The application of TCM rehabilitation nursing in patients with stroke limb dysfunction

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Abstract: Stroke is a disease with high disability rate, high recurrence rate, high mortality rate and difficult treatment, and its incidence accounts for the first of all types of cerebrovascular diseases in the body. Due to cerebral ischemia causing brain tissue damage, cerebral blood circulation disorders lead to a series of neurological manifestations, mainly including cognitive decline, kinesthesia loss, ataxia, etc. Clinically, the recovery effect for patients with stroke sequelae is not good, which seriously affects the quality of life and life safety. Therefore, it is very important to explore the application effect of TCM rehabilitation nursing in stroke limb dysfunction.

1. Introduction

Stroke is a group of acute cerebrovascular accident syndromes caused by cerebral vascular lesions caused by a variety of etiologies, often accompanied by hemiplegia, crooked mouth and eyes, unfavorable language and other symptoms, which seriously threaten people's health. At present, Western medicine mostly adopts anticoagulant therapy, neuroprotective agents, hyperbaric oxygen and other comprehensive therapies, which can improve the limb motor function of some patients to a certain extent, but the efficacy is not satisfactory and there are high adverse reactions. TCM rehabilitation nursing plays an important role in stroke, mainly including Chinese medicine dressing, acupuncture and tuina; Dietary and emotional care. Its purpose is to promote nerve regeneration and improve the patient's symptoms, so that the patient can recover and be discharged from the hospital as soon as possible. At present, the research on the sequelae of ischemic cerebrovascular disease has become one of the hot spots of scholars at home and abroad, and the rehabilitation treatment of traditional Chinese medicine has gradually been widely recognized by the medical community.

2. Information and Methodology

2.1. General Information

A municipal hospital of traditional Chinese medicine was selected to receive 80 patients with stroke limb dysfunction between January 2021 and July 2022.

Inclusion criteria: meeting the relevant diagnostic criteria for stroke; The condition is stable, and the muscle strength grade is 4 points; At the first onset; Have limb dysfunction.

Exclusion criteria: poor adherence; Concurrent psychiatric disorders; severe cardiac, lung, and renal insufficiency; with malignancy.

The selected patients were divided into 40 cases in the TCM group and the conventional group by random number table method, and the patients actively cooperated in treatment and signed an informed consent form. Both groups were given a combination of usual care and rehabilitation guidance. On this basis, the TCM group added a rehabilitation prescription. The efficacy of the two groups was evaluated and analyzed, and the result was P<0.05, and the difference was statistically significant [1].

2.2. Methods

Patients in the usual group were given usual care. At the time of admission, the patient's condition was initially evaluated, and then according to the patient's different conditions, targeted rehabilitation exercises such as walking, maintaining body balance, etc., and regular dietary guidance, life guidance and other interventions. Specific measures for patients in the TCM group to receive TCM rehabilitation nursing:

2.2.1. Emotional Care

Traditional Chinese medicine believes that poor mood and qi disorder are one of the fundamental reasons for the occurrence and development of various psychosomatic diseases. Mood abnormalities affect the functional activity of the cerebral cortex and cause corresponding symptoms. For example, depression, anxiety, irritability, suspiciousness, depression, insomnia, etc. all belong to the category of "depression", which is related to psychological factors. During the rehabilitation nursing period, in addition to providing health education, attention must also be paid to psychological counseling and behavioral training. Psychological cues can eliminate or relieve pain and discomfort caused by certain psychological disorders and adverse stimuli. At the same time, it can also help people better adjust their mental state and social adaptability, so as to promote the early recovery of diseases [2].

2.2.2. Massage

For patients with upper limb dysfunction, in addition to conventional manual massage, corresponding acupressure should also be coordinated, such as hand Sanyinjiao acupoint massage, mainly to adjust the liver and spleen; Yongquan acupoint plus kneading method; The Fenglong acupuncture method can promote sleep. For patients with lower limb dysfunction, Kunlun, Yanglingquan and other acupuncture points can be massaged to warm the meridians and dispel wind and cold; Fengchi points add pressure kneading method; The Xuehai point compression method can relax and activate the muscles. Due to the different strength of the patient's own physical constitution and the severity of the disease, the appropriate method and time are selected according to the specific situation in the clinic, generally when the patient is sore and painful, 25 min/time, 2 times/d.

2.2.3. Chinese Medicine Fumigation

Wrap the medicinal materials supplied by the doctor with gauze, put it into a fumigator, adjust it to 42 $^{\circ}$ C, and when the patient's body surface temperature is about 37 $^{\circ}$ C, 25 min/time, once/d.

