Acupoint Massage Combined with TCM Hot Compress for Gastrointestinal Dysfunction in an ICU Patient on Mechanical Ventilation: A Case Report

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Abstract

This article summarizes the nursing experience of one ICU patient with mechanical ventilation and gastrointestinal dysfunction, focusing on the application effects of acupoint massage combined with traditional Chinese medicine hot compress in the nursing care of such patients. Following comprehensive clinical examinations, the traditional Chinese medicine characteristic nursing technique of acupoint massage combined with TCM hot compress was implemented, with bundled nursing interventions provided concurrently. Through treatment based on syndrome differentiation, corresponding meridians and acupoints were selected for intervention. Post-intervention, the patient' s clinical symptoms were effectively alleviated, with significant improvements observed in specialized assessments including the Nutritional Risk Screening 2002 (NRS-2002) score, Acute Gastrointestinal Injury (AGI) diagnostic grading, and Activities of Daily Living (ADL) score, suggesting that acupoint massage combined with TCM hot compress can effectively relieve clinical symptoms in patients with mechanical ventilation and gastrointestinal dysfunction.

Full Text

Preamble

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Application of Acupoint Massage Combined with Chinese Herbal Hot Compress in Nursing Care for a Patient with Gastrointestinal Dysfunction During Mechanical Ventilation in ICU

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Abstract

This paper summarizes the nursing experience of a patient with gastrointestinal dysfunction during mechanical ventilation in ICU, focusing on the therapeutic effects of acupoint massage combined with Chinese herbal hot compress. Based on comprehensive clinical examinations, we implemented this characteristic Traditional Chinese Medicine (TCM) nursing technique together with bundled care interventions. Through syndrome differentiation and treatment, corresponding meridians and acupoints were selected for intervention. Following treatment, the patient' s clinical symptoms were effectively alleviated, with significant improvements observed in specialized assessments including the Nutritional Risk Screening 2002 (NRS-2002) score, Acute Gastrointestinal Injury (AGI) diagnostic grade, and Activities of Daily Living (ADL) scale. These results suggest that acupoint massage combined with Chinese herbal hot compress can effectively relieve clinical symptoms in mechanically ventilated patients with gastrointestinal dysfunction.

Keywords: acupoint massage; Chinese herbal hot compress; mechanical ventilation; gastrointestinal dysfunction; Traditional Chinese Medicine nursing

Introduction

Mechanical ventilation is a common therapeutic measure in ICU for critically ill patients, effectively maintaining airway patency, improving ventilation quality, and preventing hypoxia to create conditions for life-saving treatment. However, prolonged mechanical ventilation often leads to various sequelae, including muscle weakness in respiratory and abdominal muscles, and gastrointestinal dysfunction (GID) [1]. The gastrointestinal tract performs multiple vital functions including metabolism, immunity, and barrier protection. As the body' s largest "endotoxin reservoir" and "bacterial reservoir," once the intestinal mucosal barrier is damaged, endotoxins and bacteria can translocate from the intestine and, under certain conditions, injure distant organs such as the lungs and kidneys, potentially leading to systemic inflammatory response syndrome (SIRS) and even multiple organ dysfunction syndrome (MODS) [2]. Studies [3-4] have shown that the incidence of GID in ICU patients undergoing mechanical ventilation

is 50%, mainly manifesting as weakened gastrointestinal function and stress ulcers. Current common preventive and therapeutic measures include fasting, gastrointestinal decompression, early enteral nutrition, prokinetic drugs, and post-pyloric feeding [5], but the overall efficacy is suboptimal. According to TCM theory, the lung and large intestine form an interior-exterior relationship through meridians, and clinical practice is actively exploring TCM treatment modalities. Research has shown that acupoint massage combined with Chinese herbal hot compress demonstrates certain efficacy in promoting gastrointestinal function recovery [6]. This study employed acupoint massage combined with Chinese herbal hot compress to warm meridians, promote qi and blood circulation, dispel dampness and cold, and regulate organ yin-yang balance, while simultaneously implementing integrated Chinese and Western medicine bundled nursing interventions for ICU mechanically ventilated patients with GID, achieving favorable outcomes as reported below.

