

# **JOURNAL OF** NURSING

## UNIVERSE SCIENTIFIC PUBLISHING PTE. LTD.

73 Upper Paya Lebar Road #07-02B-03 Centro Bianco Singapore 534818 Website: www.usp-pl.com E-mail: contact@usp-pl.com











# **Editorial Board**

# **Editor-in-Chief**

**Prof. Yingchun Tan** Xuzhou Medical College China

# **Editorial Board Members**

**Dr. Mansooreh Tajvidi** Islamic Azad University Iran, Islamic Republic of

**Dr. Ozlem Cinar Ozdemir** Bolu Abant Izzet Baysal University Turkey

**Prof. Curt Peterson** Linkoping University Sweden

**Dr. Nicolas Padilla-Raygoza** University of Guanajuato Mexico

**Abdulkadir Levent** Batman University Turkey

Md. Sahab Uddin Southeast University Bangladesh

**Jos é Mar á Gal án Gonz ález-Serna** University of Seville Spain

**Dr. Rafat Ali Siddiqui** Virginia State University United States

**Dr. Mohamed Ghonim** LSU Health New Orleans United States Maryam Mehdizadeh Iran University of Medical Sciences Iran, Islamic Republic of

Ragaa Gasim Ahmed Albaha University Saudi Arabia

Alinane Linda Nyondo-Mipando University of Malawi Malawi

**Dr. Shima Bakhshalizadeh** University of Guilan Iran, Islamic Republic of

Nousheen Akber Pradhan The Aga Khan University Pakistan

**Umesh Kumar Meena** SMS Medical College India

**Dr. Nitish Aggarwal** The Ohio State University United States

Sam Thembelihle Ntuli University of Limpopo South Africa

**Dr. Natthawut Kaewpitoon** Suranaree University of Technology Thailand

Volume 11 Issue 2 • 2022 ISSN: 2315-4578

# Journal of Nursing

**Editor-in-Chief** 

**Prof. Yingchun Tan** Xuzhou Medical College, China



Volume 11 Issue 2 • 2022



# Journal of Nursing

http://nursing.usp-pl.com/index.php/Nursing

# Contents

# **Original** Articles

1 On the Psychological Analysis of Surgical Children with Perioperative Multimedia Animation in Digital Operating Room

Fenglin Jiang, Mingyu He, Ruiyao Jia, Li Chen

5 The Role of Vestibular Rehabilitation Training in Persistent Postural Perceptual Dizziness

Yue Liu, Peng Tang

8 Discussion on Nuclear Medical Imaging Technology and Its Radiological Protection Strategy

Bingqiang Xu, Huitong Liu

11 Global Intelligent Transportation Chain Based on Traditional Chinese Medicine: Taking the Anti-Tumor and Other Effect of Ginseng as an Example in Global Production and Salesand Economic Discussion

Zihan Wang, Yihan Liao, Jinhan Guo, Yi Qin

15 Analysis of Preventive Effect of Comprehensive Rehabilitation Nursing on Lower Extremity Deep Vein Thrombosis after Spinal Fracture Operation

Renjing Cheng



# On the Psychological Analysis of Surgical Children with Perioperative Multimedia Animation in Digital Operating Room

Fenglin Jiang<sup>1</sup>, Mingyu He<sup>1</sup>, Ruiyao Jia<sup>2\*</sup>, Li Chen<sup>3</sup>

1. Chengdu Second People's Hospital, Chengdu 610021, China.

2. Bangkok Thailand Krirk University, Bangkok 10019, Thailand.

3. Chengdu Second People's Hospital, Chengdu 610021, China.

Fenglin Jiang and Mingyu He contributed equally to this work

*Abstract:* To discuss Psychological analysis of surgical children with perioperative multimedia animation in digital operating room. Methods: 120 pediatric perioperative patients were included in the criteria for the psychoanalysis of pediatric perioperative patients using digital operating theatre multimedia animation techniques. In this study, 120 perioperative pediatric patients were randomly selected and randomly divided into observation and experimental groups, including 60 patients in each group, with all patients enrolled in 202 1. 3-2022. 3 Patients were admitted; the observation results of preoperative psychological visits and intraoperative nursing management were compared between the two groups. Result: Preoperative visit; the statistical analysis for the comparison between the observation group and the experimental group was conducted by S PSS (P <0. 05); Intervention control data analysis using two groups of intraoperative video playback, music playback, and home accompaniment (P <0. 05); The observation group and the experimental groups performed psychoanalysis, infusion coordination, anesthesia coordination, and resistance analysis, respectively, and the experimental group.

Key words: Multimedia Animation; Psychoanalysis of Perioperative Child Patients

# Introduction

Digital operating room adopts Internet information technology and video processing technology to display all patient information in the best way, so that relevant surgeons (surgeons, anesthesiologists, surgical nurses) can easily and quickly access to comprehensive medical treatment, patient information and image information support, provide accurate surgical information and smooth information exchange, provide a more accurate, safe and efficient working environment for the whole operation, combined with the advantages of digital operating room perioperative multimedia animation playback, can effectively relieve children's psychological tension.

## 1. Information and methods

#### 1.1 Basic data

In this study, 120 children admitted to our hospital during 2021. 3-2022. 3 were selected as the study subjects, and 120 patients were selected for this study with surgical indications according to the inclusion criteria of the information system computer. Researchers visited children about anxiety, depression, health. Presurgery, and the children's families will receive health education during the perioperative period. The psychological nursing analysis of intraoperative nursing management observation was randomized into control and intervention groups with 60 patients hospitalized from 2021. 3-2022. 3, comparing the effect of care between the two groups, no difference between the two groups, p > 0. 05. Inclusion criteria: children with surgery, children, anxiety, depression, crying, normal communication skills, previous medical experience, and type of surgery Exclusion criteria were: Cognitive impairment and mental disorders; Visual and hearing impairment; Withdrawn

# 2. Methods

Control group: preoperative health education, intraoperative vital signs monitoring, including close monitoring of patients' vital signs and education, drug care and other measures. Intervention team implementation: preoperative psychological care, humanistic care, intraoperative management, specifically as follows:

Preoperative visit: perioperative nursing staff need to give preoperative notice to visit patients, correctly check the child's information, operation method, operation date, anesthesia method, and evaluate the child's vascular condition.

Intraoperative nursing: the observation of vital signs. Children's preferences, nursing staff can play multimedia cartoons and cheerful music, create a lively atmosphere, attract attention, to avoid the noise of the equipment affect the child's mood. When giving children venipuncture, encourage children to face it bravely, give positive encouragement, and encourage mobile nurses and family members to give psychological support. When children's tension is effectively relieved, it provides helpful help for anesthesia induction and promotes the smooth progress of surgery.

