

ARTICLE

# Nursing Experience of Traditional Chinese Medicine Comprehensive Nursing Combined with Fasting Therapy in Paraplegic Patients

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## Abstract

This study aims to explore the application and experience of traditional Chinese medicine comprehensive nursing combined with fasting therapy in the care of paraplegic patients. By reviewing the clinical situation of paraplegic patients who underwent traditional Chinese medicine fasting therapy from May 2022 to July 2023, and observing the changes in their quality of life through combined traditional Chinese medicine comprehensive nursing. The results show that the combination of traditional Chinese medicine comprehensive nursing and fasting therapy has a positive effect on the care of paraplegic patients.

**Keywords:** Traditional Chinese Medicine Comprehensive Nursing; Traditional Chinese Medicine Fasting Therapy; Paraplegic Patients; Quality of Life; Nursing Experience

## 1. Introduction

Paraplegia is a disease that seriously affects the quality of life and function of patients, and causes great physical and Psychological stress pressure on patients and their families [1]. Traditional Western medicine nursing plays an important role in the rehabilitation of paraplegic patients, but its focus is mostly limited to limb movement rehabilitation exercises, with less attention paid to the psychological and social relationships of paraplegic patients. However, as a comprehensive treatment, traditional Chinese medicine nursing, combined with the holistic view of human nature society in traditional Chinese medicine, can more comprehensively cover the biological, psychological, and social needs of patients in terms of nursing content. Adequate improvement of patient quality of life has gradually received attention. Among paraplegic patients undergoing fasting therapy, the comprehensive nursing methods of traditional Chinese medicine are worth further research.

Paraplegia is often called impotence in traditional Chinese medicine [2]. It is a kind of disease syndrome that limb muscles are flaccid, weak, unable to move at will or accompanied by muscle atrophy. It is a disease that causes loss of motor function due to spinal cord injury, Myelitis and other reasons, which brings great challenges to patients' life and rehabilitation. Fasting therapy of traditional Chinese medicine can stimulate autophagy of cells [3], while some studies have shown that enhanced autophagy can promote the polarization of Microglia, especially anti-inflammatory Microglia, which is conducive to the local anti inflammation of spinal cord injury, greatly improves the survival rate of neurons after spinal cord injury, and is conducive to the repair of spinal cord injury [4]. The main cause of spinal cord injury in paraplegic patients is injury to the Du meridian, which is the "sea of Yang meridians". If the Du meridian is damaged, it will damage the Yang qi, causing qi and blood to become blocked and congestion blocking the meridians. If the meridians are blocked, the limbs cannot receive the warmth of Qi and blood, resulting in movement disorders. Traditional Chinese medicine fasting therapy can tonify qi, warm yang, and dissipate turbidity, promote qi circulation, dissipate excess cream and fat to dissipate qi and blood, and rebuild the balance of yin and yang. And treating diseases.

Traditional Chinese medicine fasting therapy is an improved version of fasting therapy introduced by Professor Qin Jian from Germany. Fasting therapy [5] refers to a dietary therapy in which the body utilizes its stored energy and substances to prevent and treat certain diseases within a limited period of time, while ensuring the normal life activities of the human body. In addition to moderate drinking water and extremely low calorie supply, the body does not consume food, On this basis, Professor Qin Jian improved and added traditional Chinese medicine and levocarnitine injection [6]. This therapy can stimulate cell autophagy, replenish qi and warm yang to eliminate turbidity, dissipate excess cream to dissipate qi and blood, rebuild yin and yang balance, and benefit physical and mental health. We reviewed the specific nursing measures of paraplegic patients who received comprehensive traditional Chinese medicine nursing combined with fasting therapy, and observed the changes in their quality of life. The results show that the combination of traditional Chinese medicine comprehensive nursing and fasting therapy has a positive effect on the care of paraplegic patients.

## 2. Nursing process

Retrospective analysis of paraplegic patients who underwent traditional Chinese medicine fasting therapy from May 2022 to July 2023.

### 2.1 Traditional Chinese Medicine Fasting Therapy Nursing

Buffer period (fruit meal day): the time is 1-2 days. The patients is instructed to eat 1.5 kilograms of fruits every day. Low Glycemic Index fruits such as apples, Cherry tomato, pomelos, oranges, blueberries and so on are preferred for the transition before fasting.