Clinical Data

The patient was a 60-year-old male who was transferred from the neurosurgery department to our unit on March 23, 2024, due to low blood oxygen (pulse oximetry approximately 80%) following emergency tracheal intubation. Presenting symptoms: impaired consciousness but responsive to calling, orotracheal intubation with ventilator-assisted ventilation (SIMV mode: PS 16 cmH_2O, PEEP 10 cmH_2O, respiratory rate 18 breaths/min, inspiratory time 1.2 s, FiO_2 100%, tidal volume 400 mL). The patient had fever (temperature 39°C), pulse 115 beats/min, respiratory rate 30 breaths/min, non-invasive blood pressure 133/95 mmHg, and SpO_2 97%. No chills, but with tachypnea and copious yellow-white sputum. Bowel and bladder status unobserved. Tongue appearance and coating could not be examined; pulse was wiry. Physical examination: coarse breath sounds in both lungs with moist rales; normal abdominal contour, abdominal breathing pattern, soft abdomen, slightly weak bowel sounds (approximately 3 times/min). Past medical history: hypertension for over 40 years, diabetes for over 30 years, cerebral infarction and epilepsy for 3 years, coronary artery bypass surgery 9+ years ago, smoking history of over 40 years, alcohol allergy. Auxiliary examinations: Bedside radiography showed multiple patchy infiltrates in both lungs suggestive of inflammation or pulmonary edema, enlarged cardiac silhouette, post-sternotomy changes, and tracheal/esophageal intubation; Chest CT revealed multi-lobar infiltration; Laboratory indicators: emergency cardiac enzymes showed high-sensitivity troponin T 1025 pg/mL; blood routine: white blood cell count 12.58$×10^{9}$/L, neutrophil percentage 94.3%; biochemical tests: albumin (bromocresol green method) 21.8 g/L, total protein 54.3 g/L.

This case involved a disease location in the lung with a pattern of mixed deficiency and excess. The elderly patient had constitutional deficiency with insufficient lung, spleen, and kidney qi, inadequate wei qi defense, and was attacked by six exogenous pathogenic factors with insufficient healthy qi to combat the pathogen. As the lung governs qi, opens at the nose, associates with skin and

hair, and governs the exterior defense, pathogenic invasion through mouth, nose, and skin typically first attacks the lung, causing impaired lung qi diffusion and descent, resulting in cough when qi rebels upward, and dyspnea when ascent-descent becomes abnormal. Chronic lung deficiency affected the spleen (child stealing mother qi), causing spleen dysfunction in transportation and transformation, fluid metabolism disorder, and phlegm production, hence productive cough. Long-standing phlegm generated heat, and phlegm-heat binding in the lung produced copious yellow-white, thick, difficult-to-expectorate sputum. TCM diagnosis: Wind-warm lung heat disease with phlegm-heat obstructing the lung pattern. Western medicine diagnosis: severe pneumonia, acute respiratory failure, pulmonary edema, pleural effusion, coronary atherosclerotic heart disease, hypertension grade 2 (very high risk), cerebral infarction, and hypoalbuminemia.

Western medicine treatment included ventilator-assisted ventilation, meropenem for anti-infection, Qingkailing for heat-clearing and detoxification, furosemide for diuresis and edema reduction, nicotinic acid injection for angina relief, isosorbide mononitrate for heart rate control, and atorvastatin calcium for lipid-lowering and plaque stabilization. TCM treatment involved acupoint massage combined with Chinese herbal hot compress to warm meridians, promote qi and blood circulation, dispel dampness and cold, and regulate organ yin-yang balance.

March 25: The patient' s Richmond Agitation-Sedation Scale (RASS) score was -5, CPOT score 0, with fever (maximum temperature 38.3°C). Orotracheal intubation with ventilator-assisted ventilation continued. Nasogastric feeding with 500 mL nutritional formula at 20 mL/h via nasogastric pump; gastric residual volume 150 mL/day, related to gastrointestinal function impairment secondary to hypoxia. Parenteral nutrition remained the primary route.

March 27: The patient was in sedated and analgesic state with continuous ventilator support; experienced diarrhea (5 times/day, loose, yellow-brown stools), abdominal distension, and feeding intolerance. Stool smear showed imbalanced coccobacillary ratio. Additional diagnosis: intestinal flora imbalance, suspected gastrointestinal dysfunction. Intranasal administration of norvancomycin was given to correct stool flora imbalance; metoclopramide acupoint injection at Zusanli (ST36) was administered to promote gastrointestinal motility.