## 3. Observation indicator

The HIS system computer by the operating room mobile nurse to fill in the operating room nursing record form, and randomly read the data in the background for statistics. Preoperative publicity and education work; the observation group and the experimental group conducted statistical analysis of the intervention control; The intervention of intraoperative video playback, music playback and home accompaniment in the two groups was controlled by computer background data analysis, including psychological analysis of the two groups, infusion coordination, anesthesia cooperation and resistance. SPSS2 analyzed and processed the obtained data using the 3. 0 statistical software, and represented the tests using the measured data ( $\pm$ ) at P <0. 05  $\chi$ . The results of the study are as follows:

Preoperative task	The intervention and	l control groups compare	e two data P < 0. 05.

Table 1 Fleoperative scale	Table 1	Preoperative	scale
----------------------------	---------	--------------	-------

Group	Missionary attitude	Contents of publicity and education	Mode of publicity and education <sup>∈</sup>
intervention grou	φ 9.01±0.56	8.85±0.73	9.07±0.52⊬
control group	8.33 <u>+</u> 0.76	8.27±1.08	8.14 <u>±</u> 0.79↔
tvalue	7.890	4.873	10.771↩
<i>p</i> value	0.000	0.000	C.000 <sup>(2)</sup>

Intraoperative video playback, music playback, home accompaniment intervention group, and the control group were compared with a P < of 0.05.

Table 2 Intraoperative scale

Group	video playback	Music Playerback	Family accompanying	total score <sup>()</sup>	÷
intervention group	2.28±0.47	2.41±0.39	2.35±0.38	7.04±1.24↔	~
conttrol group	2.03±0.37	2.12±0.35	2.06±0.42	6.21±1.14↔	
t value	4.578	6.062	5.608	5.397↩	
p value	0.000	0.000	0.000	0.000 <sup>[-3</sup>	

21

The observation group and the experimental group conducted psychoanalysis, infusion coordination, anesthesia coordination, and resistance analysis, respectively, and the experimental group (P < 0.05) was better than the observation group.

grouping <sup>∉⊐</sup>	Number of examples <sup>∈</sup> ੋ	Infusion	fit <sup>∈</sup> Anesthesia coordination <sup>←</sup>	Degree resistance		ncidence∉	<
Experimental group <sup>,</sup>	<b>60</b> ⊱⊐	<b>1</b> ¢ <sup>3</sup>	143	<b>0</b> € <sup>□</sup>		2 <b>(</b> 3.33 <b>)</b> $\in$	÷
Observation groups∉	60←〕	3€〕	5↩□	1	¢	9 (15.00)	¢٦∢
X <sup>2</sup> € <sup>3</sup>	¢2	Ę	4 <sup>2</sup>	تې		<b>6.9818</b> € <sup>3</sup>	<
P←⊐	¢,	¢,	с <del>)</del>	تې		<0.05€⊐	<

Table 3 Postoperative scale

#### 4. Discussion

For emotionally unstable children into the operating room into the operating room, there will be resistance, especially in nursing staff venipuncture, because children crying anxiety, through quality monitoring data table in the process of intravenous infusion make full use of his, NMIS, NIS system data, help to regulate the infusion behavior of nurses, constantly improve the quality of intravenous infusion, to ensure the safety of patients. <sup>[5]</sup>During the perioperative period, the implementation of health education for children's patients and their families, the use of multimedia animation, music playback, and parental accompaniment will help children avoid negative emotions, effectively improve patient satisfaction with caregivers, and have a significant positive impact on promoting daily work. Playing cartoons before the induction of pediatric anesthesia can effectively stabilize children's mood and ensure the safety of nursing. <sup>[7]</sup>According to the different temperament characteristics of the children undergoing the operation. the families of the children undergoing the operation should be guided to adopt targeted education methods, and encourage them to have a positive side and avoid a negative side. <sup>[8]</sup>Multimedia animation perioperative playback intervention has an obvious treatment effect on the surgical children, which can effectively relieve the psychological tension of children, is conducive to the smoothprogress of the anesthesia induction process, and has a certain application value, and is worth promoting.

### References

[1] Wang L. Specific measures and clinical effects of preoperative psychological nursing and humanistic nursing in children's operating room nursing work [J]. Sichuan Pharmaceutical Press, 2018, 39 years old, (12): 1425-1428.

[2] Yang J. Analysis of the influence of humanistic nursing in the operating room on the psychological status and rehabilitation status of surgical children [J]. Psychological Monthly, 2020, 15(01): 15 + 17.

[3] Jiang YC, Chen AN, Li YL, Zuo CL. Experience of psychological intervention in school-age children. The World's Latest Medical Information Abstract, 2019, 19 (94): 140-141.

[4] Cai XG. The influence of psychological state and coordination of anesthesia induction [J]. Journal of Qiqihar Medical College, 2020, 41 (22): 2903-2905.

[5] Huang Q, Zhang XB, Gu Y, Hu J, Hong Kong Beauty, Fu Weijia. Construction and application of intravenous infusion process quality monitoring data table in children. Chinese Journal of Nursing, 2022, 57 (07): 823-826.

[6] Shi CY. The effect of interest induction on preoperative psychological state and anesthesia induction coordination. Management of Health Standards in China, 2022, 13 (01): 166-169.

[7] Chen HY, Li L, Xia J, Yu GP, Hou LL. Nursing effect of perioperative intelligent ward application. Journal of PLA Hospital Management, 2020, 27 (07): 694-697.

[8] Wu GW, Guo LP, Huang LM, Chen XY, Chen N. The effect of interest induction on perioperative mood and behavior in preschool children with different personality characteristics. Journal of Guangzhou Medical University, 2021, 49 (05): 117-120.



# The Role of Vestibular Rehabilitation Training in Persistent Postural Perceptual Dizziness

Yue Liu, Peng Tang\*Corresponding author: Tang PengThe third department of Neurology, the Shaanxi Provincial People's Hospital, Xi'an 710068, China.

