansion, and usually resolves after delivery [4]. Postpartum sacroiliac joint misalignment a disease caused by the change of postpartum pelvic tissue structure and aseptic inflammation such as congestion, edema, and adhesion, resulting in persistent low back pain and lower extremity dysfunction. The sacroiliac joint pain caused by tissue lesions accounts for about 76.7% [5].

2. Pathogenesis of modern medicine

Maternal weight gain during pregnancy, postural changes, increased abdominal and intrauterine pressure, laxity of the spine and pelvic structures, mechanical pelvic pressure during labor during fetal descent, especially in the case of vaginal delivery and macrosomia, the symphysis pubis and Laxity or weakness of the lateral ligaments of the iliac capsular joint [4], resulting in postpartum sacroiliac joint misalignment. According to statistics, sacroiliac
joint pain accounts for 15-30% of chronic low back pain in the general population, and its risk factors include obesity, mild trauma such as jogging, pregnancy, lumbar fusion, scoliosis, difference in leg length, abnormal gait, etc. Attributable to posterior extra-articular factors, such as ligament or muscle injury, terminal lesions, or intra-articular factors [6]. Thienpont E [7] pointed out that during pregnancy and breastfeeding, increased relaxin levels in pregnant women relax the lateral ligaments of the pubic symphysis and iliac capsular joint, associated weight gain and lumbar lordosis leading to increased pressure on the sacrum, and higher levels of prolactin can lead to osteopenia. Pregnancy is generally considered to be the extra-articular pathological cause of sacroiliac joint pain, but scholar Damen L [8] found that the increase in sacroiliac joint laxity in pregnant women during pregnancy is not directly related to pelvic pain, and the asymmetry of pelvic pain and sacroiliac joints during pregnancy. It is the persistence of this dislocation that is the main cause of lumbosacral pain. Some scholars believe that “violence” added to any joint can cause some ligament damage and joint movement. A moving joint can strain a portion of the stretched ligaments, and their elasticity may interlock the articular surfaces in an unbalanced position [9].

3. TCM etiology and pathogenesis

Postpartum sacroiliac joint misalignment sutures belong to the “arthralgia syndrome” and “lumbago” in traditional Chinese medicine. After childbirth, women are deficient in all the meridians, and the meridians and collaterals are affected by exogenous, internal injury or contusion, resulting in poor circulation of qi and blood, or loss of nourishing, blocking can cause pain and cause disease, manifested as meridian block or meridian dystrophy. As stated in “Su Wen·Atrophy Lun”: “Zongjin is mainly used to tie the bones and benefit the organs”. Therefore, the normal physiological state of the sacroiliac joint is that the tendons and bones perform their respective duties, the bones are straight and the tendons are soft, and a dynamic balance is maintained.

4. The status of PSJM treatment with TCM

At present, the treatment of postpartum sacroiliac joint misalignment is mainly massage reduction and acupuncture. The author inquired about the traditional Chinese medicine treatment of the postpartum sacroiliac joint, and reviewed it from the aspects of acupuncture, massage, and traditional Chinese medicine.

4.1 Manipulative therapy alone

Manual reduction is the main treatment method for this disease. It can adjust the anterior and posterior dislocation of the sacroiliac joint, restore the static stability system of the sacroiliac joint, and release the relevant muscles and ligaments to improve the mechanical properties of the muscles and ligaments, and restore the sacroiliac joints. The dynamic stability of the joint [10]. Manipulative therapy includes release manipulation and restoration manipulation. Before performing the sacroiliac joint misalignment reduction, determine the anterior and posterior dislocation, and then implement the corresponding reduction manipulation. The study found that the anterior malocclusion is commonly used with knee flexion and hip reduction, while the posterior malocclusion is commonly used, single hip hyperextension and compression method [11] [12]. Yang Liuzhong [13] successfully restored 42 cases of postpartum sacroiliac joint misalignment patients with the same manipulation, of which 25 cases were successfully restored by one manipulation, 10 cases were successfully restored by two manipulations, and 7 cases were cured by three manipulations combined with external washing of traditional Chinese medicine, the study suggests that the correct diagnosis and operation method are related to the success of the restoration, and the wrong diagnosis and operation may aggravate the local injury and make the condition repeated or aggravated. Li Chengguo et al. [14] proposed to release the lumbar bladder meridian on the affected side, the upper edge of the iliac crest, the iliac lumbar triangle and other sacral spinal muscle attachment areas and the buttock muscles first, and then release the spastic and adhered muscles in the lumbosacral region to achieve the purpose of regenerating blood stasis and dredging the meridians and tendons, adheres to the concept of regulating the tendons first and then restoring them, the so-called “bones are straight and tendons are soft” and “tendons are soft and flesh is loose”.

