Application of Seamless Nursing in Chronic Wound Nursing

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Abstract: Objective — To analyze the application of seamless care in chronic wound care. Methods — 106 patients with chronically infected wounds treated in the hospital from April 2019 to August 2020 were selected and divided into the observation group (with seamless care, 53 cases in total) and the control group (with routine nursing, 53 cases in total) according to different nursing methods. The differences in the treatment effect, wound healing time and the number of dressing changes between the two groups were compared. Results — The clinical efficacy of the observation group was significantly better than that of the control group (P<0.05); the wound healing time and the number of dressing changes in the observation group were significantly shorter and less than those of the control group (P<0.05). Conclusion — The application effect of seamless care in chronically infected wounds is good; it can effectively shorten the wound healing time, and it is worth popularizing.

Keywords: seamless nursing, chronically infected wound, clinical nursing

1. Introduction
The incidence of chronically infected wounds in the clinic is relatively high. Infections lead to prolonged wound healing time and are prone to many complications. If not treated in time, the infections may get worse and affect the patients’ health. Therefore, how to improve the healing speed of chronically infected wounds has become an important topic of clinical research. In the past, for chronically infected wounds, the method of covering with Vaseline gauze and dressings that can keep the wound moist were mainly used to accelerate wound healing. However, it has been found in practical applications that frequent dressing changes have a certain impact on wound healing. Clinical studies believe that it is necessary to provide high-quality nursing services during the treatment of chronically infected wounds to improve the health of patients and promote wound healing. Based on this, the author conducted related research.

2. Materials and methods
2.1 Clinical materials
From April 2019 to August 2020, a total of 106 patients with chronically infected wounds were treated in our hospital. Among them, there were 57 males and 49 females respectively; the age range was 36~79 (57.79±8.65) years old; the wound area was 4.4~16.1 (10.32±3.28) cm². Inclusion criteria: The causes of wound formation are burns, trauma, pressure sores, etc., and the wound does not involve muscles. Exclusion criteria: combined with abnormal coagulation function; combined with severe organ dysfunction; combined with mental dysfunction. Combined with the needs of clinical nursing research, 106 patients were divided into two groups according to the odd and even number method, with 53 cases in each group. Comparing the relevant data between the two groups, the results showed no difference (P>0.05).

2.2 Methods
Control group (53 patients, routine nursing). After the patients were admitted to the hospital, the wounds were actively treated with debridement and symptomatic treatment according to the doctor's advice, and the patients were encouraged to return to the hospital and change their dressings.

Observation group (53 patients, seamless nursing). (1) Strengthen theoretical knowledge training. The head nurse needs to organize nurses to participate in the study and observation of chronic wound care and chronic wound complications in batches. After the patient is admitted to the hospital, the nurse can immediately implement a systematic and comprehensive evaluation of the patient, patiently understand the patient's actual treatment and nursing needs, patiently explain the relevant knowledge, give meticulous answers after the patient asks a question, understand the patient's emotions, take the initiative to comfort patients, and preventively deal with potential risk factors. (2) Change the concept of service. The inactive and inactive nursing service of nurses is the main reason that the quality of clinical nursing has
not been effectively improved. In order to improve this situation, the head nurse needs to organize nurses to carry out quality education and require general nurses to not only have good skills, theoretical knowledge and operational ability, but also have a humanistic service concept. In the nursing process, fully highlight the hospital's service concept of "people-oriented", actively implement corresponding care for patients, do not look at patients with strange eyes because of their vomiting, always respect and care for patients, prevent adverse events from patients, and improve the safety of care [5].

2.3 Observation indicators
The treatment effect, wound healing time and the number of dressing changes were compared between the two groups. The curative effect evaluation criteria are as follows. Markedly effective: the wound is completely healed; the laboratory culture is negative; the wound is painless. Effective: the wound shrinks ≥ 50%; the laboratory culture is negative; the suture or skin grafting is feasible; the pain is relieved to a certain extent. Ineffective: the wound shrinks less than 50%; laboratory culture is positive; pain is obvious and severe; suture or skin graft surgery is not allowed.

2.4 Statistical analysis
All research data were statistically analyzed using SPSS17.0 statistical software, and the difference was statistically significant when \( P<0.05 \).

