

# Clinical Practice of Multidimensional Fascial Chain Release for Joint Soft Tissue Pain

Duan Zhenyu, Zhang Jin, Xie Xinzhe

*Shiyan Taihe Hospital Rehabilitation Center, Shiyan, Hubei, China*

**Abstract: Objective:** To observe the effect of multidimensional fascial chain release in the treatment of joint soft tissue pain patients in the outpatient rehabilitation treatment department. **Methods:** A total of 76 patients with joint soft tissue pain admitted to the Rehabilitation Treatment Department of our hospital from February to November 2024 were selected as the research objects and randomly divided into two groups. One group received conventional treatment (38 cases, control group), and the remaining group received multidimensional fascial chain release treatment (38 cases, observation group). The pain symptoms and overall treatment effect of the two groups were analyzed. **Results:** The pain symptoms of the observation group after treatment were lower than those of the control group ( $P<0.05$ ). The overall treatment effective rate of the observation group was higher than that of the control group ( $P<0.05$ ). **Conclusion:** In the treatment of patients with joint soft tissue pain, the rehabilitation treatment department can effectively relieve the pain symptoms and ensure the overall treatment effect by carrying out multidimensional fascial chain release treatment.

**Keywords:** Rehabilitation Treatment Department; Multidimensional Fascial Chain Release; Joint Soft Tissue Pain

## 1. Introduction

Joint soft tissue pain is the most common disease type in the outpatient rehabilitation treatment department, which has always maintained a very high admission volume in clinical practice. Its pathogenesis is complex, and the treatment cycle is long. Affected by pain symptoms, patients' daily lives are directly influenced<sup>[1-2]</sup>. In the treatment of patients with joint soft tissue pain, in order to

rapidly improve their pain symptoms, it is necessary to adopt more effective treatment plans according to the characteristics of these patients. The treatment of joint soft tissue pain patients with multidimensional fascial chain release has gradually been applied in clinical practice. This study mainly observed the specific clinical effects of this treatment plan.

## 2. Materials and Methods

### 2.1 General Information

A total of 76 patients with joint soft tissue pain admitted to the Rehabilitation Treatment Department of our hospital from February to November 2024 were selected as the research objects and randomly divided into two groups by random sampling. One group received conventional treatment (38 cases, control group), and the remaining group received multidimensional fascial chain release treatment (38 cases, observation group). In the control group, there were 20 males and 18 females, aged 36-65 years, with an average age of  $(51.45 \pm 1.68)$  years. The body mass index was 21-24 kg/m<sup>2</sup>, with an average of  $(22.15 \pm 0.77)$ kg/m<sup>2</sup>. In the observation group, there were 21 males and 17 females, aged 37-66 years, with an average age of  $(52.66 \pm 1.98)$  years. The body mass index was 21-24 kg/m<sup>2</sup>, with an average of  $(22.98 \pm 0.75)$  kg/m<sup>2</sup>. There was no significant difference in basic data between the two groups ( $P>0.05$ ).

### 2.2 Methods

Patients in the control group were treated with conventional analgesic drugs and received massage rehabilitation treatment on the painful site, 20 minutes each time, twice a day. Patients in the observation group received multidimensional fascial chain release treatment, which was performed by professional rehabilitation physicians. Before treatment, X-ray examination was conducted

on the lesion site of the patient to analyze the severity and scope of the lesion site and understand the local nerve function of the patient. Radiofrequency ablation was used to separate the adhered fascial tissues at the lesion site. After the operation, routine dressing was applied, and the patient was instructed to elevate the affected limb to rapidly relieve local swelling. After the operation site stabilized, the patient could use a massage stick to release and massage the joint site, 20 minutes each time, three times a day.

### 2.3 Observation Indicators

(1) Comparison of pain levels: The VAS pain scale was used to assess the pain degree of patients before and after treatment. The score range was 0-10 points, and the higher the score, the more severe the pain symptoms of the patient. (2) Evaluation of overall treatment effect: If the patient's pain symptoms disappeared and joint movement was normal (5), as shown in Table 1.

**Table 1. Comparison of Pain Degrees Between the Two Groups ( $\bar{x} \pm s$ )**

Group	Number of Cases	Before Treatment	1 Week After Treatment	2 Weeks After Treatment	4 Weeks After Treatment
Observation Group	38	5.35 ± 0.18	3.56 ± 0.23	3.12 ± 0.23	2.05 ± 0.22
Control Group	38	5.28 ± 0.22	4.56 ± 0.15	4.11 ± 0.14	3.45 ± 0.18
<i>t</i>	-	1.255	14.478	18.648	20.045
<i>p</i>	-	0.628	0.001	0.001	0.001