*Abstract:* Objective: To analyze the role and application value of vestibular rehabilitation training in persistent postural perceptual dizziness. Methods: 60 patients with persistent postural perceptual dizziness who were diagnosed and treated in the Shaanxi Provincial People's Hospital in China from May 2019 to July 2019 were selected as the experimental research objects. Using the method of retrospective summary research, they were divided into two experimental groups according to their treatment methods. There were 30 patients in the rehabilitation group and the control group. The control group used routine drugs for diagnosis and treatment. The rehabilitation group should take the treatment of the control group as the benchmark, implement vestibular rehabilitation treatment and nursing, and observe the treatment effects of the two experimental groups. Results: after treatment, the total effective rates of the patients in the control group was significantly higher than that of the control group. After treatment, the patient satisfaction of the rehabilitation group was 96% and that of the control group was 71%. Conclusion: Vestibular rehabilitation training is very effective in patients with persistent postural perceptual dizziness. The application of this method will improve its treatment effect, and patients will have a high degree of satisfaction with it. Therefore, it can be vigorously promoted in clinical practice in China.

Keywords: Vestibular Rehabilitation Training; Persistent Postural Perceptual Dizziness; Effect

# Introduction

Dizziness is a morbid compensatory symptom formed by patients' interaction. It will have the main manifestations of active vestibular dysfunction in clinical practice. Patients with persistent postural perceptual dizziness will have anxiety, and some patients can't maintain normal living conditions. Duloxetine hydrochloride is the main drug for the diagnosis and treatment of this kind of disease. Vestibular rehabilitation treatment will use various ways such as body movement and head eye coordinated movement to improve the functional state of patients with low vestibular function, reduce the adverse effects caused by anxiety, and alleviate their tense subjective psychological response, to improve dizziness symptoms and improve patients' self-regulation ability.

# 1. Data and methods

# 1.1 Data

60 patients with persistent postural perceptual dizziness admitted to the Shaanxi Provincial People's Hospital in China from May 2019 to July 2019 were used as experimental subjects, and the inclusion criteria were set by means of retrospective summary study. Well, the course of patients with persistent postural perceptual dizziness cannot be less than 3 months, and no psychotropic drugs or anti dizziness drugs can be used within two weeks before the experiment. All clinical data and information reports are complete, excluding patients with mental diseases or lack of clinical data. In this experiment, there were 30 male patients and 30 female patients. The youngest was 26 years old and the oldest was 77 years old. The overall average age was 46 years old, and the body mass index was  $(24.39 \pm 6.44) \text{ kg/m2}$ . Combined with their treatment methods, they were divided into control group and rehabilitation group in turn. Each experimental group had 30 patients. There was no

difference between the data and information of the two experimental groups, and p>0.05.<sup>[1]</sup>

#### 1.2 Method

The patients in the control group were treated with conventional drugs, taking duloxetine hydrochloride orally, 20mg, once a day. Patients in the rehabilitation group should be treated with vestibular rehabilitation based on the treatment of the control group, and a rehabilitation group should be established, which is composed of the Department responsible nurse and the organization doctor. If necessary, they can communicate with the family members of the patients and invite them to participate in the treatment activities. Their members must be familiar with and understand the characteristics of vestibular rehabilitation treatment and the application methods and steps. To carry out behavioral rehabilitation treatment, first stand up, keep your eyes on the dot at 1cm in front, so that it can be parallel to the position of your eyes, mainly shaking your head left and right, stop shaking your head immediately after feeling dizzy, and repeat the above actions again after dizziness stops. Practice for ten minutes in the morning and afternoon, turn your head 45 degrees to the right, stare at the fixed target, and then nod up and down. Open your eyes first, and then close your eyes. Follow the principle from slow to fast. Secondly, choose a chair with a back and put it within ten steps. The patient sits on a chair and should quickly bend down to touch his feet. Then sit up quickly. After doing it three times in a row, he should walk to the opposite chair and repeat the above action repeatedly. The two chairs are used to practice for ten minutes, and the morning and afternoon practice for ten minutes respectively. The last is the standing position. You should open your eyes and walk. After 10 to 15 steps, close your eyes. The first training needs to be completed jointly under the guidance of medical staff. Then you can have someone accompany you in the follow-up training. You need to train three times a day, each time for ten minutes. The two experimental groups were treated and observed for 15 days.<sup>[2]</sup>

# **1.3 Observation indicators**

(1) Efficacy criteria: significant effect: symptoms such as dizziness are significantly reduced and can live or work normally; Effective: dizziness and other symptoms have been reduced, from time to time, without affecting normal life or work; Invalid: dizziness and other serious symptoms, unable to get up, need to stay in bed. (effective + effective) / number of cases in this group  $\times$  100.00% = total effective rate. (2) Satisfaction: after treatment, the self-made satisfaction survey scale of our hospital was used for investigation, which was divided into three levels: very satisfied, relatively satisfied and dissatisfied. The reliability and validity of the scale were above 0.95. All surveys were conducted before the survey, necessary explanations were given to the patients, and the patients' cooperation was obtained. The patients completed the self-survey and scoring independently. The satisfaction of the survey and evaluation was 100.00%.<sup>[3]</sup>

#### **1.4 Statistical methods**

Spss20.00 statistical software package was used to express and statistically analyze the measurement data and counting data, and T or chi square test was performed. P<0.05 represents that the difference is statistically significant.

#### 2. Results

First, the experimental observation and comparison show that all patients have completed the treatment. The total effective rates of the rehabilitation group and the control group are 92% and 74% respectively. The total effective rate of the rehabilitation group will exceed that of the control group. The second is the comparison of satisfaction. After receiving treatment, the satisfaction of the control group is 71%, and that of the rehabilitation group is 96%. The satisfaction of the rehabilitation group will significantly exceed that of the control group, and p<0.05.

### 3. Discussion

Duloxetine hydrochloride is a common treatment for persistent postural perceptual dizziness, which is a dual channel blocker. In clinic, the therapeutic effect of its drugs will be better, but not all patients can benefit from taking drugs. Vestibular rehabilitation treatment mainly uses psychological, behavioral intervention and other methods to reduce the

activity level of the sympathetic nervous system and improve its self-regulation ability. It uses compensatory methods to promote peripheral or central vestibular loss to reverse the high-sensitivity state of motor stimulation formed by the patient's conditioned reflex, so that it can achieve the ideal quality goal. And through experimental research, after treatment, the total effective rate of the control group is 74%, and the total effective rate of the rehabilitation group is 92%. If it cannot be effectively treated, the patients will suffer from long-term dizziness, a significant decline in quality of life, and irregular medication will also aggravate the symptoms of dizziness. Therefore, in this situation, vestibular rehabilitation treatment is needed, its application value in patients with persistent postural perceptual dizziness will be better played out. The duration of each exercise is gradually extended by  $1 \sim 2min$ . PPPD patients with mild to moderate anxiety can be exposed to the environment that induces dizziness and treated with vestibular rehabilitation exercise alone. However, those who have not significantly improved their severe anxiety should be treated with drugs and psychological intervention.<sup>[4]</sup>

