Clinical Nursing Observation on Treating Stage II-III Pressure Ulcer with Saprophytic Muscle Cream

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Abstract: To observe the clinical nursing effect of saprophytic muscle cream on the treatment of stage II-III pressure sores. Seventy-one patients with pressure ulcers who were hospitalized in the department within 3 years were randomly divided into observation group and control group, 33 cases in observation group, 58 pressure ulcers, combined with home treatment of detoxification and muscle cream; 38 cases in control group. In the control group, 38 cases, a total of 66 pressure ulcers, using vaseline gauze and conventional care methods. The KPS score, ADL score, SWLS score, and the healing of the patient's pressure sore were compared between the two groups at 1 month and 3 months. The data of 51 patients with diabetes mellitus complicated with pressure sores (69 sores) were retrospectively analyzed. The patients were divided into observation group (28 cases, 39 places) and control group (23 cases, 30 places). The three-month KPS score ($t=2.652$, $P=0.037$) and ADL score ($t=2.064$, $P=0.047$) were significantly different. The life satisfaction table (SWLS) was very satisfactory ($\chi2=5.233$, $P=0.032$), the difference was significant. The cure rate of pressure ulcers in one group of patients after one month ($\chi2=11.393$, $P=0.001$), significant efficiency ($\chi2=5.492$, $P=0.027$), total effective rate ($\chi2=11.644$, $P= 0.001$), the difference was statistically significant ($P < 0.05$). After treatment of pressure sore with saprophytic muscle cream, the therapeutic effect was significantly different from that of the control group. There was also a significant difference between the two groups in the healing time of Phase II and III.

1. Introduction

Pressure sore care is a basic care in clinical care. Clinical nursing is very important. In the quality inspection of nursing, the incidence of hospital care based pressure ulcers is 0%. However, when patients are hospitalized, some patients have pressure ulcers before they come to the hospital. Therefore, the care of such a group of patients becomes a key issue. The project is a combination of the Third Affiliated Hospital of Qiqihar Medical University and Qiqihar Traditional Chinese Medicine Hospital in the clinical application of traditional Chinese medicine on the pressure ulcer care, through the practice of nursing is significant. Through the research of this project, we can promote the healing of patients' pressure sores, strengthen the basic nursing, make patients and their families satisfied, reduce the economic expenses of patients, promote the treatment of primary diseases, improve the quality of nursing services, and thus improve the social benefits of hospitals and economic benefits. The report is as follows:

2. Research objects and research methods

Patient enrollment criteria and exclusion criteria. Inclusion criteria: patients with pressure ulcers in phase II and III of Shea staging method; patients with treatment, dementia; exclusion criteria: patients with stage I and IV pressure ulcers; patients with advanced tumors; patients with abnormal coagulation; he cannot actively cooperate with the treatment.

Observation indicators. Observation content: healing time of pressure sores; color of sore surface, granulation tissue formation, exudate condition, and then evaluate the therapeutic effect of pressure

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sore. Among them, the evaluation criteria of pressure sore: cure, sore surface damage, natural healing; markedly effective, reduced sore surface, reduced exudate, good growth of granulation tissue; ineffective, no granulation tissue growth on the sore surface, no obvious shrinkage or enlarged sore surface, The exudate did not decrease.

Evaluation criteria for pressure ulcers. Cure: sore surface scars, local tissue repair and healing; markedly effective: sore face shrinkage, some sore surface scars or granulation tissue growth, no secretions; improved: sore surface exudate decreased, sore surface did not expand; invalid: The sore surface does not heal and there is still secretion or exudate.

Statistical methods. All observation data were analyzed by SPSS22.0 statistical processing software. The count data were compared by $\chi 2$ test. The measurement data were expressed in the form of mean±standard deviation ($\bar{x} \pm S$). Comparison by t test, $P<0.05$ was statistical.

3. Specific research content and nursing methods

Taking patients with clinical stage II and III pressure ulcers as the research object, two groups were selected as the control study, and the pressure sore nursing evaluation method was used to treat the pressure sore lesions in the pressure ulcer recovery stage after using different nursing treatments for patients with pressure ulcers. And the changes in the various stages of injury healing were studied and analyzed.