March 29: The patient was off sedation and analgesia, responsive to calling with eye opening, febrile (maximum temperature 38°C). With orotracheal intubation and ventilator support, the patient had 4-5 loose, yellow-brown stools daily and abdominal distension with significant gastric residual volume (500 mL/day). To reduce reflux and aspiration risk, acupoint massage was added at points including Zhongwan (CV12), Shenque (CV8), and Qihai (CV6), followed by Chinese herbal hot compress application.

April 3: The patient was conscious, without dyspnea or tachypnea, with stable heart and respiratory rates. Passed the cuff leak test and was successfully

weaned and extubated. Non-invasive ventilator support was provided. Gastric residual volume was 50 mL/day, bowel movements 2 times/day. Enteral nutritional formula was increased to 1000 mL for caloric supplementation.

April 11: The patient was in good spirits with coherent responses, on nasal cannula oxygen at 3 L/min. Cardiac monitoring showed SpO_2 93%, pulse 95 beats/min, respiratory rate 19 breaths/min, blood pressure 113/71 mmHg. Abdominal breathing pattern, soft abdomen, normal bowel sounds (approximately 6 times/min), albumin (bromocresol green method) 36.8 g/L. On April 11, 2024, the patient was transferred to the step-down unit for continued treatment and discharged successfully on April 15, 2024.

Nursing Assessment

TCM Four Examinations: Inspection: impaired consciousness but responsive to calling, acute illness appearance, tracheal intubation with ventilator support, tongue appearance and coating not examinable, normal abdominal contour, abdominal breathing pattern, indwelling urinary catheter, no stool observed. Auscultation and Olfaction: tachypnea, no special breath or body odor, slightly weak bowel sounds (approximately 3 times/minute). Inquiry: aversion to cold, fever 39°C, no special dietary preferences, difficulty falling asleep requiring medication, currently in sedated and analgesic state. Palpation: deep and thready pulse, soft abdomen.

Specialized Assessment: Nutritional Risk Screening 2002 (NRS-2002) score was 4, indicating malnutrition risk; Acute Gastrointestinal Injury (AGI) diagnostic grade was I, indicating risk of gastrointestinal dysfunction or failure; Activities of Daily Living (ADL) score was 0, indicating severe dependence in self-care abilities.

Nursing Diagnosis

The nursing diagnoses were: Impaired gas exchange, related to severe pneumonia with acute exacerbation of pulmonary infection and reduced alveolar respiratory surface area; Ineffective airway clearance, related to thick sputum and inability to expectorate effectively due to sedated state; Diarrhea, related to acute respiratory failure and middle-jiao deficiency-cold causing intestinal flora imbalance; Altered comfort, related to abdominal distension and diarrhea caused by severe gastrointestinal dysfunction; Imbalanced nutrition: less than body requirements, related to spleen-stomach transportation dysfunction and feeding intolerance.

Nursing Plan

Based on comprehensive nursing assessment and syndrome differentiation analysis, the therapeutic principle was determined as clearing lung and resolving phlegm, unblocking fu-organs and descending turbidity, and strengthening

spleen and augmenting qi. Following mechanical ventilation combined with anti-infection treatment, the patient was successfully weaned with significant improvement in pulmonary infection and dyspnea symptoms. TCM appropriate techniques of acupoint massage combined with Chinese herbal hot compress were implemented to eliminate gastrointestinal dysfunction symptoms including abdominal distension, diarrhea, gastric retention, and weakened bowel sounds, thereby improving quality of life and nursing satisfaction.

Nursing Interventions

2.4.1 TCM Characteristic Nursing

2.4.1.1 Acupoint Massage: Guided by TCM theory and based on organ-meridian doctrine, acupoint massage applies techniques including pressing, pointing, kneading, pushing, grasping, and pinching on body surfaces (primarily the abdomen and its meridian points, with additional points on head, face, chest, back, and limbs selected according to different diseases). This allows "qi" and "force" to penetrate along meridians and acupoints into the body to achieve meridian unblocking, qi-blood circulation promotion, and organ yin-yang regulation for disease prevention and treatment [7].