# Conclusion

Dizziness is a kind of common physical and mental disease. Once patients suffer from this disease, it will occur repeatedly, which will not only have an adverse impact on the patients themselves, but also affect the normal life of the patients' families. Patients with this kind of disease are usually middle-aged and elderly people, who are affected by factors such as the long treatment cycle of chronic diseases. Their diagnosis and treatment requirements will be relatively high, and it is also easy to induce them to have some doctor-patient disputes. [5] Therefore, vestibular rehabilitation therapy for dizzy patients can correctly guide patients to receive reasonable drug diagnosis and treatment, and provide psychological counseling for them, so that patients can cooperate with treatment and reduce the negative emotions of patients due to disease factors. And through experimental research, it is found that vestibular rehabilitation treatment itself will make dizziness or dizziness symptoms more serious, but repeated stimulation signals can make it form vestibular habits, thus gradually forming a more perfect compensation, so that the prognosis and quality of life of patients will become higher. Experimental research shows that after treatment, the satisfaction of the rehabilitation group and the control group is 96% and 71% respectively. The satisfaction of patients in the rehabilitation therapy in the diagnosis and treatment of patients with this disease will make its treatment effect better.

# References

[1] Jiang ZD, Interpretation of diagnostic criteria for vestibular migraine [J]. Chinese Journal of Neurology. 2013 (08).

[2] Liao J, Wu WY, Huang J, Observation on the efficacy of vestibular rehabilitation training combined with paroxetine in the treatment of persistent postural perceptual dizziness [J]. Modern medicine and health. 2018 (17).

[3] Wang T, Observation on the efficacy of biofeedback cognitive behavior combined with vestibular rehabilitation training in the treatment of chronic subjective dizziness [J]. China Minkang medicine. 2017 (21).

[4] Department of Cardiology, Clinical effect of cardiopulmonary rehabilitation training on improving motor function of stroke patients [J]. Chinese practical medicine. 2022 (05).

[5] Chen XH, Effect of standardized rehabilitation training process on patients with acute cerebral infarction [J]. Journal of Anhui health vocational and technical college. 2020 (01).



# Discussion on Nuclear Medical Imaging Technology and Its Radiological Protection Strategy

Bingqiang Xu, Huitong Liu<sup>\*</sup> \*Corresponding authors: Dr. Huitong Liu Shaanxi Provincial People's Hospital, Xi'an 710068, China.

*Abstract:* The continuous progress and development of medicine has effectively promoted the continuous progress of nuclear medicine imaging technology. At present, nuclear medicine imaging technology has been widely used in clinic. The application of this technology needs to be carried out in open radioactive places, and there will be some radioactive damage, which is concerned and valued by more and more medical workers. In order to ensure the effective protection of radioactive work, it is necessary to have perfect, safe and reliable prevention and control measures, so as to effectively ensure the health of medical workers and patients, And it can effectively promote the long-term and stable development of nuclear medicine. This article will elaborate the nuclear medical imaging technology in detail, and elaborate the specific radioactive protection strategy of nuclear medical imaging technology, hoping to provide reference for everyone. *Keywords:* Nuclear Medicine; Imaging Technology; Radiation Protection; Strategy

## Introduction

With the continuous progress of science and technology, the continuous development of medicine, the effective combination of computer technology and positron emission technology, nuclear medicine technology has been widely used in the medical community, and the continuous updating of radioactive drugs has made nuclear medicine technology achieve good achievements and breakthroughs. Nuclear medicine effectively combines radioactive elements and related compounds, and can diagnose and evaluate human volume. It belongs to the medical discipline, and can fully judge the liver function and specific condition of patients. With the continuous development of nuclear medical imaging technology, it has developed from the original diagnosis stage to treatment, and has been widely used. Nuclear medical imaging technology is a non closed radioactive source. In the process of technology application, external radiation will appear, and its injection and pollution behavior belongs to internal radiation. If it is not properly handled in the process of technology application, it will easily cause physical injury and impact to medical staff and patients, so, It is very necessary to study nuclear medical imaging technology and protect its radioactivity.<sup>[1]</sup>

# 1. Analysis of nuclear medical imaging technology

Nuclear medicine is an important part of modern medical technology, which has a direct impact on the development of hospitals. It belongs to an independent discipline technology. Nuclear medicine imaging technology has the characteristics of simple operation and clear image. It is an important clinical medical diagnosis technology in China, and it is an important foundation and guarantee for clinical diagnosis and quality in China. Generally, the images formed by MRI and ultrasound serve for the structure, The formed image is relatively clear, and the accuracy is guaranteed. Nuclear medical imaging technology applies nuclide tracing technology. In the specific diagnosis process, the difference of absorption function will be used as the basis, and the radioactive concentration will be used as the reconstruction variable. When the labeled radioactive molecule probe and imaging agent enter the inspection machine, they will be introduced into the tissues and organs inside the body, and then the radioactive tracer will be emitted, and then presented as an image, which can accurately detect the liver The accurate presentation of the location, volume and specific shape of the lesion can effectively reflect the blood flow and metabolism of the liver and the location of the lesion.<sup>[2]</sup> The changes of many other molecules will also be displayed through

the image, which can check the physical condition as soon as possible, and if there is a problem, it can be treated in time. With the continuous progress of medical technology, new and advanced nuclear medical imaging technology is widely used in clinic, which can effectively present the anatomical morphology and functional metabolism of patients. The electronic reflection diagnostic instrument is effectively combined with the emission computer technology, which can effectively make up for the defects of the traditional medical imaging technology and effectively improve the resolution of the instrument, It has effectively promoted the continuous progress of nuclear medicine technology.

# 2. Radiological protection strategy of nuclear medical imaging technology

Generally, nuclear medicine staff usually contact with the content of using nuclear radiation to treat patients' diseases. Diagnosis and treatment, and carry out various medical research according to nuclear medicine technology, will be exposed to radiation in the specific work process, which is easy to cause physical and psychological damage to medical staff. Therefore, we should attach great importance to the effective protection of radiation of nuclear medicine imaging technology.