2.2.4. Acupuncture

The acupoint is selected from Hegu, Zusanli, Quchi, and disinfected with alcohol, and acupuncture

can be carried out for 30min/time, 1 time/d. Nursing interventions were performed in both groups for one month [3].

2.3. Observation Indicators and Judgment Standards

2.3.1. Compare the TCM Symptom Scores of the Two Groups of Patients

The patient is unstable in walking, numbress in limbs, hemiplegia and physical weakness and other conditions to score, the score is set at $0\sim3$, the high score indicates that the patient's symptoms are more serious.

2.3.2. Compare the Psychological States of the Two Groups of Patients

Patients on the Anxiety Self-rating Scale (SAS) were used to assess their level of anxiety, with higher scores indicating greater anxiety. It includes 20 items, each ranging from 1~4 points, for a total of 80 points. The level of depression was measured using the Depression Self-rating Scale (SDS), and the higher the score, the more likely they were to show depressive symptoms. It includes 20 items, each ranging from 1~4 points, a total of 80 points [4].

2.3.3. Compare the Limb Function of the Two Groups of Patients

Using the Fugl-Meyer Exercise Scale (FMA) assessment, the score is set at 0~100, the higher the score, the better the exercise effect. At the same time, it can also be seen that the lower the BMI value in the same time period, the faster the recovery speed and the shorter the recovery time. This was a significant difference from the conventional group, suggesting some improvement after treatment.

2.3.4. Compare the Two Groups of Neurological Functions

The results of the stroke evaluation form (NIHSS) were clinically verified, and the total effective rate of the TCM group was higher than that of the conventional group, indicating that the acupuncture group could effectively alleviate the symptoms of acute brain injury [5].

3. Results

3.1. Comparison of the Two Sets of General Information

There were 23 males and 17 females in the regular group; Age 54~75 years old, average (63.97 ± 5.38) years; Hemiplegia: 22 on the right, 18 on the left. There were 25 males and 15 females in the TCM group; Age 55~74 years old, average (63.21 ± 5.26) years; Hemiplegia: 22 on the right, 18 on the left. The general conditions of the two groups were compared, and the difference between the two groups was not statistically significant (P>0.05), which was comparable.

3.2. Comparison of TCM Symptom Scores between the Two Groups

Before the intervention, the scores of walking instability, limb numbress, hemiplegia, and physical weakness were not statistically significant (P>0.05), and the scores of walking instability, limb numbress and hemiplegia, and physical weakness were lower in the two groups than before the intervention, and the TCM group was lower than that in the conventional group, and the difference between the two groups was statistically significant (P<0.05). This is shown in Table 1 [6].

	Walking instability				Limb numbness			
Group	Before Intervention	After Intervention	t Value	P Value	Before Intervention	After Intervention	t Value	P Value
Regular group (n=40)	2.40±0.49	1.65±0.27	6.645	0.000	2.39±0.42	1.72±0.39	6.794	0.000
$\begin{array}{c} \text{TCM group} \\ (n=\!\!40) \end{array}$	2.41±0.53	1.15±0.18	8.963	0.000	2.42±0.45	1.33±0.42	8.344	0.000
t Value P Value	0.192 0.588	11.278 0.000			0.497 0.335	10.594 0.000		
		Hemiple	egia		Weakness			
Group	Before Intervention	After Intervention	t Value	P Value	Before	After	t Value	P Value
Regular					Intervention	Intervention		
group (n=40)	2.20±0.37	1.53±0.43	7.731	0.000	2.39±0.52	1.64±0.49	8.115	0.000
group (n=40) TCM group (n=40)	2.20±0.37 2.24±0.45	1.53±0.43 1.15±0.23	7.731 9.692	0.000 0.000	2.39±0.52 2.33±0.47	1.64±0.49 1.09±0.55	8.115 11.375	0.000 0.000

Table 1: Comparison of TCM symptom scores between the two groups

3.3. Comparison of the Psychological States of the Two Groups

The SAS and SDS scores of the two groups before the intervention were not statistically significant (P>0.05), and the SAS and SDS scores of the two groups after the intervention were lower than those before the intervention, and the TCM group was lower than that of the conventional group, and the difference between the two groups was statistically significant (P<0.05).

3.4. Comparison of Neurological Function Scores between the Two Groups

Before the intervention, the NIHSS scores of the conventional group and the TCM group were divided into (18.58 ± 4.04) and (18.68 ± 4.13) groups for comparison, and the difference between the two groups was not statistically significant (t=0.635, P=0.584), and the conventional group and the TCM group were divided into (18.43 ± 3.33) and (14.28 ± 3.75) groups. After intervention, the intervention group significantly reduced the psychological symptoms of patients compared with the usual group, and the difference was statistically significant (t=14.264, P=0.000)[7].