Acupoint Massage Protocol: Step 1: Using palm-kneading technique, clockwise kneading was applied to acupoints including Tianshu (ST25), Qihai (CV6), Zhongwan (CV12), Xiawan (CV10), Shenque (CV8), Daheng (SP15), and Fujie (SP14), 30 times per point, followed by counterclockwise kneading of the same points 30 times to stimulate different acupoints for organ regulation and gastrointestinal motility promotion. Step 2: The abdominal rubbing method primarily used gentle circular motions around the periphery of the palm to mobilize spleen-stomach qi transformation dynamics and protect the middle-jiao. Through tight pushing and slow moving techniques, the meridian qi of each acupoint could be activated, promoting qi-blood generation and enabling proper spleen ascent and stomach descent with appropriate qi movement. Step 3: Using thumb pads with moderate pressure, alternating kneading and pressing was applied to Zusanli (ST36), Zhigou (TE6), Shangjuxu (ST37), and Dachangshu (BL25) until the patient experienced sour, numb, distending, and painful sensations. Treatment was performed during Chen period (8:00-9:00) and Hai period (21:00-22:00) daily, 2 minutes per point per session, twice daily, 30 minutes per session, with 7 days constituting one treatment course [8].

Operation Method: Assist the patient to supine position with flexed knees; the operator stands on the patient' s right side. Before massage, communicate with the patient, inquire about medical history in detail, understand the patient' s sensations and pain tolerance; inform the patient and family that local soreness and distension may occur during treatment. For abdominal massage, instruct the patient to empty the bladder, explain precautions and contraindications of acupoint massage, and apply different massage media according to condition requirements.

Precautions: Trim nails before operation to prevent skin injury. Keep warm and cover the patient well in winter. Apply uniform, gentle, and sustained pressure during massage; violent force is prohibited. Massage is contraindicated in various hemorrhagic diseases, menstrual period in women, pregnant abdomen/lumbar region, skin damage, and scarred areas.

2.4.1.2 Chinese Herbal Hot Compress: Based on syndrome differentiation for medication formulation, 100 g of Evodia rutaecarpa (Wu Zhuyu), 100 g of Magnolia officinalis (Houpo), 100 g of Aurantium fruit (Zhishi), and 250 g of coarse sea salt were crushed and thoroughly mixed, then placed in a self-made cotton bag to create the herbal hot compress. After microwave heating to 60-70°C, it was applied to the affected area or acupoints. Through hot steam, local capillaries dilated and blood circulation accelerated, utilizing both medicinal effects and temperature to achieve meridian warming, qi-blood harmonization, and dampness-cold dispelling as an external treatment.

Operation Method: With the patient in supine position, apply a layer of Vaseline to the abdominal hot compress area. First use TCM massage techniques of rubbing and rolling methods to iron the herbal hot compress clockwise around the umbilicus for 10 minutes with light and uniform pressure. As the medicine bag temperature decreases, the ironing speed can be increased. When temperature drops to approximately 50°C, apply the compress covering Shenque (CV8) and abdomen for 15-20 minutes per session, twice daily. Acupoint selection: medicinal ironing of abdomen (primarily Shenque, Zhongwan, Guanyuan (CV4), Qihai, and Tianshu) [9].

Precautions: Herbal hot compress temperature is generally controlled at 60-70°C, not exceeding 70°C; for elderly and infants, not exceeding 50°C. Specific temperature should be based on patient abdominal skin tolerance. Avoid abdominal wounds during operation. Closely monitor vital signs during hot compress, observe and palpate abdominal skin condition to prevent discomfort and burns. Slight redness and mild sweating of abdominal skin are appropriate. Observe for local skin flushing, blisters, or itching; if present, immediately remove the hot compress and administer anti-allergy treatment.

2.4.2 Bundled Nursing Care

2.4.2.1 Routine Care: The patient was housed in a single-room negative pressure laminar flow ward with temperature strictly controlled at (24.0$±$1.5)°C and relative humidity maintained at 45%-60%. Disinfection with chlorine-containing disinfectant was performed twice daily to prevent cross-infection. Treatment and nursing procedures were arranged centrally to ensure adequate patient rest. For condition monitoring, continuous attention was paid to vital signs and monitoring indicators. Arterial blood gas analysis was monitored regularly to precisely adjust ventilator parameters. Twenty-four-hour fluid intake and output were accurately recorded to ensure water-electrolyte balance. Simultaneously, consciousness and pupillary responses were closely observed,

with immediate reporting of abnormalities to physicians.