# 2.1 Strengthening the protection of clinical staff

In the process of irradiation of nuclear medicine technology, some radioactive drugs will result in serious harm to the health of clinical staff. Therefore, effective protective measures should be taken for medical protection personnel. When clinical workers are exposed to nuclear radiation, they should wear masks, isolation clothes, sleeves and other protective clothing, which can prevent aerosol, dust and other harmful substances from absorbing the respiratory tract and causing harm to the body. Silicone shoes and latex gloves that have been contaminated should be cleaned and disinfected in time, and their front and back sides should be correctly distinguished to avoid cross contamination, Medical staff should also carry out the detection of instruments with systemic contamination to determine whether they are contaminated by radiation, and deal with them in time. They should also carry out radiation monitoring in the workplace and make sufficient records. conduct  $\gamma$  During the application of radionuclides, relevant medical staff should place some lead bricks for effective protection to avoid radiation damage. conduct  $\beta$  When using radionuclides, effective protective measures should be taken to avoid damage to the face and eyes. Relevant staff should strengthen protective work and avoid physical contact with patients. For patients receiving radionuclide therapy, their activity areas should be reasonably limited. It is best to restrict patients' activities in their wards and have independent toilets. We should also pay attention to adequate radiation protection training for medical workers to improve their awareness of protection. A large number of facts have proved that there is a direct relationship between radioactive medical accidents and the professional quality of medical staff. As nuclear medicine staff, they must take up their posts with certificates. Before taking up their posts, they must do a good job of training, comprehensively master the methods of radiation protection, strictly grasp the operation process of clinical medicine, and operate the process in strict accordance with the relevant clinical medical operation requirements. Hospitals should have sound and perfect radiology department management rules and protection requirements, and strictly follow the relevant management and requirements.<sup>[3]</sup>

# 2.2 Process of enhancing protection against radionuclides

The process of radiation therapy should meet the conditions of safety, hygiene and convenience. It should be set on the ground floor of the hospital together with the waiting room, examination room and operation room. It is necessary to strengthen the control of the control area and supervision area of the radiotherapy site, and must clearly divide them. Generally, the treatment room will be set in the control area, and the surrounding rooms will be set as the supervision area. This is very convenient for the management of radiation protection, and can better control the effective exposure of nuclear technology. In the treatment room, it is necessary to ensure that the irradiation direction of the useful harness has sufficient protection, and the shielding of the main ray should meet the relevant requirements. <sup>[4]</sup> For the protection of rays in other directions, it is necessary to fully meet the relevant shielding requirements of scattered rays and missed lines. We must pay attention to the effective protection of the radiation direction of the harness in the treatment room, and do a good job in shielding management. In the process of radioactive radiation, we should choose the conditions with good shielding and ventilation. The sub packaging treatment tray of radionuclides should have sufficient disposable absorbent paper to avoid

direct contact with the radioactive source by hands and body. When taking medicine, attention should be paid to maintaining a certain distance. Long handled instruments can be selected to insert into the lead jar to clamp the medicine, and there should be sufficient spacing from the radioactive source, so as to try our best to reduce the radiation and impact on the human body. When injecting radioactive drugs into patients' veins, it is necessary to stand behind the lead screen and complete it as soon as possible to reduce the radiation time. Minimize the impact and damage of radiation on human body.<sup>[5]</sup>

# 2.3 Strengthening the nursing management of nuclide patients

The patient should make an appointment before the examination, and try to inject the examination in batches at different times, explain the examination items and relevant precautions to the patient, strengthen health education, and for the need for systemic bone imaging examination.

The patients examined should make it clear that the radioactive drug injection treatment will not cause damage to the body, and eliminate the patients' ideological concerns. Before the injection of imaging agent, guide the patients to drink more water and urinate to avoid urine pollution. After examination, patients should rest in the waiting area to avoid walking around at will, which will cause mutual irradiation between patients and medical workers.

## Conclusion

With the cooperation of ultrasonic imaging, CT technology and nuclear magnetic resonance technology, the level of diagnosis and treatment of clinical diseases is constantly improving, and nuclear medicine technology has become the core technology of medical imaging diagnosis at this stage. In the process of the application of nuclear medicine technology, we should effectively apply the radioactive protection measures, do well in the protection of patients and medical workers, do well in isolation protection, pay attention to enhancing the awareness of radioactive protection of medical staff, pay attention to the training of nuclear medicine workers, and standardize the operation process of nuclear medicine radiation process, which can not only effectively avoid unnecessary nuclide exposure, It also effectively reduces the physical injury caused to patients and medical staff. It can effectively promote the continuous development of Chinese medicine, better diagnose and improve the quality of diseases for people, shorten the treatment time, improve the treatment effect of patients, effectively improve the medical level of our country, and better serve the people.

# References

[1] Li YL, Ma L, Discussion on nuclear medical imaging technology and its radiation protection strategy [J], Imaging technology 2018(03).

[2] Huang Y, Nursing research on the way of medication and protection of radionuclides in clinical diagnosis and treatment[J], Nursing research 2016(19).

[3] Liu WB, Gu H, Kang YL, Nuclear medical imaging technology and radiological protection of workers [J], Chinese practical medicine 2014(06).

[4] Liu Q, Research on nuclear medical imaging technology and radiation protection of staff [J], Abstracts of the latest medical information in the world 2018(78).

[5] Shang LM, Tian LX, Yun MK et al, Research on geometric correction method of dual plate multifunctional nuclear medical imaging system [J], CT Theory and application research 2017(02).



# Global Intelligent Transportation Chain Based on Traditional Chinese Medicine: Taking the Anti-Tumor and Other Effect of Ginseng as an Example in Global Production and Salesand Economic Discussion

Zihan Wang<sup>1</sup>, Yihan Liao<sup>2</sup>, Jinhan Guo<sup>3</sup>, Yi Qin<sup>4</sup>

 Faculty of Chinese Medicine, Macao University of Science and Technology, Macao 999078, China.
International Sakharov Environmental Institute, Belarusian State University, Minsk 220070, Belarus.

**3.** Department of Analytical Economics and Econometrics, Belarusian State University, Minsk 220030, Belarus.

4. Medical Oncology, Chifeng Cancer Hospital (The Second Affiliated Hospital of Chifeng University), Chifeng 024000, China.

*Abstract:* The global sale of TCM is in line with China's national policy. The therapeutic concept of Chinese medicine has an avant-garde guiding role in the world. We need to design related intelligent production chain, which is of great help to the internationalization of TCM. Therefore, we have designed and analyzed it. Ginseng has strong anti-tumor capability. Therefore, we try to analyze the relevant data and discuss it in the light of economics.

Keywords: Traditional Chinese Medicine; Ginseng; Oncology; Medicine; Economics

# Introduction

Ginseng, known as the king of herbs, is the most famous traditional Chinese medicine, so that they are a little mysterious. Some people say that ginseng is precious because it is rare and the yield is too small. In fact, it is not. The main reason why ginseng is precious is because it has more efficacy and more definite curative effect, so it is precious.