It is worth noting that Ning Yanhui et al. [15] applied fixed-point rotational reduction in different directions in the treatment of postpartum left and right subluxation of the sacroiliac joint. The feature of this method is to use the force opposite to the injury mechanism on the basis of the principle of self-rotation and leverage to reset the staggered joints, and to release the relevant muscles and ligaments to improve the mechanical properties of the muscles and ligaments and restore the power of the sacroiliac joint. Sexually stable. Zhang Bo et al. [16] used three small fixed-point chiropractic manipulations to determine the type of wrong suture through chiropractic diagnosis, and carried out targeted correction and reduction manipulations with a light, accurate and safe “small angle, small force,
and small amplitude” manipulation, which was compared with conventional manipulation therapy. In comparison, the JOA score and VAS score of the treatment group were significantly better than those of the control group (P<0.05), and the total effective rate of the treatment group was significantly higher than that of the control group (P<0.05). Huang Qin et al. [17] found through clinical research that the four-step frog-pulling method has a good effect on the treatment of postpartum sacroiliac joint misalignment. The mechanical stability system, that is, the statically stable tissue mainly includes the complete pelvic bone and the internal ligament structure of the pelvis; the soft tissue structure of the sacroiliac joint is released, and the dynamic stability system of the sacroiliac joint is restored, that is, the dynamic stable tissue mainly refers to the sacroiliac joint. The muscles around the iliac joint and its fascia.

There are also doctors who think that it is not necessary to distinguish the type of dislocation of the sacroiliac joint before manual reduction therapy. Hua Haochang [18] used the four-finger push or rolling method on the lower waist when manipulating tendons, and then applied the method on the posterior superior iliac spine. Below, the inner and upper edge of the sciatic foramen, the lower edge of the piriformis muscle and the tensor fascia lata muscle are plucked at the pain points, and finally the reduction is performed, and the assistant is instructed to continue to pull the affected lower limb. Lateral lower extremities for back pull. Zhong Jianan et al. [19] directly used fixed-point rotational manipulation to treat postpartum sacroiliac joint misalignment, and the total effective rate reached 100%. This method mainly uses its own rotation and lever principle to achieve good release of muscle and ligament, and to improve the mechanical properties of disease-related muscles and ligament tissue, so as to restore the dynamic stability of the sacroiliac joint. A good improvement in sleep quality indicators was also obtained. Ma Youmeng et al. [20] used the adductor muscle pinch method to treat postpartum sacroiliac joint misalignment. The total effective rate was 100%. First, find the tense and painful part of the adductor muscle on the inner thigh of the affected side, and the operator alternately pinch with both hands to eliminate it. Muscle tension, the adductor muscle tension and the coordination of the pelvis and lower limbs can be restored to normal, so that the sacroiliac joint misalignment can be effectively treated. In the treatment of postpartum sacroiliac joint misalignment, Chen Yongfeng et al. [21] mainly based on traditional massage, starting from the theory of the twelve meridians and tendons, and combining with Zhuang medicine’s “focus detection technique” and “focus elimination technique”. Manipulative techniques, walking along the 12 meridians, straightening the meridians, unblocking and relieving pain, using the Zhuang medicine meridian and tendon massage of “inspecting the meridians - meridians fixing the meridians - meridians eliminating the meridians - multi-dimensional unlocking”, and conventional Comparing with massage techniques, straightening out the meridians and tendons of the twelve meridians can effectively improve the abnormal pathological state of soft tissues such as muscles and ligaments.

4.2 Manipulative combined with traditional Chinese medicine treatment

4.2.1 Manipulation combined with traditional Chinese medicine hot compress therapy

Hot compress therapy can dilate local capillaries, promote blood circulation, reduce swelling and relieve pain. When used in conjunction with other treatments, it can significantly enhance the effect of treatment and improve the symptoms of patients [22]. In “Plain Questions: Blood and Qi Xingzhi”, it is recorded that “the shape is bitter and happy, the disease occurs in the tendons, and it is cured by ironing”, and it is pointed out that the disease located in the muscles and bones can be treated by ironing. Chen Shiping et al. [23] used Daqing salt hot compress combined with massage manipulation for tendon repair and rehabilitation in the treatment of postpartum sacroiliac joint misalignment. The results showed that the cure rate of Daqing salt hot compress alone was 50%, while the cure rate of the treatment group was 93.33%, Daqing salt hot compress has the effect of strengthening yang, nourishing qi, strengthening muscles and bones, promoting qi and activating blood. Li Yuanjin et al. [24] believed that women’s body is weak due to childbirth, and postpartum is prone to blood stasis and chills, and manual therapy cannot be used alone for the treatment of postpartum sacroiliac joint misalignment; Dispersing ironing can warm the meridians and dredge collaterals, activate blood circulation and remove blood stasis, and dispel cold and eliminate paralysis. Zhou Ling et al. [25] applied the plaster to the sacroiliac joint after manual loosening and rehabilitating, and then used the medicines that nourish the liver and kidney, relax the tendons and activate the collaterals. The subsidence further consolidates the effect of manual therapy.