Wound care. Between August 2009 and August 2012, 71 patients with pressure ulcers were hospitalized in our department, including 41 males and 30 females, aged 45-83 years, with an average of 68.5 years, including chronic obstructive pulmonary disease. There were 15 cases, 10 cases of cardiopulmonary resuscitation, 23 cases of pulmonary heart disease, 17 cases of pulmonary infection combined with respiratory failure, and 6 cases of other diseases. All patients had 124 pressure ulcers. All patients had a history of continuous or intermittent long-term bedridden. The patients were randomly divided into observation group and control group, 38 cases in the control group, and 66 pressure ulcers, using Vaseline gauze and conventional nursing methods. There were 33 cases in the observation group and 58 pressure ulcers. The combination of detoxification and muscle ointment combined with home care; home care is an important part of continuing care and health care. The main target is all kinds of elderly patients, chronic diseases and disease sequelae need rehabilitation training. Through home care, improve patient status, delay disease progression, reduce complications, and reduce patient re-admission, thereby reducing patient care costs and improving quality of life.

Diabetes patients with pressure ulcers care. In the endocrinology department, from January 2010 to June 2013, 51 patients with diabetes mellitus complicated with pressure ulcers were treated, including 69 sores, including 31 males and 20 females, aged 46-85 years, with an average age of 65.4 years. All patients were type 2 diabetes with a history of 6 to 37 years. The sore surface formation time is 5 to 63 weeks, with an average of 20 weeks. The maximum area of the sore surface is 9 cm × 15 cm, and the minimum is 3 cm × 6 cm. The degree of sore surface is different, and the deepest part can reach the periosteum. Pressure sore parts: 13 cases in the back, 20; 9 cases in the hip, 12; 7 cases in the thigh, 7; 6 cases in the calf, 8; 10 cases in the heel, 14; 6 cases in the foot, 8 in the foot. The pressure ulcer was evaluated and graded by Shea staging method, 23 in stage II and 38 in stage III. Patients were divided into observation group (28 cases, 39 cases) and control group (23 cases, 30 cases) by random number table method.

Observation group: Thoroughly clean the patient’s sore surface. After scouring the roving cloth with physiological saline, wipe the sore surface. Rinse thoroughly with a syringe and aspirate the saline solution. Use a sterile syringe needle to draw the word “well” on the sore surface and the surface of the necrotic tissue to sore. A small amount of bloody exudation can be seen on the surface. Apply a proper amount of saprophytic muscle cream to the affected area. The thickness is 2~3mm. The boundary should exceed the edge of the sore surface. At the same time, the Kanghuier exudate absorbing patch is used to cover the sore surface. In the environment, according to the actual exudate condition of the sore surface, choose 1~3d dressing 1 time. If there is exudation of

purulent discharge on the sore surface, a silver ion dressing is added for local antibacterial. Control group: the traditional method of nursing dressing change, first use iodophor disinfection of the skin, then choose hydrogen peroxide and saline to wash the sore surface to remove necrotic tissue, and finally use Vaseline oil gauze to fill, external sterile gauze cover, once a day dressing change.

Home care

Three days before the patient leaves the hospital, the content of home care is formulated according to the actual situation of the patient's bed rest, and systematic training is carried out. First, the head nurse will train each responsible nurse, and then the responsible nurse will jointly train the patient and the patient's family. The main nursing contents include tension-free position care, pressure sore care equipment, rehabilitation exercise methods, psychological care and so on. At the same time, a follow-up group was established, and a family visit was performed for the observation group (1 month from the hospital and 3 months from the hospital), and the control group was followed by two telephone visits (1 month from the hospital and 3 months from the hospital).

Environmental factors: The room is facing the sun, the ventilation is good, the indoor air is fresh, the bedding is often aired and kept clean and dry, and the underwear is made of pure cotton texture, which is often changed. Use a self-made air cushion, cotton ring and other items to prevent local pressure on the pressure sore and keep the skin clean and dry.

Change position: When changing the patient's position, especially for elderly patients, the tension-free technique is adopted. When the patient turns over, the family puts the hand on the patient's body and pushes the patient to the center of the body. Turn left or right oblique 300 axis to prevent skin tension in dangerous parts. At the same time, use air cushions, pillows, etc. to separate the patient's bone protrusions such as knees and internal hemorrhoids to avoid direct contact with the skin. When the patient sits up, the family members stand in the middle of the patient's legs. Place the hands under the hips on both sides of the patient, hold the hands tightly in the patient's appendix, and lift the patient up; when the patient sits down, the family should first loosen the clenched hands, let the patient lean slightly to the side, first put down The side of the buttocks reinforces the patient's body, and then the other side of the buttocks is lowered. During the whole process, the force is applied to the appendix to keep the skin of the patient's appendix relaxed.

Nutritional Care: Strengthen nutrition support, eat more high-protein, high-calorie, high-vitamin diet to increase the body's resistance and tissue repair ability.