Fasting period: The duration is 5-7 days, and a total of 3000ml of Linggui Zhugan Tang traditional Chinese medicine drink and water should be consumed every day. If the patient is hardly get around, assistance can be provided in Prepare boiling water, mixing traditional Chinese medicine with hot-water, and measures to prevent scalding and related nursing

Tab.1 Basic information of samples

Variable	Quantity	Proportion/%	Variable	Quantity	Proportion/%
<b>Sex</b>			<b>Age/a</b>		
Male	7	100	(21,30)	7	100
Female	0	0	<b>BMI/ (kg/m<sup>2</sup>)</b>		
<b>Native Place</b>			<24	0	0
City	7	100	>24	7	100
Rural	0	0	<b>Occupation</b>		
<b>Degree of education</b>			Unemployed	4	25.45
Middle school and below	0	0	part-time job	3	5.45
High school/technical secondary school	0	0			
Bachelor/college degree	7	100			
<b>Marital status</b>					
Unmarried	7	100			
Married	0	0			

education should be taken.

**Recovery period:** It is recommended to gradually increase the food intake from less to more, from fine to coarse, from soft to hard. On the first to second days of recovery, liquid diet is the main diet, such as sugar free yogurt, millet Congee, soup (excluding soup dregs), Chinese steamed eggs. During the recovery period, drinking more than 2.5L of water every day is recommended to avoid a large intake of carbohydrates.

**Medication related care:** During fasting, 1.0 g of L-carnitine is injected intravenously twice a day. During the first intravenous injection of L-carnitine, an intravenous indwelling needle is placed for the patient to avoid difficulty in puncture due to poor vascular conditions caused by fasting. Repeated puncture can cause pain to the patient. During the retention period, care should be taken for the indwelling needle.

## 2.2 Traditional Chinese Medicine Comprehensive Nursing

**Dialectical nursing:** Spinal cord related injuries in traditional Chinese medicine are referred to as damage to the meridians [7]. Qi and blood cannot nourish the muscles of the muscles, resulting in weakness of the limbs and prolonged bed rest, further leading to deficiency of spleen and kidney qi and blood, and inability to nourish the limbs leading to flaccidity. According to the holistic concept and dialectical nursing philosophy of traditional Chinese medicine, we cannot only focus on local areas in treatment and nursing. We should start from the holistic perspective in dialectical nursing. Traditional Chinese medicine believes

that the essence of the kidney is innate, the spleen is acquired, and the spleen governs muscles and limbs. Therefore, it is necessary to regulate qi and blood while tonifying the spleen and kidney, and apply acupoints for treatment. The acupoints are selected: Spleen Shu, Kidney Shu, and Zusanli; During the combined fasting therapy period, the ear acupoints should be pressed and the acupoints should be selected to reduce appetite and alleviate hunger; Endocrine, liver, spleen, kidney, regulate endocrine and liver spleen, dredge meridians, and promote body recovery.

**Emotional care:** Due to the average clinical prognosis and long rehabilitation cycle of paraplegia, as well as the need for long-term bed or wheelchair rest due to the disease, poor self-care ability, or disease related complications, the psychological burden of patients increases, which can easily lead to negative emotional states such as anxiety and depression [8], which is not conducive to the active recovery of patients and affects their quality of life. Therefore, we need to pay attention to the emotional care of patients and alleviate their negative emotions, Help patients build confidence in overcoming their diseases.

The Huangdi Neijing points out that "anger hurts the liver, joy hurts the heart, thought hurts the spleen, sorrow hurts the lung, and fear hurts the kidney". According to the principle of the five elements, "grief overcomes anger" (gold overcomes wood), "fear overcomes joy" (water overcomes fire), "anger overcomes thought" (wood overcomes earth), "joy overcomes worry" (fire overcomes gold), "thinking overcomes fear" (soil overcomes water). According to the principle of "joy overcomes worry", patients need to be guided to keep happy and comfortable. You can watch humorous variety shows, Telling jokes, listening to cross talk, etc., overcoming sadness through joy; Encourage patients to have more contact with other patients, share pleasant experiences together, reduce negative emotions, and build confidence.

**Homeopathy:** Homeopathy is to try to comply with the patient's own needs and emotions during hospitalization, and to meet the patient's physical and mental needs as reasonably as possible. Due to the long-term suffering of paraplegic patients from illness, their emotions are prone to fluctuations. If this situation occurs, it should first be from the perspective of benefiting the patient. If it is beneficial for the patient's emotional health or disease recovery, it can meet their relevant needs. However, it is important to note that patients should not blindly comply with their unreasonable, arbitrary and unreasonable demands, unrealistic and even harmful demands for physical and mental health. They should be patiently explained, carefully advised, and persuaded to guide patients to correct their emotions, especially when they have concerns about the disease. Medical knowledge can be explained to patients, and mental baggage can be discarded to eliminate concerns, which is conducive to establishing a positive and upward mindset, Enhance confidence in overcoming diseases.