2.4.2.2 Gastrointestinal Dysfunction Specialized Care: Determine nutritional intake and feeding method: Within 24 hours of admission, indirect calorimetry was used to assess basal metabolic rate and determine nutritional supply amount; appropriate feeding methods were selected according to gastrointestinal dysfunction status. Weekly assessment was conducted with timely adjustments. Nasogastric feeding precautions: During feeding, pump slowly and uniformly, gradually increase feeding volume, and control temperature at 38-40°C. To avoid reflux and aspiration, maintain head-of-bed elevation at 45° and continuously monitor gastric residual volume. Intra-abdominal pressure monitoring: Indirect measurement was used to monitor intra-abdominal pressure once daily; for persistently increased pressure, monitor twice daily. Intra-abdominal pressure 12-15 mmHg (1 mmHg 0.133 kPa): continue original enteral nutrition plan; 16-20 mmHg: provide trophic feeding; >20 mmHg: suspend enteral nutrition. Electrolyte monitoring: During enteral nutrition, regularly monitor changes in potassium, magnesium, phosphate, and other electrolytes daily [10].

2.4.2.3 Mechanical Ventilation Care: Observe and patrol the patient frequently, suction sputum as needed, maintain sterile technique during suctioning, with gentle movements and appropriate negative pressure to prevent airway mucosal injury. Each suctioning should not exceed 15 seconds. Turn and percuss back frequently, administer mechanical assisted expectoration for 30 minutes twice daily as ordered, and provide ventilator nebulization twice daily to promote airway clearance and sputum expectoration. Timely manage ventilator alarms, secure ventilator tubing to prevent kinking, and promptly drain condensate water [11].

2.4.2.4 Psychological Care: Patients with severe pneumonia often experience life-threatening fear, especially during ICU treatment without family companionship and inability to speak during tracheal intubation. Therefore, psychological care is crucial. Medical staff can communicate using writing boards and communication cards to meet physiological and psychological needs, thereby enhancing confidence in overcoming disease. To create a caring service concept, the department designated 15:30-16:00 daily as visiting time to help patients better cooperate with treatment and accelerate recovery.

2.4.2.5 Health Education: Health education should be implemented early, continuously, and personalized according to different stages. During the period when consciousness recovered but ventilator dependence continued, explain the importance of the ventilator and instruct patients not to pull or move ventilator tubing to avoid adverse events such as extubation. After weaning and extubation, instruct patients in correct coughing, sputum expectoration, and early mobilization to promote recovery.

Evaluation

2.5.1 Gastrointestinal Dysfunction Assessment

After 14 days of TCM appropriate technique intervention combining acupoint massage and herbal hot compress, the patient's specialized assessments including NRS-2002, AGI, and ADL scales all showed significant improvement. Symptoms of gastrointestinal dysfunction such as abdominal distension, diarrhea, gastric retention, and weakened bowel sounds basically disappeared. See Table 1 .

Table 1 Comparison of Effects Before and After Acupoint Massage Combined with Herbal Hot Compress Intervention

Assessment Item	Pre-intervention	Post-intervention
NRS-2002 Score	[Data]	[Data]
Intra-abdominal Pressure (mmHg)	[Data]	[Data]
Bowel Movements (times/day)	[Data]	[Data]
Gastric Residual Volume (mL)	[Data]	[Data]
Bowel Sounds (times/min)	[Data]	[Data]

2.5.2 Overall Assessment

The patient' s temperature returned to normal (Figure 2 [Figure 2: see original paper]); sputum volume decreased and consistency became thin (Figure 3 [Figure 3: see original paper]). Laboratory indicators analysis showed increased albumin and total protein (Figure 4 [Figure 4: see original paper]); decreased white blood cell count and neutrophil percentage (Figure 5 [Figure 5: see original paper]).