### 3.2 Comparison of Overall Treatment Effects

**Table 2. Comparison of Overall Treatment Effects [n, (%)]**

Group	Number of Cases	Markedly Effective	Effective	Ineffective	Effective Rate
Observation Group	38	20(52.63)	18(47.37)	0(0.00)	38(100.00)
Control Group	38	12(31.58)	18(47.37)	8(21.05)	30(78.95)
$\chi^2$	-	4.253	0.000	16.045	16.045
<i>p</i>	-	0.024	1.000	0.001	0.001

### 4. Discussion

Joint soft tissue pain is a common disease in clinical practice. Its inducing factors are complex, which can cause varying degrees of pain in the patient's joint site and directly affect the patient's daily physical activities. Some severe patients may even experience joint movement limitation<sup>[3-4]</sup>. These patients have a long disease course and the characteristics of recurrent attacks, which cannot be cured in a short time. In

after treatment, it was considered markedly effective. If the patient's various symptoms improved and there was no obvious abnormality during movement after treatment, it was considered effective. If the patient's abnormal symptoms did not improve and showed a trend of worsening after treatment, it was considered ineffective.

### 2.4 Statistical Methods

SPSS 25.0 was used to analyze the data in the study. Measurement data were expressed as ( $\bar{x} \pm s$ ) and count data were expressed as percentages (%). Chi-square test was used, and  $P < 0.05$  indicated that the difference was statistically significant.

### 3. Result

#### 3.1 Comparison of Pain Degrees

The pain score of the observation group after treatment was lower than that of the control group ( $P < 0.05$ ).

The overall treatment effective rate of the observation group was higher than that of the control group ( $P < 0.05$ ), as shown in Table 2.

conventional treatment, the treatment mainly focuses on anti-inflammatory and analgesic aspects. Although it can improve the patient's pain symptoms to a certain extent, the overall treatment effect is not ideal.

Multidimensional fascial chain release is a commonly used treatment for patients with joint soft tissue pain in clinical practice. Under the action of this surgical method, combined with the characteristics of the soft tissue at the lesion site of the patient, the adhered fascial tissues are separated, which can promote the

recovery of the patient's damaged function. Affected by joint soft tissue lesions, muscles are in a tense state for a long time or under the action of trauma, which easily causes fibrosis or adhesion of the surrounding fascial tissues, affecting local blood circulation and ultimately causing pain and movement limitation in patients [5-6]. Some severe patients may even experience persistent pain or muscle stiffness. Under the action of multidimensional fascial chain release treatment, the adhered fascial tissues are first separated by surgery, and after the operation site recovers, auxiliary treatment such as tuina and massage release is carried out, which can rapidly improve the blood circulation at the lesion site of the patient and reduce the patient's pain symptoms. In this study, the observation group received multidimensional fascial chain release treatment. Combined with the observation, it was found that under the action of this treatment measure, the patient's pain symptoms could be rapidly reduced, and the overall clinical treatment effect for these patients could be improved, which was helpful for the patient's recovery. In conclusion, during the treatment of patients with joint soft tissue pain, multidimensional fascial chain release treatment can be used to help patients recover.

### References

- [1] Qian Shihui, Shen Ruiyu, Zhang Bingbing, et al. Clinical Observation of Self-Made Shujin Qubi Decoction Combined with Manipulation Release under Anesthesia and Celecoxib Capsule in the Treatment of Primary Frozen Shoulder [J]. Chinese Journal of Traditional Chinese Medicine Science and Technology, 2025, 32(03): 465-467.
- [2] Xin Tianyou, Hu Yuxuan, Liu Qianyun, et al. Analysis of the Effect of Ultrasound-Guided Acupotomy Release in the Treatment of Stenosing Tenosynovitis of the Flexor Pollicis Longus Tendon [J]. Journal of Qiqihar Medical University, 2025, 46(06): 566-570.
- [3] Yin Zuxin, Hao Wei, Wu Haizheng, et al. Efficacy Study of Jingjin Needle Release Combined with Rubbing and Pulling Tuina in the Treatment of L3 Transverse Process Syndrome [J]. Shaanxi Journal of Traditional Chinese Medicine, 2025, 46(03): 407-411.
- [4] Li Yanan, Qi Weihua, Cheng Zhenzhen, et al. Efficacy Observation of Ozone Hydraulic Release under Musculoskeletal Ultrasound Guidance in the Treatment of Periarthritis of Shoulder [J]. Practical Journal of Clinical Medicine, 2025, 22(02): 121-125.
- [5] Guo Qinxia, Ma Changhong, Wang Ying, et al. Application Effect of Chinese Medicine Smearing Combined with Exercise Therapy in Patients with Cold-Damp Obstruction Type Rotator Cuff Injury after Arthroscopic Release [J]. Chinese and Foreign Medical Research, 2025, 4(05): 81-83.
- [6] Gao Kai, Liu Jun, Huang Nanyong, et al. Clinical Effect of Atlantoaxial Lateral Mass Release under Microscope in the Treatment of Atlantoaxial Dislocation [J]. Chinese Journal of Bone and Joint Surgery, 2025, 18(02): 129-134.