Postoperative Application of Interventional Nursing in the Thoracoscopic Radical Resection of Lung Cancer

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Received date: October 22, 2015; Accepted date: December 28, 2015; Published date: May 02, 2016

Abstract

In this paper, the effects of interventional nursing after the thoracoscopic radical resection of lung cancer were discussed and 86 patients undergoing the thoracoscopic radical resection of lung cancer in our hospital were selected. According to the method of random number table, patients were divided into the observation group and the control group (43 cases in each group). All the patients were given routine nursing after thoracic surgery, and postoperative interventional nursing was added in the observation group. The results showed that the off-bed time, the chest tube removal time, and the length of stay of the observation group were all shorter than the control group (P<0.05). The postoperative complication rate of the observation group was 4.65% and the patient satisfaction rate was 95.3%, while the postoperative complication rate of the control group was 18.6% and the patient satisfaction rate was 88.4% (P<0.05). Therefore, the application of interventional nursing for patients undergoing thoracoscopic radical resection of lung cancer can promote patients’ recovery, reduce complications, and improve patients’ satisfaction to nursing service.

Keywords Interventional nursing; Radical resection of lung cancer; Effect observation
1. Introduction

Lung cancer is the most common human malignant tumors. According to the latest statistics in 2015, the incidence rate of lung cancer in China has leapt to the top of various malignant tumors [1]. In recent years, benefited from the development of video-assisted thoracoscopic surgery (VATS), thoracoscopic radical resection of lung cancer has become the main treatment for early stage lung cancer [2]. With the improvement of medical services and the development of society, the expectations of these patients for high-quality postoperative nursing also increase significantly, which lead to the requirement of improving the postoperative nursing. Postoperative interventional nursing is a new method of nursing. It can provide scientific, coherent and targeted services for patients post-surgery. It not only improves the quality of nursing service, but also enhances the communication between nurses and patients, and addresses the needs of patients [3]. This paper discussed the effects of interventional nursing in the thoracoscopic radical resection of lung cancer.

2. Materials and methods

2.1 Clinical data

86 patients who underwent thoracoscopic radical resection of lung cancer in our hospital from January to November 2015 were selected. The patients were screened for no diseases of heart, kidney, liver and other vital organs as well as other major diseases. These patients include 64 males and 22 females, aged 31-68 with an average age of 51.7±10.6. Based on the random number table method, these patients were divided into the observation group and the control group (43 patients for each group). After comparing the gender, age, stage and other basic data of the two groups, the resulted difference was not statistically significant (P>0.05) prior to the treatment.

2.2 Methods

Both groups were given routine nursing after thoracic surgery. In addition to the routine nursing, interventional nursing was introduced in the observation group and the details were listed as follows: (1) Communicating were conducted with patients and their families every day after the surgery. An effective personalized nursing plan was constructed based on the recovery of patients after surgery and adjusted according to the feedback from the patients. (2) Mental health assessment was provided to the patients. Targeted counseling was given based on patients’ psychological conditions. The negative emotions and confusions of the patients were eased and the confidence in the postoperative recovery was built [4]. (3) The wards were kept quiet and clean. The comfort level of wards was improved and the temperature and lighting were kept in a comfortable range. (4) The patients were guided to gradually change their diet from semi-liquid to normal diet. The patients were advised to eat low-fat, appropriate-protein, high-vitamin, fiber-rich, light, and digestible diet. (5) Body position nursing were enhanced after surgery. When a patient after anesthesia was not fully conscious, horizontal position without pillow was suggested and the head was rested on one side. The position was changed to the semireclining position 6 hours after surgery [5]. The patients were able to start with minimal physical exercise on the bed shortly after surgery. The nurses should assist and encourage patients to come out of bed early, in order to facilitate the recovery of lung function and promote wound healing. (6) The nursing of drainage tube was enhanced. The amount and characteristics of the drainage liquid were closely monitored. The complexion and mental state of patients, and the bleeding or oozing occurs in the wounds were observed to detect the potential internal hemorrhage early. Remind patients do not make the drainage tube twist, fold or prolapse during doing exercise. The patency of the drainage tube was observed as well. (7) The prevention of postoperative complications was strengthened. The body temperature, bleeding, or oozing occurs in the wounds were closely monitored. Wound dressings were replaced in time to prevent wound infection. Routine disinfection and
antibiotic treatment was given to the incision to prevent infection \[6,7\]. (8) The patients were told to pay attention to personal hygiene after discharge, including keeping the skins clean and conduct adequate exercise. The diet should be kept regular, low-fat, rich-vitamin, and digestible. Hot and spicy food and deep-fried food was prohibited.

