

Study of Nursing Countermeasure of Senile Oblique Inguinal Hernia Complication

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ABSTRACT Objective: To explore the nursing strategy of senile oblique inguinal hernia complication. **Method:** the postoperative observation, nursing and health guidance of 66 cases of senile oblique inguinal hernia complication patients' hernia repair surgery were treated in our hospital from May 2014 to August 2015. **Result:** In this group, all patients' incisions healed well and the patients recovered and left the hospital. **Conclusion:** the nursing work focuses on mental nursing, diet guide, disease observation and nursing for complication which can increase patients' cure rate and living quality.

KEYWORDS

Senile
Oblique inguinal hernia
Nursing countermeasure

1. Introduction

With the development of medical science and deregulation of operative indication scope, patients with senile complication, have the opportunity to take operative treatments. Even though risks of the operation and post-operation was increase, the providing of pre-operative and post-operative nursing care with opportunities are able to effectively treat and practice on such cases. Monitoring and controlling blood as well as controlling infections which relieve patients' conditions [1], making patients' operation safe to ensure they pass the pre-operative period and operation stage successfully. After admission, patients should control the fasting blood-glucose to around 7 mmol/L, and urine glucose (0~+) in order to perform the tension-free inguinal hernia hernioplasty operation. With nursing treatment of active anti-infection and monitoring blood glucose, the incisions were cured without complications of bed sore or pulmonary infection, etc. and the patients recovered and discharged from the hospital.

2. Data and method

2.1. General data

Sixty six cases of oblique inguinal hernia patients that were

treated in our hospital from May 2014 to August 2015 were selected, in which 48 were males and 18 were females from 60 to 85 years old. The disease had lasted for one to five months. Among them, 44 cases were indirect hernia on the left side and 22 cases were indirect hernia on the right side. Accessory examination: there was nothing abnormal detected in blood routine examination. Coagulation function showed FB1.566 g/l, blood type "o" RH "+", blood biochemistry TBI147.9 $\mu\text{mol/l}$. IBI132.5 $\mu\text{mol/l}$. CREA124.3 $\mu\text{mol/l}$. Fe44 mol/l and nothing abnormal were detected. Five items of immunity examination showed weakly positive HBsAg; glycosylated hemoglobin was 4.2%; chest radiography showed chronic bronchitis; electrocardiogram showed sinus bradycardia (HR 58 times/min), mandrel inclined left obviously (-45°), left anterior branches were retardant, left ventricular showed high voltage, cardiology department consultation showed non-specific data, no discomforts like palpitation and chest distress existed; heart disease was left out of the equation. Blood glucose was slightly higher during the time of hospital admission, the monitoring of blood glucose showed normal range and the hemoglobin of glycobiology showed normal range, therefore diabetes was left out the equation. Diagnosis: (1) Right oblique inguinal hernia (2) Chronic bronchitis. (3) Abnormal renal function. All the patients' incisions of this group healed well, and the patients recovered and discharged.

2.2. Method

Adopt herniorrhaphy with clinical polypropylene amendment net (WP0410 + 5042), tension-free hernioplasty with epidural anesthesia, hernial ring filling operation, with 60 minutes of operation time. The operation was successful

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with 15 mL of bleeding amount, and the patients returned to the ward safely after the operation.

3. Nursing management

3.1. Pre-operative nursing

3.1.1. General nursing

Patients with large hernia should less active, and rest in bed; patients shall use truss in order to avoid abdominal contents from taking off and causing incarceration. Bronchitis, prostatic hyperplasia and constipation, etc. shall be cured actively. Smoker shall quit smoking two weeks before the operation and patients should be prevented from catching cold. Patients shall drink more water, and eat unrefined fiber like vegetables in order to keep bowels healthy and laxatives should be used when necessary [2].

3.1.2. Disease observation

The occurrence of incarcerated hernia shall be alerted if patients have obvious stomachache with sudden enlarged, tense and hard hernia with obvious haphalgnesia which cannot be absorbed into the enterocoelia. It should be reported to the doctor immediately, with emergency treatment.