We conducted a search on the CNKI China Knowledge Network and found that ginseng has the following functions:

Firstly, regulating the central nervous system: Ginseng can regulate the central nervous system, improve the excitation and inhibition process of the brain, and make it tend to be balanced; it can improve the ability of mental and physical labor, improve work efficiency, and have anti-fatigue effect.

Secondly, it has the function of promoting the brain, which can help people improve their learning and memory ability, because ginseng contains substances for our memory.

Thirdly, improving cardiac function: Ginseng can increase myocardial contractility, slow down heart rate, increase cardiac output and coronary blood flow, and resist myocardial ischemia and arrhythmia. It has certain effects on cardiac function, cardiovascular system and blood flow. Ginseng has obvious hypoxia tolerance, and its preparation is effective against sinus arrhythmia. Ginsenoside can accelerate lipid metabolism and has a significant effect of reducing high cholesterol. Small doses of ginseng can slightly increase blood pressure in anesthetized animals, while large doses can reduce blood pressure. Different ginseng preparations can enhance the function of isolated toad heart and in vivo rabbit, cat and dog heart, and improve the myocardial weakness during ventricular fibrillation.

Fourthly, hypoglycemic effect: Ginseng contains ginsenoside and ginseng polysaccharide. In particular, ginsenoside Rb2 has obvious hypoglycemic effect. In addition, ginseng polysaccharide (or glycopeptide) is another hypoglycemic component of ginseng.

Fifthly, enhancing the immune function of the body: ginseng contains active ingredients that can regulate the immune function of our body, and it also helps to improve the immune system of people with low immunity.

We believe that the global supply chain design of ginseng needs to be based on the following principles:

The first is to optimize the industrial layout and promote industrial integration. The Chinese medicine industry includes Chinese medicinal materials cultivation, processing, R&D and production, sales and trade, and large-scale health industry services. All provinces in central China are rich in Chinese medicine resources. The overall planning of the pharmaceutical industry chain in central China should be done well, and big data and artificial intelligence should be fully utilized to optimize the services of the entire industry chain, improve the production efficiency in all links of the entire industry chain, and promote the integrated development of the entire industry we will build a community of interests for the entire industrial chain and continuously optimize and improve the industrial layout.

The second is to strengthen industrial innovation and increase market share through product and service innovation. Using modern scientific and technological means and western medical data analysis, we should innovate the scientific and technological content of Chinese medicine products and services, expand additional products, and increase the added value of Chinese medicine products. We will vigorously develop the health market of traditional Chinese medicine in Central China, continuously develop new medicines and foods, promote traditional Chinese medicine health food to play a major role in the integration of medicine and nursing, and increase the market share of health care with products and services.<sup>[1]</sup>

In the process of internationalization of traditional Chinese medicine, we must abide by the following principles:

The first step is to go abroad, which reflects the spirit of innovation; the second step is to enter the world and make Chinese medicine an international "drug" through the integration of Chinese and Western medicine and the integration of technical standards; the third part is to go to the high end and make our Chinese medicine products become international first-line clinical drugs, which are accepted and used by doctors, patients and medical insurance institutions. Of course, there are many difficulties to overcome in order to achieve this goal. Taking Tasly Compound Danshen Dropping Pills as an example, there are 10 key bottlenecks in the internationalization of traditional Chinese medicine. Clinical research, CMC research, and communication of policies and regulations are the top priorities. In addition, pharmacology and toxicology, data management, North American production, market layout, pharmaceutical economy, risk prevention, and strong alliance must all attract the attention of enterprises taking international.<sup>[2]</sup>

Ginsenoside Rh2 is called "life protector" by many people. It is the most active substance in all components of ginseng, because its content is only one in 100,000, which is extremely precious.

### 1. Inhibition of tumor cell growth

Regulating tumor cell signaling pathway systems. Cell signaling pathway system refers to cells receiving external signals, through a set of specific mechanisms, the extracellular signals are transmitted into intracellular signals, and ultimately regulate the expression of specific genes, and cause cell response.

## 2. Inducing apoptosis of tumor cells

Studies have found that cancer can be treated by some drugs or artificially accelerating cancer cell apoptosis. Experiments show that Rh2 can induce apoptosis of glioma, liver cancer and other cancer cells through different ways, restore normal cell proliferation, and effectively treat cancer.

## 3. Reversing the abnormal differentiation of tumor cells<sup>[3]</sup>

Ginsenoside Rh2 is an exogenous differentiation inducer. By inducing differentiation and apoptosis, cancer cells not only undergo morphological differentiation changes, but also undergo functional differentiation changes. Eventually, cancer cells can evolve into normal cells and even become normal cells completely.

### 4. Reversal of drug resistance in oncology

In the process of treating tumors, clinical chemotherapy failure is often related to the resistance of tumor cells to

chemotherapeutic drugs. Ginsenoside Rh2 can be used as a tumor resistance reversal agent to improve the anti-tumor activity of chemotherapeutic drugs. Ginsenoside Rh2 has strong anti-tumor activity and can be used in the treatment of cancer resistant to various anti-tumor drugs.

## 5. To achieve anti-tumor goals by improving immunity

Ginsenoside Rh2 can regulate and enhance the immune function through various ways, and has a protective effect on the immune system. Ginsenoside Rh2 can significantly increase IL-2 activity, phagocytic function of macrophages and killing activity of NK cells, thus exerting anti-tumor effect. Its protective effect on the immune system is a major feature of Rh2 over other anti-tumor drugs.

## 6. Anti-tumor metastasis

The experimental study of ginsenoside Rh2 against cancer cell metastasis showed that ginsenoside Rh2 had a significant inhibitory effect on spontaneous lung metastasis of mouse B16-BL6 melanoma cell highly metastatic strain. The lung coefficient of Rh2 at the dose of 26,52 mg/kg was significantly different from that of the control group. The number of lung metastatic nodes at the dose of 16.6 mg/kg was significantly different from that of the control.<sup>[4]</sup>

# 7. Synergistic attenuation with chemotherapy drugs

In the process of treating tumors, clinical chemotherapy failure is often related to the resistance of tumor cells to chemotherapeutic drugs. Ginsenoside Rh2 can be used as a tumor resistance reversal agent to improve the anti-tumor activity of chemotherapeutic drugs. General chemotherapy drugs are not easy to enter cancer cells. There is a P-glycoprotein in cancer cells that can expel chemotherapy drugs, resulting in poor tolerance of cancer cells to chemotherapy drugs. Rh2 has hydrophilic and lipophilic properties, and can easily enter the nucleus to kill cancer cells.<sup>[5]</sup>

Economic discussion: At present, China is in a period of rapid economic development, which can promote the process of population agglomeration and urbanization, and promote economic growth and balanced development. We find that the optimization of industrial structure and the international balance are favorable, and realize the new development pattern with the domestic cycle as the main body and the domestic and international double cycles mutually promoting each other. The international trade of ginseng meets these standards. The speed of urbanization can be adjusted through the cultivation and industrial production of ginseng, the economic development planning of densely populated areas around factories, and the export of products can also promote the increase of GDP. The export of ginseng is of great benefit to our country.