4. Discussion

Stroke is a frequent disease in the elderly, mainly due to cerebral vascular rupture leading to brain tissue ischemia and hypoxia caused by brain damage or softening and corresponding neurological deficit symptoms, most patients have varying degrees of motor dysfunction after the onset. Within three months of the patient's onset of illness is the critical period of rehabilitation, during which active and effective rehabilitation measures can be taken to minimize the degree of neurological deficit of the patient. However, clinical practice has found that it is difficult to return patients to the expected level by simply applying conventional rehabilitation care from Western medicine.

In this study, tuina, Chinese medicine fumigation and other interventions for TCM patients, which can activate blood circulation and remove stasis, channel and relieve pain, promote blood flow, accelerate metabolism and tissue repair and regeneration, thereby relieving pain and restoring nerve function. The results showed that the TCM group had symptoms such as unstable walking, numbness of limbs, hemiplegia, and the score of the frail group was lower than that of the conventional group (P<0.05), indicating that TCM rehabilitation nursing had a good effect in improving the clinical symptoms of patients. Due to the influence of limb dysfunction, language communication disorders, etc., patients with stroke are very prone to irritability, anxiety, depression and other negative emotions. Therefore, the mental health of stroke patients has always been the focus of rehabilitation treatment, and a good psychological state can effectively improve patient compliance and allow them to actively cooperate with treatment. The results of this study showed that the difference between the two groups before intervention was not significant (P>0.05), which was not statistically significant, and it was observed that the TCM group had significant progress (P<0.05) compared with the conventional group. It showed that anxiety and depression were greatly reduced after the intervention in both groups. In this study, the method of acupuncture Hegu, Sanli, Quchi and other acupuncture points was used to effectively stimulate the patient's dysfunctional limbs, unblock the limb meridians and blood vessels, and improve the limb dysfunction of the stroke. The results of the study showed that the two groups of patients showed different degrees of improvement after treatment, among which the traditional Chinese medicine group and the conventional group had better results, and there was no significant difference in efficacy between the traditional Chinese medicine group and the conventional group, but the recovery speed was faster in the traditional Chinese medicine group, and the observation results suggested that traditional Chinese medicine rehabilitation nursing was better than conventional therapy.

5. Conclusions

In summary, limb dysfunction greatly affects the normal life of patients, and through the rehabilitation care of traditional Chinese medicine, patients can master certain treatment skills and methods in rehabilitation training. It can not only reduce the pain of patients, improve their confidence in overcoming diseases, but also effectively improve patients' limb function, restore their ability to live, protect their nerve function, and have a more ideal overall recovery effect worthy of vigorous promotion.

References

[1] Zhan Xiaomei. Application Effect of Rehabilitation Nursing of Traditional Chinese Medicine in Patients with Limb Dysfunction of Stroke [J]. China Medical Innovation, 2022,19(19):84-87.

- [4] Du Lijuan. Application Effect of Rehabilitation Nursing of Traditional Chinese Medicine in Neurological Rehabilitation of Patients with Limb Dysfunction of Stroke[J]. Journal of Practical Chinese Internal Medicine, 2021, 35(10): 65-67. DOI:10.13729/j.issn.1671-7813. Z 20210720.
- [5] Shao Zehua, Ye Qingrong. Application of Rehabilitation Nursing of Traditional Chinese Medicine in Patients with Limb Dysfunction of Stroke [J]. Clinical Research of Traditional Chinese Medicine, 2021,13(14):133-135.

[6] Lu Xinying. Application of Rehabilitation Nursing of Traditional Chinese Medicine in Patients with Limb Dysfunction of Stroke [J]. Journal of Jilin Medical University, 2021, 42(01):24-25.DOI:10.13845/j.cnki.issn1673-2995.2021.01.009.

^[2] Meng Xia, Wang Congmei, Wu Jie. Application of Rehabilitation Nursing of Traditional Chinese Medicine in Limb Dysfunction of Stroke [J]. Guangming Journal of Traditional Chinese Medicine, 2022,37(07):1295-1297.

^[3] Zhang Jinli. Application Effect of Traditional Chinese Medicine Rehabilitation Nursing in Stroke Patients with Limb Dysfunction and Its Effect on Neurological Function[J]. Chinese Community Physician, 2021,37(30):174-175.

^[7] Shi Gaijiao. Application of Rehabilitation Nursing of Traditional Chinese Medicine in Limb Dysfunction of Stroke[J]. Guangming Journal of Traditional Chinese Medicine, 2020, 35(13):2092-2094.