4.2.2 Manipulative combined with traditional Chinese medicine treatment

Zhang Huidong et al. [26] proposed that women with postpartum qi and blood deficiency, liver and kidney insufficiency, oral administration of traditional Chinese medicine can adjust the balance of yin and yang, nourish qi and blood. Jingui Shenqi Decoction is used to treat the symptoms according to the treatment. The “Neijing” states: “The
kidney is the official of strength” and “the liver is the root of the extreme”. Oral administration of traditional Chinese medicine aims to invigorate the liver and strengthen the kidney, and strengthen the Yangqi. Manipulation combined with Jingui Shenqi Decoction can not only relax the tension of the lumbosacral ligaments, but also nourish the muscles and muscles to achieve the dynamic stability of the sacroiliac joints. Li Zhiqiang et al. [27] believed that postpartum fatigue injury caused spleen and stomach weakness, aggravated qi and blood deficiency, and caused the muscles, veins and joints to lose nourishment; after manual treatment, most symptoms were relieved, but some symptoms were still difficult to solve. “Yi Zong Jin Jian” [28] said: “Although the injury is flat, the circulation of qi and blood is not smooth”, so after the manipulative loosening and rectification, Huangqi Guizhi Wuwu Decoction is used to achieve the effect of nourishing qi and blood, warming the meridian and dredging the arthralgia. As stated in “Jingui·Xuebi Constipation and Pulse Syndrome Syndrome No. 6” [29]: “Blood Arthralgia is both weak in yin and yang… The external syndrome is inhumane, like wind arthralgia, and Huangqi Guizhi Wuwu Decoction is the main Now, Huangqi Guizhi Wuwu Decoction is often used in the treatment of consumptive blood and arthralgia in clinical practice.

4.3 Manipulation combined with needle knife or acupuncture

After muscle and bone injury, pathological changes such as tissue edema, adhesion, and fibrosis caused by trauma and inflammation, as well as pathological changes such as muscle fiber rupture, ligament stripping, and cartilage contusion, are prone to occur at the lesion site [30]. Using a small needle knife to close and cut the contractures, adhesions, scars and other parts of the diseased muscles can release the spasm muscles, restore the biomechanical balance between tissues and improve blood circulation, thereby eliminating edema, inflammation, and pain relief [31]. Jiang Zhigang [32] observed the clinical efficacy of acupuncture combined with fine-tuning manipulation in the treatment of postpartum sacroiliac joint misalignment. The control group was treated with fine-tuning manipulation alone. The results showed that the cure rate in the treatment group was 22.5% higher than that in the control group. Solution, adjust the organizational structure relationship between the sacroiliac joints, so that the sacroiliac joints lumbosacral to achieve dynamic balance. Wang Lei [33] treated postpartum sacroiliitis by using row acupuncture with warm acupuncture and moxibustion followed by manual restoration. Inflammation, and then adjust the unstable position of the sacroiliac joint through massage.

4.4 Manipulation combined with partial closure therapy

The local sealing treatment of Ashi acupoint can block the local sympathetic nerve of the acupoint and stimulate the local blood circulation through the stimulation of the compressed muscles and nerves, so as to relieve pain and eliminate edema [34]. Zhan Ruihong et al. [35] used partial sealing and manipulation to treat 21 cases of postpartum sacroiliac joint misalignment, the cure rate was 95.2%, and the total effective rate was 100%. The use of procaine and prednisolone in closed treatment has strong analgesic and anti-inflammatory effects, which can effectively relieve local pain symptoms and reduce tissue edema. The release and restoration of massage manipulations relieve muscle and vascular spasm, and restore the original normal anatomical relationship of the sacroiliac joint. Lv Qingshan et al. [36] used 1% lidocaine 10ml plus triamcinolone 5ml to locally seal the tender point of the affected sacroiliac joint in the treatment of postpartum acute sacroiliac joint misalignment, and the patient’s pain was significantly relieved. Follow-up showed recovery.