# Conclusion

There is no doubt about the medical role of ginseng. We can benefit the whole world through the export of ginseng. The export of Chinese ginseng is also beneficial to China, which can accelerate the internationalization of traditional Chinese medicine. Therefore, we believe that the design of relevant industrial chains is conducive to national development and world progress.

# References

[1] Park, D., Bae, DK., Jeon, JH., Lee, J., Oh, N., Yang, G., & Kim, YB., (2011). Immunopotentiation and antitumor effects of a ginsenoside Rg3-fortified red ginseng preparation in mice bearing H460 lung cancer cells. environmental toxicology and pharmacology, 31(3), 397-405.

[2] Jeon, HG., Kim, SC., & Jeong, NP., (1991). Effects of ginseng saponin fraction and cyclophosphamide on the tumoricidal activity of mouse macrophage and the antitumor effect. Journal of Ginseng Research, 15(2), 99-105.

[3] Zhang, C., Liu, L., Yu, Y., Chen, B., Tang, C., & Li, X. (2012). Antitumor effects of ginsenoside Rg3 on human hepatocellular carcinoma cells. Molecular medicine reports, 5(5), 1295-1298.

[4] Xie, Q., Wen, H., Zhang, Q., Zhou, W., Lin, X., Xie, D., & Liu, Y. (2017). Inhibiting PI3K-AKt signaling pathway is involved in antitumor effects of ginsenoside Rg3 in lung cancer cell. Biomedicine & Pharmacotherapy, 85, 16-21.

[5] Chen, L., & Huang, G. (2018). Antitumor activity of polysaccharides: an overview. Current drug targets, 19(1), 89-96.



# Analysis of Preventive Effect of Comprehensive Rehabilitation Nursing on Lower Extremity Deep Vein Thrombosis after Spinal Fracture Operation

**Renjing Cheng** 

The Second People's Hospital of Hefei, Hefei 230000, China.

Abstract: Objective: To analyze the application value of comprehensive rehabilitation nursing in the prevention of lower extremity deep vein thrombosis after spinal fracture. Methods: Before the implementation of various work, a total of 80 patients with spinal fracture disease requiring surgical treatment were selected from January 2020 to January 2022 and randomly divided into groups. 40 patients in the control group were treated with conventional nursing mode, and 40 patients in the observation group were treated with comprehensive rehabilitation nursing. Before and after the implementation of various nursing measures, the two groups presented the evaluation value of nursing satisfaction, the evaluation value of the incidence of lower limb deep vein thrombosis, the clinical indicators and the evaluation value of coagulation function indicators, carried out careful observation and comparison. Results: The 2.50% result of the observation group was lower than the 17.50% result of the control group, P < 0.05. The satisfaction of the observation group (97.50%) was higher than that of the control group (82.50%) (P < 0.05). Compared with the control group, the evaluation values of lower limb swelling degree, activity time out of bed and length of hospital stay in the observation group were lower, P < 0.05. The evaluation results of PT, APTT, TT and FIB in the observation group were significantly different from those in the control group (P < P0.05). Conclusion: Through comprehensive rehabilitation nursing after spinal fracture, the degree of lower limb swelling of patients is reduced, the prevention effect of deep vein thrombosis is good, the coagulation function is improved, the recovery time is shortened, with high satisfaction, which has reference and application and promotion value in clinical practice. Keywords: Comprehensive Rehabilitation Nursing; Spinal Fracture; Deep Venous Thrombosis of Lower Extremities; Nursing

Satisfaction; Blood Coagulation Function

# Introduction

In recent years, the incidence of spinal fracture is increasing and the harm is great. Indirect external force is the main pathogenic factor, and the typical clinical symptoms of patients after the onset are spinal pain, swelling and dyskinesia, which reduces the quality of life<sup>[1]</sup>. Bed rest after surgical treatment leads to slow venous blood return of lower limbs and high risk of deep vein thrombosis. If not timely intervention will cause organ and tissue dysfunction, which will lead to serious consequences <sup>[2]</sup>. In view of this situation, a series of active and effective comprehensive rehabilitation nursing methods can significantly reduce the risk of complications and improve the overall rehabilitation nursing effect. In this paper, from January 2020 to January 2022, a total of 80 patients with spinal fracture requiring surgical treatment were selected to observe the application value of comprehensive rehabilitation nursing. The following contents are available.

## 1. Data and methods

# **1.1 General Information**

A total of 80 patients with spinal fracture were selected, all of whom were admitted during the study period from January 2020 to January 2022. Among the 40 cases in the observation group, 22 cases were male and 18 cases were female. The age range was 35-75 years old according to statistics, and the average value was (55.46±4.21) years old. Among the 40

cases enrolled in the control group, 23 cases were male and 17 cases were female. The statistical age range was 36-74 years old, and the average value was ( $55.52\pm4.19$ ) years old. There was no difference in natural information between groups (P>0.05).

# 1.2 methods

In the control group, routine nursing was carried out according to the relevant standards of spinal fracture, including basic nursing such as disease observation and assisted examination. Guide the intake of easy to digest light food, inform the operation process and prognosis effect, and prepare for the operation.

Observation group comprehensive rehabilitation nursing, (1) postoperative posture nursing: take supine position, raise both lower limbs appropriately, promote lower limb venous reflux. Nursing staff massage the patient's lower limbs properly, assist the patient to turn over, when necessary, put on stretch socks for the patient to prevent thrombosis. (2) Postoperative rehabilitation nursing: carry out early functional exercise, nursing staff combined with intravenous pump treatment, after recovery to a certain extent, carry out lower limb training, the time is controlled at 15min each time, 3 times a day. At the same time, leg elevation training was carried out appropriately, and lower limb flexion exercise was carried out 7d after surgery to prevent muscle atrophy and lower limb deep vein thrombosis. (3) Massage care: massage the lower limbs of patients, and implement the plantar venous pump, increase the pressure of the calf and thigh, increase the blood flow rate to empty the venous congestion. Ask the family member to massage both lower limbs to ensure the vascular function of the patient. (4) Health education: To carry out health education in easy to understand language, inform relevant knowledge of surgery, do psychological work well, eliminate inner concerns, emphasize the importance of prevention of deep vein thrombosis, and improve the degree of nursing cooperation.