Results and Follow-up

After 14 days of acupoint massage combined with herbal hot compress intervention for gastrointestinal dysfunction, the patient's symptoms including diarrhea, abdominal distension, gastric retention, and weakened bowel sounds improved significantly, with increased food intake and no further feeding intolerance. Concurrently, through bundled nursing interventions, pulmonary inflammation was controlled, the patient was successfully weaned from the ventilator, acute respiratory failure was corrected, and the condition markedly improved, leading to discharge on April 15, 2024. One-week telephone follow-up revealed that the patient' s self-reported symptoms of diarrhea, abdominal distension, and indigestion had basically disappeared. With increased functional exercise and rehabilitation activities, daily dietary intake gradually increased without any discomfort. Nurses provided further health education, instructing the patient on healthy eating with balanced nutrition, light and easily digestible foods, adequate protein supplementation, proper work-rest balance, and maintaining a pleasant mood to promote comprehensive recovery.

Discussion

4.1 Etiology, Pathogenesis, and Treatment Principles of Gastrointestinal Dysfunction in Mechanically Ventilated ICU Patients from TCM Perspective

Traditional Chinese medicine considers gastrointestinal dysfunction as belonging to the categories of "abdominal pain" and "fullness and distention," primarily caused by insufficient healthy qi, weak ying-wei defense, inability to resist external pathogens, leading to internal toxin accumulation and obstruction of meridians by toxic heat and phlegm turbidity. The interaction between internal and external toxins causes intestinal congestion, impaired transmission, and blocked fu-qi, thus inducing disease. Based on the theoretical foundation of "lung and large intestine being interior-exteriorly related," ICU mechanically ventilated patients, due to intolerance of severe acute disease, stomach' s inability to descend turbidity, gastrointestinal obstruction, plus damage from high-pressure, high-intensity continuous ventilation, are prone to spleen-stomach function injury, middle-jiao qi stagnation, impaired transportation, blocked fu-qi, and turbid yin failing to descend, resulting in spleen-stomach qi deficiency pattern gastrointestinal dysfunction. This manifests as symptoms including epigastric fullness, absence of flatus, abdominal pain, abnormal defecation, and reflux [12-13]. Treatment requires syndrome differentiation and treatment according to etiology: expel pathogen when pathogenic qi is exuberant, tonify healthy qi when deficient, and address both simultaneously in mixed deficiency-excess patterns. The disease location is in spleen-stomach but involves large and small intestines, which belong to "fu-organs" in TCM. Since "fu-organs take unblocking as normal," treatment should prioritize "unblocking" [14]. Therefore, for spleen-stomach qi deficiency pattern gastrointestinal dysfunction in ICU mechanically ventilated patients, the main treatment principles should be clearing lung and resolving phlegm, unblocking fu-organs and descending turbidity, and strengthening spleen and augmenting qi.

4.2 Characteristic Application of TCM Appropriate Techniques

Stimulation of various essential acupoints in acupoint massage creates synergistic effects, both tonifying spleen-stomach qi to normalize stomach qi ascent-descent and transmission, and cultivating earth to generate metal to nourish lung meridian and unblock large intestine fu-qi, thereby relieving gastrointestinal dysfunction. Among them, Tianshu (ST25) belongs to the Stomach Meridian of Foot-Yangming, and its massage can regulate qi, relieve stagnation, and dredge large intestine fu-qi. Qihai (CV6) has effects of regulating menstruation, consolidating menstruation, and augmenting qi to assist yang; its stimulation can promote gastrointestinal motility and improve gastrointestinal blood circulation. Zhongwan (CV12) belongs to the eight extraordinary meridians, and its massage can regulate ascent-descent and manage middle-jiao to achieve stomach harmonization and spleen strengthening. Xiawan (CV10) has functions of harmonizing middle-jiao, regulating qi, descending counterflow and stopping vomit-

ing, and eliminating accumulation and stagnation. Shenque (CV8) can restore yang and consolidate collapse, strengthen and transport spleen-stomach. Daheng (SP15) has intestinal regulation effects. Fujie (SP14) has spleen strengthening, middle-warming, and counterflow-descending effects. Zusanli (ST36) has spleen-stomach regulation, qi-blood harmonization, deficiency-tonifying, and stomach heat-purging effects. Zhigou (TE6) can clear and disinhibit the triple burner and unblock fu-organs to descend counterflow. Shangjuxu (ST37) has intestinal unblocking, stagnation-transforming, spleen-stomach regulating, and meridian-qi harmonizing effects. Dachangshu (BL25) has intestinal regulation and qi-stagnation transformation effects. Simultaneously, massaging the abdomen along intestinal direction can increase propulsive rhythmic contractions of small and large intestines, stimulate intestinal motility, improve gastrointestinal function, promote intestinal blood circulation, increase intestinal mucosal neurotrophic support, and enhance intestinal motility function.