Rehabilitation training: When the patient is in bed for a long time, the body is prone to symptoms such as soreness and pain, and poor bowel movements. Therefore, when the patient is sitting up, the family can press the meridians, acupuncture points, etc. by pressing the limbs, and pressing the Sanyinjiao on the foot. And TaiChong, Gongsun, Yongquan acupuncture points, require a lighter method, press 2min, according to the meridian shape, beat the kidney, spleen, liver, gallbladder, bladder and stomach and other meridians, to achieve the purpose of relaxing the muscles and stimulating the blood circulation.

Health Education: Targeting patients and their families to carry out health knowledge and education, truly understand what is the pressure sore, and the damage of pressure sores, especially pay attention to how to prevent further development of pressure ulcers and correct pressure ulcer care measures, improve family members Recognize the importance of prevention and treatment of pressure sores; at the same time do a good job of psychological care for patients and their families, with emphasis on the continuity and scientific nature of home care, and cannot be interrupted.

Family visits. A follow-up group of one month after the patient left the hospital conducted family visits. Attention was paid to the environment of the room, the bed sheets and bedding of the patients, the family members demonstrated the patients' changing posture methods, the nutrition and rehabilitation training of the patients, and talked with the family members and patients to understand the knowledge of pressure ulcer diseases. Solve all kinds of problems. The contents of family visits for 3 months after discharge include inquiring about the general state of patients, including medication, diet, defecation and psychological status; consulting and improving measures for the problems arising from the last family visit; focusing on the aspects of turning over interval, operation methods and rehabilitation training.

The patients in the control group followed the previous telephone interview method of our department. Before leaving the hospital, the patients were routinely educated about the pressure ulcers, strengthening the patient's accommodation, diet and psychological care, assisting the patient to turn over and change the vaseline gauze in time; one month after discharge. Telephone interviews were conducted twice with three months to understand the general status of the patient and inform the relevant precautions.

4. Results

Patients were sacrificed at the time of leaving the hospital and one month after leaving the hospital, and the Karnofsky score and ADL score were scored during the three-month follow-up period. The scores of the Karnofsky assessment scale (KPS) and the daily living ability (ADL) rating scale were scored, and the KPS score was scored. The difference between the three months of hospitalization (t=2.652, P=0.037) was statistically significant (P<0.05), and the ADL score was shown at three months after leaving the hospital (t=2.064, P=0.047). , statistically significant (P <0.05), as shown in Table 1.

Table 1 Comparison of Karnofsky score and ADL score between the two groups (points)

Group	n	Karnofsky score			ADL score		
		Leaving hospital	After 1 month	After 3 month	Before Leaving hospital	After 1 month	After 3 month
Observation group	33	70.63±12.39	81.34±14.55	91.47±7.39	69.19±18.98	87.43±14.17	96.38±4.38
Control group	38	67.48±13.22	76.47±15.20	85.44±12.94	66.37±16.85	79.45±23.07	91.46±10.28
t		-0.907	1.634	2.652	0.826	1.829	2.064
P		0.375	0.069	0.037	0.436	0.223	0.047

Surveys of patients' life satisfaction were conducted in one month and three months after leaving hospital. There was no significant difference in one month after leaving hospital. At three months after leaving hospital, patients scored seven items of life satisfaction scale (SWLS) and very satisfactory items (2 = 5.233, P = 0.032), with significant difference (P < 0.05). Other project indicators have no statistical significance, as detailed in Table 2.

Table 2 Comparison of Life Satisfaction Scale (SWLS) scores at 3 months after discharge (case)

Groups	n	VS	S	LS	N	LDS	DS	VDS
observation group	33	22	5	3	2	1	0	0
control group	38	15	7	5	2	4	2	3
$\chi 2$		5.233	0.134	0.292	0.021	1.516	1.787	2.720
P		0.032	0.761	0.716	0.638	0.363	0.495	0.243

The curative effect of pressure ulcer is detailed in Table 3. The cure rate (2=11.393, P=0.001) and marked efficiency (2=5.492, P=0.027) are compared after one month, and the total effective rate of one month is compared (2=11.644, P=0.001), the difference is significant (P<0.05).

Nursing care for diabetes mellitus complicated with pressure ulcer. The therapeutic effects of the two groups are detailed in Table 3, and there is statistical significance in the therapeutic effect (P < 0.05). The cure time of two groups of patients in different stages is detailed in Table 4. The cure time of stage II and III is also statistically significant (P < 0.05).