3.1.3. Eliminate the factors that may cause the elevation of intra-abdominal pressure

For the patients undergoing selective operation, if the intra-abdominal pressure elevation factors like cough, constipation, dysuresia come out before the operation, corresponding management should be made. The operation should be performed after controlling the symptoms. Guide the patients to keep warm in order to prevent respiratory infections, and smokers shall quit smoking two weeks before the operation [3].

3.1.4. Pre-operative training

For patients who are senile or for patients who have thin abdominal muscle, relapse or incisional hernia, abdominal muscle training shall be reinforced. Excretion while on bed by using a toilet stool shall be exercised. Enteroclysis shall be made in the night before the operation in order to eliminate internal stercoroma and prevent post-operative abdominal distension and difficult defecation.

3.1.5. Mental nursing

Senile patients' functions decrease, and their cognitive and receptivity abilities decline at different degrees. They do not understand the operation and worry about anesthetic accidents and other risks that are absent. In addition, others including operation cost, the state of life and body after the operation increase the adverse reactions of anxiety, panic and depression, etc. A majority of senile patients experiencing insomnia, causing bad sleep quality. For the above mentioned situations, we should pacify the concerns of patients, explain doctor's expertise, technological level,

anesthesia effect, accident-proof measures, as well as the price of operation materials, total cost after the operation, the methods and significances of operation recovery, and post-operative results and prognosis problems in detail to them. The explanations should make in layman's terms, with emphasis on the new operation method. The new operation method overcomes the conventional operation's interference on normal dissection, and has advantages on safety, little trauma, mild pain, and rapid recovery. These explanations will made patients familiar to the operation and ease their mental stress, in order to allow us in acquiring patients' understanding and make them cooperate with the treatment actively [4].

3.1.6. Pre-operative preparation

Nurses should complete all examinations before the operation and cure protopathy actively; nurses should guide patients on the practice of defecation while on bed, and learn how to adjust position, take deep breath and cough, etc. Nurses should discourage patients from smoking and drinking, treat respiratory infection with antibiotics and advice for operation after inflammation is controlled. Patients should control blood glucose level and total calories intake every day. Sugar, smoking, drinking and food with high starch are forbidden; administration of insulin if necessary and control the blood glucose till it reverts to normal range. Nurses should guide patients to have meals with low protosalt, low fat, low cholesterol, and high vitamins. It also encouraged eating more high quality protein and having "vitagen" drinks rather than dessert. Patients should involve in small amount of activity in order to reduce heart burden, control infusion speed and complete all examinations. Control protopathy actively if the prostatic hyperplasia is accompanied by dysuresia in order to prevent urination difficulty after the operation. Relax the bowels for constipation patients and advise to consume high-fiber foods and encourage them to urinate before the operation to drain the bladder. Shave the patients' skin on the morning of the operation, clear hair, dirt and feculency in umbilicus near the operation area, forbid patients to eat or drink eight hours prior the operation and ensure sufficient sleep [5].

3.2. Post-operative nursing

3.2.1. Position and activity

Patients should lie on the back after returning to the ward, with a soft pillow under the knees to make articulation coxae bend slightly and reduce the tension in the oblique inguinal hernia incision area and intra-abdominal pressure. These beneficial enhance healing rate and ease the pain on incision. Next day, the patient should be changed into the semi-reclining position. Patients shall lie on the back for one to two days after the operation, and take activities out of bed three to seven days after the operation. Patients with tension-free hernioplasty can take off-bed

activities in the early stage. Old and frail patients as well as recurrent hernia, strangulation hernia and huge hernia patients should delay off-bed activities.

3.2.2. The change of vital signs should be monitored closely after the operation.

Patients who have severe complication should be placed in the horizontal position. The patients can change the position into lateral position after six hours of stable blood pressure, and then placed in the horizontal position, and rest after three to five times of repetition. With this, abdominal muscles can become relaxed, and tension on the incision and pain can be eased. The semi-reclining position is good in lungs which will expand, decrease difficult breathing and ease the pain to the poor constitution patients.