3. Results

3.1 Comparative analysis of clinical efficacy
The clinical curative effect of 53 cases in the observation group was 94.3% significantly higher than that in the control group (\( P<0.05 \)), as shown in Table 1.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Markedly effective</th>
<th>Effective</th>
<th>Ineffective</th>
<th>Total effective rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation group (n=53)</td>
<td>28</td>
<td>22</td>
<td>3</td>
<td>94.3</td>
</tr>
<tr>
<td>Control group (n=53)</td>
<td>23</td>
<td>20</td>
<td>10</td>
<td>81.1</td>
</tr>
</tbody>
</table>

X² 5.135
P 0.041

3.2 Comparative analysis of average wound healing time and average number of dressing changes
The average wound healing time and average number of dressing changes of 53 cases in the observation group were significantly lower than those in the control group (\( P<0.05 \)), as shown in Table 2.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Average wound healing time (days)</th>
<th>Average number of dressing changes (times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation group</td>
<td>45.6±5.6</td>
<td>7.8±2.3</td>
</tr>
<tr>
<td>Control group</td>
<td>68.5±7.5</td>
<td>16.5±4.5</td>
</tr>
</tbody>
</table>

\( t \) value 5.465
\( P \) value 0.044

4. Discussion
Wound infection is a common clinical complication. Especially for burn patients and surgical patients, if the wound is not handled properly, the patient's condition may become worse, affecting the clinical treatment effect, prolonging the hospital stay and increasing the medical burden [1]. Chronic wound infection is a relatively serious disease and requires multiple dressing changes. During the dressing change, the patient will have certain pain symptoms, which can easily cause anxiety and depression, and even cause doctor-patient disputes. Therefore, how to accelerate the healing of chronically infected wounds has become an important issue that doctors need to solve. Traditional medicine believes that...
effective debridement can accelerate wound healing. For chronically infected wounds, it is necessary to completely remove the infected tissue to prevent necrotic tissue from stimulating the wound surface, breeding bacteria, and aggravating the infection of the patient \[5\]. After the necrotic tissue is removed, the wound needs to be properly treated, which can accelerate wound granulation. However, in the process of debridement, attention should be paid to controlling the depth to prevent bleeding from the wound. Clinical studies have found that large-area wounds need to be debrided multiple times to allow the granulation tissue to grow better \[3\]. In the process of debridement, attention should be paid to the gentle operation, which can effectively remove necrotic tissue and prevent tissue bleeding. To avoid residual wounds of necrotic tissue leading to bacterial growth and maintain a good environment for wounds \[3\]. In the process of wound care, it is necessary to strengthen drainage, which helps to reduce the stimulation of inflammatory exudates and has a better impact on the wound surface \[5\]. This method can accelerate the formation of wound granulation. The traditional treatment method is mainly to use petroleum jelly gauze to cover the wound, but it requires multiple dressing changes. This method may lead to prolonged disease and chronic wounds, so it is necessary to break through the limitations of traditional dressing changes.

For chronically infected wounds, a silver ion dressing is commonly used in clinical practice. The dressing belongs to a new type of dressing, which is used for the treatment of chronic infectious wounds and can obtain relatively ideal therapeutic effects. Silver ion dressing has a broad-spectrum antibacterial effect and can effectively inhibit the growth of bacteria on the wound surface. The application of this material in chronically infected wounds can effectively improve the inflammatory response of the wound, and at the same time can effectively stop bleeding, improve the patient’s pain symptoms, accelerate the healing of the wound, improve the quality of life of the patient, and reduce the occurrence of adverse phenomena \[6\]. Studies have pointed out that the application of silver ion dressings in the treatment of chronically infected wounds can promote wound healing, prevent wound infections, keep the wound clean, and reduce the use of antibiotics \[7\]. Scholars have found through observation that on the basis of the treatment of chronic wounds with silver ion dressings, combined with high-quality nursing services, patients can understand the reasons for medication, soothe their emotions, encourage patients to understand the work of medical staff, and cooperate with clinical work to further improve clinical practice. The therapeutic effect can also accelerate the healing of chronically infected wounds, reduce the number of dressing changes in patients, and relieve the patients’ physical discomfort \[8\]. This study agrees with the above research point of view. The results of the study show that the clinical efficacy of 53 cases in the observation group (94.3%) was significantly higher than that of the control group (81.1%) in the implementation of seamless care during the treatment of chronic infection wounds; the average wound area, the healing time and the average number of dressing changes of the 53 cases in the observation group were significantly lower than those of the control group.

5. Conclusion

In summary, the incidence of chronically infected wounds in clinic is relatively high. Infection leads to prolonged wound healing time and is prone to many complications. If not treated in time, it may aggravate the degree of infection and affect the health of patients. The application of seamless nursing in chronically infected wounds is effective, can effectively shorten the wound healing time, and is worthy of popularization.

References

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