Chinese herbal hot compress is a TCM external therapy that alleviates abdominal distension and defecation abnormalities by increasing serum motilin levels to promote gastrointestinal function recovery. Evodia rutaecarpa is acrid, bitter, and hot in nature, with effects of descending counterflow and stopping vomiting, dispersing cold and relieving pain [15-16]. Magnolia officinalis has dampness-drying, qi-moving, distention-reducing, and panting-relieving effects. Aurantium fruit can break qi, eliminate accumulation, transform phlegm, and relieve distention. Coarse sea salt enters the kidney meridian; after heating, it produces high penetrability, rapidly conducting medicinal power through body surfaces to regulate internal organ function, warm and unblock meridians, and promote qi-blood circulation. Applying the above medicinals as hot compress on abdomen and corresponding acupoints can penetrate skin and interstices to directly reach the disease location, thereby regulating gastrointestinal function [17].

Acupoint massage combined with herbal hot compress is a comprehensive intervention integrating meridians, acupoints, medicinals, and hot ironing. *Suwen · Tiaojing Lun* states: "For disease in bones, use fire needling with medicinal ironing." *Suwen · Xueqi Xingzhi Pian* records: "For physical toil with mental joy, disease arises in tendons, treat with ironing and guiding."According to treatment methods corresponding to disease depth—fire needling with medicinal ironing for bone disease, and hot ironing with massage guiding for tendon disease—ironing method can penetrate heat to the level of tendons and meridians [18]. This study first used acupoint massage to unblock meridians, open interstices, and promote qi-blood circulation, then supplemented with herbal hot compress to facilitate medicinal penetration and absorption, producing rapid effects that further enhance qi-blood yin-yang balance and organ function regulation. This approach is simple, painless, non-invasive, improves patient comfort and satisfaction, and is generally well-accepted.

4.3 Limitations of This Study and Current Status

Although the primary diagnoses for this patient upon admission were severe pneumonia and acute respiratory failure, gastrointestinal dysfunction manifestations became increasingly prominent during treatment and nursing progression, with suboptimal effects from conventional Western nursing interventions. Due to the "lung and large intestine being interior-exteriorly related," the influence between gastrointestinal and pulmonary functions is mutual and interdependent. Based on TCM syndrome differentiation and holistic treatment principles, researchers designed a bundled nursing intervention protocol of acupoint massage combined with herbal hot compress according to the patient' s TCM pattern differentiation and clinical symptoms. After two treatment courses of coordinated lung-gastrointestinal therapy, the patient was successfully weaned and extubated, with significant improvement in gastrointestinal dysfunction symptoms including diarrhea, abdominal distension, gastric retention, and weakened bowel sounds. Self-care ability was effectively enhanced, and the patient showed high recognition and acceptance of the intervention protocol with good compliance and satisfaction with treatment outcomes.

Through literature review, TCM characteristic nursing for gastrointestinal dysfunction patients primarily focuses on symptomatic care, with limited research literature on targeted interventions based on TCM syndrome differentiation patterns, resulting in limited options for TCM appropriate technique protocols. Although this case demonstrated clear effects of acupoint massage combined with herbal hot compress for mechanically ventilated gastrointestinal dysfunction, several limitations remain.

This is a case report lacking large-scale data support and comprehensive, systematic long-term observation. To gain deeper understanding of the actual effects of this TCM characteristic therapy, more in-depth and sustained clinical exploration and research are needed to continuously optimize and refine this therapy, providing more sophisticated and meticulous nursing care to further enhance patient satisfaction and quality of life.

Informed Consent: Publication of this case report was approved by the patient and family.
Conflict of Interest Statement: The authors declare no conflicts of interest.

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Note: Figure translations are in progress. See original paper for figures.