4.5 Musculoskeletal Ultrasound-Guided Manual Therapy

Although manipulation is the main treatment method for this disease, the manipulation of sacroiliac joints is mostly based on experience, mainly relying on the operator to determine the lesion site and treat it under the guidance of palpation and clinical experience, which is subjective and vague. Due to the shortcomings of stability and uncertainty, the clinical efficacy may not be well guaranteed due to the inaccuracy of the treatment site. Current studies have shown that musculoskeletal ultrasound can clearly observe the dynamic changes of musculoskeletal tissues in real time, and has the characteristics of convenient operation, accuracy, and safety [37]. Huang Weichang [38] and others conducted a clinical observation of the clinical efficacy of manual treatment of postpartum sacroiliac joint misalignment under the guidance of musculoskeletal ultrasound. The results showed that the cure rate in the treatment group was 100%. Compared with simple manual therapy, musculoskeletal ultrasound can accurately diagnose the injuries of muscles, tendons and ligaments around the sacroiliac joint, and precise manual therapy guided by ultrasound can improve the safety and therapeutic effect during treatment, and the use of musculoskeletal ultrasound for reexamination of patients after treatment can objectively evaluate the curative effect and follow-up.
Liu Guiping [39] used musculoskeletal ultrasound-guided fixed-point Lin’s manipulation for tendon repositioning and traditional manipulative tendon repositioning treatment under the guidance of musculoskeletal ultrasound in 60 cases of postpartum sacroiliac joint misalignment. Clinical symptoms were significantly improved, and the therapeutic effect was significantly improved.

4.6 Chinese medicine compound treatment

Liu Rui [40] observed the curative effect of 60 cases of postpartum sacroiliitis treated with Buzhong Yiqi Decoction, and the total effective rate was 98.3%; he believed that the combination of invigorating qi and activating blood with herbs for dispersing wind and dampness would not only treat the disease Deficiency has a tonic effect, can also accelerate the body’s blood circulation, has anti-inflammatory and analgesic effects on local inflammation and pain, and obtains an excellent therapeutic effect. More research literatures have been found on the oral treatment of sacroiliac joint diseases with traditional Chinese medicine, and its research prospects are broad and need to be further explored.

4.7 Multimodal treatment

Wei Wenguang et al. [41] treated 40 patients with postpartum sacroiliac joint misalignment by acupuncture combined with chiropractic treatment, acupuncture combined with lumbo-gluteal muscle function exercise, comprehensive treatment of acupuncture, chiropractic, lumbo-gluteal muscle function exercise and treatment. The spine combined with the functional exercise of the lumbo-gluteal muscle to observe the changes of the modified Oswestry Disability Index score before and after treatment in the four groups, and to compare the clinical efficacy of the two groups. Conclusion: Acupuncture, chiropractic, and functional exercise of the lumbo-gluteal muscle comprehensively treat postpartum sacroiliac joint misalignment. The curative effect of suture is definite. Acupuncture and chiropractic have obvious effects in the short-term curative effect and symptom relief, and the long-term curative effect of lumbo-gluteal muscle function exercise is obvious. The functional exercise of the lumbo-gluteal muscle can enhance muscle strength, improve the state of ligament relaxation, and fundamentally prevent the recurrence of staggered seams and symptoms by increasing the stability of the pelvis.

5. Discussion

It is found that most doctors pay attention to the treatment of clinical symptoms, but ignore the recovery of targeted muscle and ligament functions. Through the exercise of the lumbosacral muscles, the elasticity of the ligaments around the joints can be restored, the biomechanical stability of the spine can be strengthened, and the recurrence rate can be reduced, such as breaststroke [42]. Therefore, the normal physiological state of the sacroiliac joint is that the tendons and bones perform their respective duties, the bones are straight and the tendons are soft, and a dynamic balance is maintained. For the treatment of the disease, the first thing is to fill the blood and qi to nourish the muscles and bones, and to pass the meridians and collaterals. Commonly used TCM treatments include massage, acupuncture, acupuncture, oral administration of traditional Chinese medicine or hot compresses. This study found that the treatment of sacroiliac joint misalignment is not limited to simple manual therapy or acupuncture, and the use of traditional Chinese medicine may improve local pathological inflammation. It is worth noting that the comprehensive effect of multiple treatments is significantly better than that of single treatment.

In this paper, through the review of relevant literature, it is found that there are still very few literatures on the treatment of postpartum sacroiliac joint misalignment with traditional Chinese medicine, acupuncture and cupping. Under the social and economic development of our country, the progress of social culture has made women’s postpartum recovery more and more attention. Research on postpartum sacroiliac joint misalignment still needs to be continued. Currently, it is necessary to increase the sample size and set objective efficacy indicators to provide sufficient data to evaluate the clinical efficacy of related treatment methods for postpartum sacroiliac joint misalignment. The subjectivity and experience of disease diagnosis and treatment have not been systematically standardized clinically.

References

2446-2448.