**Exercise guidance:** Instruct patients to practice sitting Baduanjin qigong [9] once a day in the morning. Sitting Baduanjin qigong is a traditional health preserving skill of traditional Chinese medicine. It has the advantages of high safety, simplicity, good efficiency and low price. It absorbs the essence of the traditional culture of the motherland, effectively combines medical treatment, exercise and health care, and can dredge channels, regulate qi and blood, strengthen muscles and bones, strengthen the waist and kidney, so as to enhance physique and improve the quality of life, Suitable for patients with chronic and debilitating diseases. After sitting Baduanjin qigong exercise, the joints were passively moved. The

activity time of each joint is about 5 minutes to avoid joint contracture. When engaging in passive activities, attention should be paid to the gentle and rhythmic movements, and the range of activity should reach the maximum physiological range, but should not exceed it to avoid pulling muscles and ligaments.

**Living and recuperation:** The residential ward is sunny and well ventilated, with a warm and comfortable layout, assisting in daily care, such as taking a shower, transferring beds and chairs, and going to the bathroom; Advise patients to have regular daily routines and follow the four seasons, which is beneficial for adjusting the balance of yin and yang in the body and enhancing their ability to resist external pathogens. If it is advisable to go to bed late and wake up early in the third month of spring, you can go outdoors and experience a lot of sunshine to generate yang energy; In summer, it is advisable to go to bed late and wake up early, and not to indulge in coldness to avoid damaging yang qi; In autumn, it is advisable to go to bed and wake up early, and clothing should not increase too quickly. It is appropriate to "freeze in autumn" and store yin essence; In winter, it is advisable to go to bed early and wake up late, pay attention to preventing cold and keeping warm, and protect yang qi.

### **2.3 Prevention of complications**

**Hypoglycemia:** During hospitalization with traditional Chinese medicine fasting therapy, it is necessary to prevent the occurrence of hypoglycemia. Blood glucose monitoring should be conducted four times a day, and once in the morning, noon, afternoon, and before going to bed at night. Patients should be advised to bring candy when going out for examination or treatment. If there are symptoms of hypoglycemia such as palpitations, shaking hands, dizziness, and fatigue, oral candy should be taken first and immediately returned to the ward, If hypoglycemic reactions occur in the ward, one oral candy or 40mL of 50% glucose injection can be given intravenously or orally. Rest in bed and observe that blood sugar levels rise to normal, and hypoglycemic symptoms disappear [11].

**Pressure ulcers:** Patients with paraplegia should actively pressure ulcers due to prolonged bed rest, long-term pressure on local tissues, impaired blood circulation, lack of tissue nutrition, loss of normal skin function, and tissue necrosis. They should keep the bed clean and tidy, wear cotton breathable clothing, turn over every 2 hours, and eat high protein and vitamin foods on a daily basis [12].

## **3. Safety indicators**

In terms of safety, for the paraplegic patients who were treated with Chinese medicine fasting therapy, considering that the patients may have the risk of hypoglycemia or electrolyte disorder, we made nursing observation records on the changes of Fingertip fasting Glucose, sodium ion and potassium ion. During the whole period of Chinese medicine fasting therapy, the patient's Fingertip fasting Glucose was at a low level, but there was no hypoglycemia or hypoglycemic reaction. The sodium ion and potassium ion fluctuated within the normal range, and there was no electrolyte disorder. This indicates that under the guidance and care of professional medical team, the Chinese medicine comprehensive nursing combined with fasting therapy is safe and feasible for paraplegic patients.

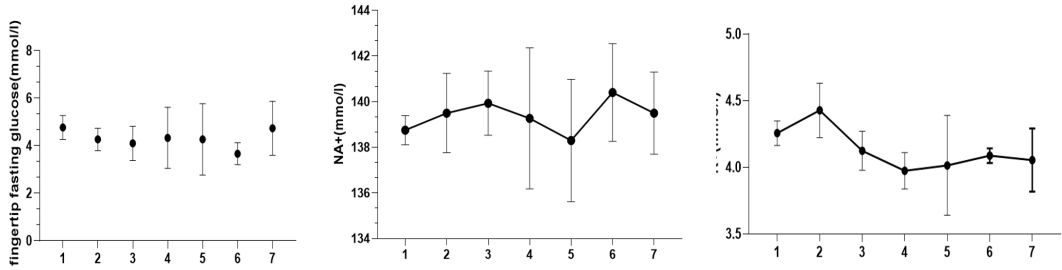


Fig.1 Fingertip fasting Glucose, Na<sup>+</sup> and K<sup>+</sup>

#### 4. Statistical methods

SPSS 22.0 was used for statistical analysis, with measurement data described as mean ± standard deviation. Two independent sample t-tests were used for inter group comparison, and the number and percentage of count data were described.  $\chi^2$  tests were used for inter group comparison, with  $P < 0.05$  being the statistically significant difference.