# **1.3 Observation Indicators**

① The assessment results of the incidence of lower extremity deep vein thrombosis in the two groups were observed and compared <sup>[3]</sup>. ② The evaluation results of nursing satisfaction of the two groups in the experiment were observed and compared. On the day of discharge, a self-made questionnaire was used for evaluation. The content of the questionnaire: Nursing attitudes and nursing skills, etc., were investigated by patients, and the satisfaction degree was judged by score, with scores ranging from 0 to 100, 90-100 being marked as very satisfied, 60-89 as basic satisfied and 0-59 as dissatisfied. Total satisfaction rate = very satisfaction rate + basic satisfaction rate. ③ The evaluation results of coagulation function of the two groups in the experiment were observed and compared. 3ml peripheral venous blood samples were taken, and the patients' coagulation function and other related indicators were analyzed and evaluated with the help of automatic coagulation analyzer. The evaluation indexes include prothrombin time PT, activated partial thrombin time APTT, thrombin time TT and fibrinogen FIB. ④ The clinical indicators of the two groups were observed, including the degree of lower limb swelling, movement out of bed and length of hospital stay.

## **1.4 Statistical methods**

The data collected from the experiment were statistically analyzed in SPSS22.0. The count between the two groups was expressed by (%), and the results were obtained by  $\chi^2$  test. The measurement between the two groups was expressed by () and t-test was performed. P<0.05 was statistically significant.

# 2.The results

# 2.1 Comparison of incidence of lower extremity deep vein thrombosis

#### between the two groups

The evaluation result of 2.50% in the observation group was lower than that of 17.50% in the control group (P < 0.05). Table 1: Comparison of assessment values for the incidence of deep vein thrombosis in lower limbs [N (%)]

Group	occurrence (n)	Incidence (%)
Control group (n=40)	7 (17.50)	17.50%
Observation group (n=40)	1 (2.50)	2.50%
$x^{^{2}}$		5.000
Р		0.025

# 2.2 Comparison of nursing satisfaction between the two groups

The satisfaction of the observation group (97.50%) was higher than that of the control group (82.50%) (P < 0.05). Table 2: Comparison of nursing satisfaction evaluation values [N (%)]

Group	satisfied	basic satisfied	dissatisfied	satisfaction rate
Control group (n=40)	16 (40.00)	17 (42.50)	7 (17.50)	33 (82.50)
Observation group (n=40)	20 (50.00)	19 (47.50)	1 (2.50)	39 (97.50)
$\boldsymbol{x}^{^{2}}$				5.000
Р				0.025

# **2.3** Comparison of coagulation function between the two groups

PT and FIB in the observation group were lower than those in the control group, while APTT and TT in the observation group were higher than those in the control group, P < 0.05.

Table 3: Coagulation function assessment Scale ( $\overline{x} \pm s$ )				
Group	PT (s)	APTT (s)	TT (s)	FIB (g/L)
Control group (n=40)	15.18±2.42	40.29±4.44	18.32±2.55	2.32±0.52
Observation group (n=40	13.52±2.15	36.87±4.39	16.92±1.59	3.57±0.49
t	3.243	3.464	2.946	11.064
Р	0.001	0.000	0.004	0.000

# 2.3 Comparison of clinical indicators between the two groups

Compared with the control group, the evaluation values of lower limb swelling degree, activity time out of bed and length of hospital stay in the observation group were lower, P < 0.05.

Group	Degree of lower limb swelling (cm)	movement out of bed (h)	length of hospital stay(d)
Control group (n=40)	3.96±0.33	43.42±4.23	3.97±0.33
Observation group (n=40	2.05±0.31	36.32±2.98	2.02±0.29
t	26.680	8.678	28.072
Р	0.000	0.000	0.000

Table 4: Comparison of various clinical indicators ( $\overline{x} \pm s$ )

### 3. Discussion

Patients with spinal fracture are prone to many complications after surgery, the most common of which is deep vein thrombosis of lower limbs, which is highly correlated with patients' reduced coagulation function and stress response. Therefore, it is necessary to pay more attention to it and implement a comprehensive and systematic nursing method to obtain the ideal effect and good prognosis. In the nursing work, the conventional nursing form is single and does not meet the actual needs of patients. Relevant nursing staff carry out comprehensive rehabilitation nursing based on routine nursing, which is of great significance to the improvement of curative effect and prognosis.

The study found that 2.50% of the observation group was lower than 17.50% of the control group, P < 0.05. It can be seen that comprehensive rehabilitation nursing, health education, promoting patients to realize the importance of prevention and treatment of complications, and actively participate in exercise and treatment, accelerate patients' blood circulation and prevent thrombosis can effectively control the occurrence of lower limb deep vein thrombosis. The satisfaction of the observation group (97.50%) was higher than that of the control group (82.50%) (P < 0.05). To investigate the reasons, the use of comprehensive rehabilitation nursing, from different angles, through posture guidance, massage nursing and rehabilitation nursing, so as to keep the lower limb blood flow in a good state, accelerate the recovery of patients with disease, help to improve nursing satisfaction. The evaluation value and recovery time of lower limb swelling in the observation group were lower than those in the control group (P < 0.05). It can be seen that the implementation of comprehensive rehabilitation nursing, shorten the rehabilitation time, and further improve the nursing effect. The evaluation results of PT, APTT, TT and FIB in the observation group were significantly different from those in the control group (P < 0.05). It can be seen that the implementation nursing, comprehensive understanding of patients with spinal fracture surgery, improve the importance of related nursing, actively prevent related complications and improve lower limb venous return, is conducive to improve coagulation function.

To sum up, comprehensive rehabilitation nursing can shorten the rehabilitation time, improve the coagulation function, reduce complications, have higher satisfaction and achieve accurate nursing effect in the postoperative nursing work of spinal fracture.

# References

[1] Chen XL, Li CC, Sun K, et al. Effect of systematic nursing and routine nursing on the reduction of intraoperative stress injury in patients with spinal fracture and spinal cord injury [J]. Chinese Journal of Trauma, 2021, 37(2):152-157.

[2] Qin Q, Luo JY. Effects of hyperbaric oxygen therapy combined with continuous nursing on neurological recovery and mood in patients with spinal fracture and spinal cord injury [J]. Chinese Journal of Marine Medicine and Hyperbaric Medicine, 2021,28(2):203-207.

[3] Zhang Y, Zhang Y, Zhang Y, et al. The effect of early nursing intervention on the treatment of thoracolumbar spinal fracture[J]. Chinese Journal of Health Standards Management, 2021, 12(17): 143-146.