Table 3 Comparison of therapeutic effects of pressure ulcers in two groups of patients (example)

Groups	Pressure sore,	cure,	effect	invalid	Total effective rate (%)
Observation group	28	23	4	1	97.4
Control group	23	11	7	5	76.7
$\chi 2$		7.300			17.683
P		0.026			0.000

Table 4 Comparison of pressure ulcer healing time between the two groups (d)

Groups	cases	PhaseII	Phase III
Observation group	28	9.1±1.7	15.8±4.9
Control group	23	13.6±2.7	19.7±5.3
t		-5.231	-2.085
P		0.000	0.009

5. Discussions

Long-term bed rest leads to malnutrition and metabolic disorders in the body, and patients are prone to pressure sores. Through comprehensive and meticulous care, the pressure sore part can promote the formation of sore surface cells in a sterile and humid environment, promote the regeneration of granulation, and achieve the healing of sore surface. The detoxification muscle cream contains light powder, frankincense, comfrey and blood. The ingredients of traditional Chinese medicine can play the role of detoxification, detoxification, and promoting blood circulation. Before applying the medicine, the pressure sore surface is cleaned with physiological saline, disinfected and sterilized to provide a moist environment, which is beneficial to the regeneration of the wound granulation tissue and is beneficial to wound healing. Through this study, it can be seen that the use of de-septic muscle cream to wipe the sore surface can shorten the healing of the sore surface, and the effective rate reached 77.5% in one month, compared with the control group Vaseline wipe ($\chi 2$=11.644, P=0.001), the difference Significantly, it was statistically significant (P<0.01).

Home care is part of the continuation of care. By formulating a home care program, the means of care can be made more scientific, concrete and practical, and careful care measures can be developed to consider the details of specific care, which can effectively promote the healing and prevention of sore surface. In the case of pressure ulcers, the observation group was able to promptly discover the blind spots of family care and the places where the nursing is not comprehensive, and promote the recovery of the patient's health, delay the development of the disease, and promote the sore through scientific methods and the healing of the face.

According to the results of this group of studies, the KPS score (t=2.652, P=0.037) and ADL score (t=2.064, P=0.047) were significantly different after three months of hospitalization. It was statistically significant (P<0.05), indicating the development of home care methods, and through two home visits, effectively improved the patient’s living conditions, improved daily living ability, and the patient’s functional status was greatly improved.

In home care, the patient’s skin sore face care is essential, to avoid friction and compression parts, and to maintain the moistness of the sore surface with saline, to change the patient’s position through tension-free methods, to the greatest extent, to promote the patient’s sore The face is healed, but at the same time, because the patient turns over at least half an hour, the task is large, many family members can not adhere to it, increase the family visit link, can effectively guide the patient's family members, and promote the patient's wound in a short time. Heal. At the same time, home care measures enable patients to increase their confidence in living while staying in bed for a

long time. They feel the care from their loved ones. Through the survey of life satisfaction after three months of patient leaving the hospital, the life satisfaction table (SWLS) among the seven satisfaction project scores, in the very satisfactory project ($\chi 2=5.233$, $P=0.032$), the difference was statistically significant ($P<0.05$). It can be seen that patients are full of optimism about life. At the same time, it provides dietary guidance and rehabilitation training for patients. It can improve body function by increasing protein intake, massage skin to promote local blood circulation, and promote the recovery of body functions and increase body resistance.

Diabetic patients have low skin resistance and are prone to ulceration and ulceration. Therefore, diabetic patients are prone to pressure ulcers after bed rest, and diabetic patients themselves suffer from pressure ulcer healing due to high blood sugar, strict blood vessels, and high age. . In recent years, the treatment of pressure sores has proposed the theory of “wet healing”, that is, in a humid environment; necrotic tissue can be hydrated by exudate, releasing the fibrinolysis enzyme of the tissue cells themselves, which can hydrolyze necrotic tissue. In turn, the healing effect of debridement is achieved.

6. Conclusion

Pressure ulcers are caused by long-term bed rest, long-term compression of local tissues, blood circulation disorders, and persistent ischemia and hypoxia, resulting in skin ulcers. Higher blood sugar, narrow blood vessels, and higher age affect the healing of pressure ulcers, which is a common complication of long-term bedridden patients. The incidence of pressure ulcers in the hospital reached 0.38%. Once pressure ulcers occurred, the prognosis and quality of life of the patients were seriously affected. It can be seen from the study that compared with the traditional pressure ulcer nursing method, after the sore skin cream is applied to wipe the sore surface, the therapeutic effect of the pressure sore is extremely significant, and the two groups are in the phase II and III healing time. The comparison also has significant differences. Through the comparative observation of clinical practice, it can be seen that the treatment of decomposed musculature in the treatment of pressure sores, whether it is diabetic pressure ulcers or home care, is better than traditional methods.

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