#### 5. Evaluation

The evaluation was conducted using the World Health Organization on Quality of Life Brief Scale (WHO QOL - BREF) [13], and patients were evaluated by the same researcher. Relevant data analysis was conducted based on the evaluation scores.

#### 6. Discussion

Through evaluation indicators, it was found that the physiological and psychological scores of patients who received comprehensive Chinese medicine nursing combined with fasting therapy during hospitalization significantly improved compared to before hospitalization. These all indicate that this approach is beneficial for improving patients' pain, enhancing their physiological functions, bringing them a relaxed and happy mood, viewing the disease more positively, reducing negative emotions, and increasing their social and activity circles. Better integration into society leads to an increase in patients' environmental and social scores. The scores of patients in the fields of physiology, psychology, environment, and society have all increased, indicating that their physiological, psychological, and social environment conditions have been improved [14]. This reflects the improvement of the overall quality of life of patients under the holistic nursing concept of traditional Chinese medicine, indicating that paraplegic patients have a positive application effect in receiving comprehensive Chinese medicine nursing combined with fasting therapy in the care of paraplegic patients. However, due to the limited number of nursing staff, This nursing method and its effectiveness still need further research and verification. Secondly, fasting therapy needs to be carried out under the guidance of professional medical personnel to avoid adverse reactions such as electrolyte disorders in patients.

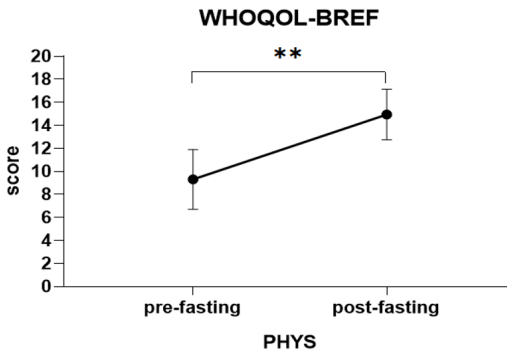


Fig.2 Physiological score

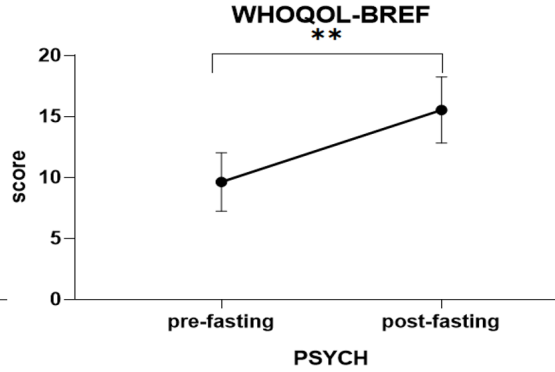


Fig.3 Psychological score

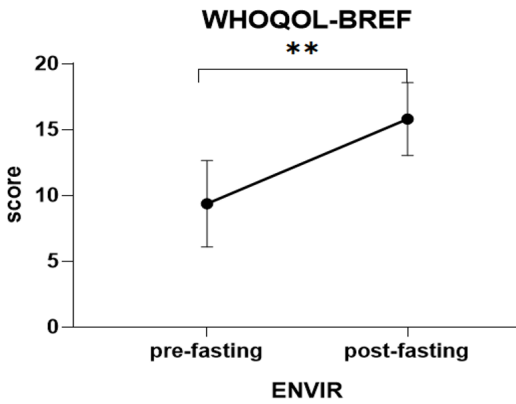


Fig.4 Environmental field rating

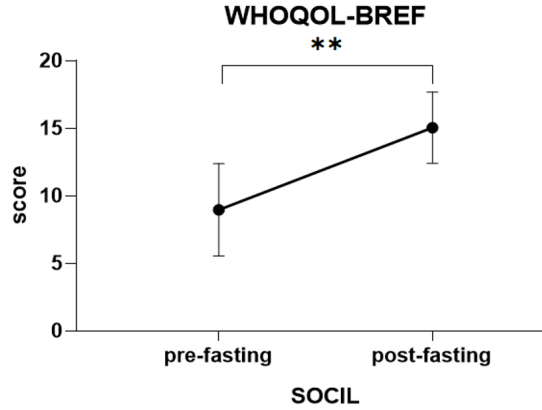


Fig.5 Social sector rating

## 7. Summary

The combination of traditional Chinese medicine comprehensive nursing and fasting therapy has certain advantages and potential in the care of paraplegic patients, which can help improve their clinical symptoms and quality of life. However, this nursing method still needs further research and validation to improve the development of nursing procedures and operational norms. I believe that in further research, the combination of traditional Chinese medicine characteristic nursing and fasting therapy will provide more options and assistance for the rehabilitation of paraplegic patients.

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