3.2.3. Incision management

Observe the incision if there is erythema or bleeding. As for all the patients, the incision can be pressed for six to eight hours with 0.5 kg~1 kg sandbag or 1 kg of salt after the operation. Nurses should keep the incision dressing and perineum clean and dry, lift up scrotum with soft towel which is good for circulation and ease the hydrocele; direct patients to avoid increasing abdominal pressure tension for example, through sneezing, excretion, etc. which may make the incision dehiscence.

3.2.4. Pain management

Nurses shall admit the patients into a clean and quiet ward with fresh air after the operation, and explain post-operative considerations to the patients carefully, guide patients to take deep breath in order to ease their emotional tension and eliminate the anxiety of pain. Pulmonary infection, senile patients' respiratory retreats and weak coughs may cause secretions to accumulate in the air flue which can lead to respiratory infection. Gentle coughing was recommended. Nurses can also guide patients to take deep breaths after the operation when the blood pressure is normal. Patients shall cover the incision lightly with both hands when coughing in order to eliminate shaking pain and avoid tearing the incision. Patients can start from little cough, and increase intensity gradually after that and cough one to two times every two hours. Nurses shall give analgesia and spasmolytic medicine to ease the pain if patients cannot withstand it [6].

3.2.5. Diet nursing

Nurses can provide patients with appropriate carbohydrates if their post-operative blood pressure was stable without ventosity and the borborygmus was normal according to the personal condition. Abundant dietary fibre, vitamins and inorganic salt were encouraged. Control daily intake of fat, and encourage patients to eat frequently but smaller meals. Patients shall maintain regular bowel move-

ment to reduce abdominal pressure. Pungent foods that are spicy and dry are forbidden in order to avoid constipation.

3.2.6. Preventing complications nursing **Visceral injury**

This is the most serious complication of laparoscopic surgery and the morbidity is low. Clinically, it can be divided into two kinds which are parenchyma organ injury and hollow organ injury. Clinical manifestation shows intraperitoneal hemorrhage, infection, diaphragm damage that can make patients breathe with difficulty. Therefore, nurses should observe patients' systemic conditions and vital signs closely after the operation, and report the matter to the doctor to manage immediately if patients have symptoms of pale face, reduced blood pressure and increased heart rate.

Cutaneous dropsy

This is the most common clinical complication, which shows as crepitus in subcutaneous tissue of local incision. The main reason for this complication is because patients' nape tissues are weak and little gaps exist between nape tissues and puncture sheath. Meanwhile, factors of excessive pressure of pneumoperitoneum and long operation time may also cause this complication. Clinically, mild pneumoderm may have no influence on the patients and can disappear three days after the operation.

3.3. Discharge instruction

Enjoin patients that they cannot take part in heavy physical labour or strenuous exercise within half-a-year after the operation, including lifting heavy things or standing for a long time, etc.

Consume more fresh vegetables and fruits that are rich in fibre, such as celery, spinach and Chinese chives, etc. Drink a moderate amount of water and maintain regular bowel movements. Spicy and dry food was forbidden in order to avoid constipation.

Fried food, vermicelli, root and tuber crops food and fruit should be controlled but not forbidden. Patients should master the balanced nutrition, including not overcooking to keep vitamins retained.

Nurses should advise smokers to quit smoking, prevent chronic cough and the disease of prostatic hyperplasia. Prevent coughing and sneezing that may elevate intra-abdominal pressure, causing the disease to relapse. Patients should make further consultation in order to reduce recurrence rate and increase curative rate.

4. Result

Operations were successful without post-operative massive haemorrhage. Antibiotic used prophylactically for 48 hours and can get up within six hours after the operation.

Gastrointestinal function recovery time was 24 hours, and post-operative temperature was normal. Patients were discharged from hospital eight days after the operation without wound infection bleeding and myocardial and cerebral infarction. After two months of the operation, there were six times of follow-up visits and no relapse exists.

5. Conclusion

Pre-operative mental nursing must be done well because of the long course of patients' inguinal hernia complication, bad therapeutic effect by taking medicine repeatedly and skepticism towards operative treatment. Key points of nursing are mental nursing, diet guiding, disease observation, intensive postoperative nursing of inguinal hernia complication in order to consolidate the operation treatment effect and prevent the occurrence of complication, thus improving senile patients' life quality.

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