3. Statistical methods
The data was analyzed with SPSS 20.0 statistical software and the measurement data was tested with t-test; the computed data was tested with 2 test and the difference was considered statistically significant \(P<0.05\).

4. Results
4.1 Postoperative indicators of both groups
The off-bed time, the chest tube removal time and the length of stay of the observation group were shorter than the control group \(P<0.05\). The postoperative complication rate of the observation group was 4.65% and that of the control group was 18.6% \(P<0.05\) (Table 1).

4.2 Patient satisfaction of both groups
The results of the patient satisfaction survey showed that: 19 cases in the observation group chose 'very satisfied'; 2 cases chose 'satisfied' and 2 cases chose 'dissatisfied'; the patient satisfaction rate was calculated to be 95.3%. In contrast, 23 cases in the control group chose 'very satisfied'; 18 cases chose 'satisfied' and 2 cases chose 'dissatisfied'; the patient satisfaction rate was 88.4%. The patient satisfaction of the observation group was significantly higher than the control group and the difference was statistically significant \(t=6.9, P<0.05\).

5. Discussion
Thoracoscopic radical resection of lung cancer has the advantages of less surgical trauma, less pain, less damage, and quick recovery, and has been widely carried out in clinical practice \[2\]. Nurses can give

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Off-bed time (h)</th>
<th>Chest tube removal time (h)</th>
<th>Length of hospitalization (d)</th>
<th>Postoperative complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>43</td>
<td>23.50±0.93</td>
<td>30.50±10.25</td>
<td>12.56±0.95</td>
<td>4 1 2 1</td>
</tr>
<tr>
<td>Observation Group</td>
<td>43</td>
<td>18.20±1.19</td>
<td>24.50±10.41</td>
<td>9.35±1.20</td>
<td>1 0 1 0</td>
</tr>
<tr>
<td>t/x</td>
<td>-</td>
<td>1.24</td>
<td>1.17</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>(P)</td>
<td>-</td>
<td>&lt; 0.05</td>
<td>&lt; 0.05</td>
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interventional nursing after this surgery to assess the recovery of patients daily, and make a targeted nursing plan for patients. Postoperative health education and rehabilitation guidance could be strengthened to enrich the nursing content and improve the quality of nursing. The results of this study showed that, the off-bed time, the chest tube removal time and the length of stay of the observation group were all shorter than the control group; and the postoperative complication rate of the observation group was significantly lower (P<0.05). The improved results were mainly due to the extra attention paid for patients’ recovery and the various targeted nursing measures made to promote patients’ recovery under the interventional nursing. In the prevention and treatment of postoperative complications, nurses should strengthen monitoring and teach patients the specific precautions to help them prevent or detect complications early. Meanwhile, for patients with complications, nurses could give patients counseling to ease their anxieties in order to minimize the effect of adverse psychological reactions on postoperative recovery.

In addition, postoperative interventional nursing shortens the length of stay, which reduces the patients’ hospital costs, improves the availability of ward beds, and reduces the shortage of medical resources. Patient satisfaction for nursing service is a direct indicator for the evaluation of nursing quality. In this paper, the patient satisfaction of the observation group was significantly higher than the control group, indicating that postoperative interventional nursing not only improves the quality of nursing, but also reflects patients’ recognition to this method. It also creates a harmonious nurse-patient relationship to improve patient compliance. In summary, the application of interventional nursing after the thoracoscopic radical resection of lung cancer can promote patients’ recovery, reduce complications, and improve patient satisfaction to nursing service.

Acknowledgement
None.

Competing Financial Interests
The authors declare no competing financial interests.

References