

Exploration of Complication Prevention and Early Intervention Measures for Anorectal Ostomy

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Abstract: Anorectal ostomy is often used to treat diseases such as colorectal cancer, but there are many possible complications after surgery. The main content of this paper is the prevention and early treatment of anorectal ostomy complications, starting with preoperative general assessment and accurate selection of ostomy sites, and then exploring all kinds of ways to prevent such complications. At the same time, early intervention measures are to be taken to closely monitor the condition of the ostomy and promptly address any abnormal changes in order to reduce the risk of complications and improve the quality of life for patients, providing certain references for clinical anorectal ostomy care.

Keywords: anorectal ostomy; complication prevention; early intervention measures

1. Introduction

Anorectal ostomy is relatively common in the clinic, but there are some serious postoperative complications that can be very harmful to the patient's health. The common causes of problems are skin problems around theostomy and narrowing of the ostomy; both are physically uncomfortable and emotionally stressful. There are some countermeasures in place now, but they have not shown any improvement. In-depth research on the prevention and early intervention of complications in anorectal ostomy is of great significance; it can reduce the occurrence of such complications, improve the prognosis for patients, enhance the quality of life for patients, and positively affect the development of the field of anorectal ostomy care.

2. Common Complications of Colostomy

2.1 Skin Problems around the Colostomy

One of the typical reasons for skin problems around a colostomy is post-colostomy surgery. Generally speaking, there are three kinds: skin allergies, skin damage and skin infections. Most skin allergies are due to irritation from materials such as the base and adhesive of colostomy bags, and they appear as local redness and itching of the skin. Severe cases may have papules and blisters. Skin damage is usually caused by prolonged contact of the colostomy output with the colostomy bag, friction at the edge of the bag, or incorrect handling during bag changes; thus, leakage and pain can occur at the damaged site, affecting the quality of life of the patient. Most skin infections are caused by secondary problems in the skin, such as injury, lack of cleaning, etc[1].; these allow pathogens to enter the injured area and cause local inflammation, swelling, pus formation, and other serious symptoms. If not addressed in time, there will be an extended infection and worse pain after surgery.

2.2 Colostomy Ischemia and Necrosis

Colostomy ischaemia and necrosis usually occur in the early period after surgery, and according to the extent of ischaemia, they can be divided into three grades: mild ischaemia, moderate ischaemia and severe necrosis. Mild ischaemia is indicated by a pale colour of the colostomy mucosa, which is light red or pale, and the mucosa is soft. The patient does not have pain. Timely intervention will improve the blood supply. Mild ischaemia is associated with a change in the colour of the colostomy mucosa from bright red to dark red or purple, reduced elasticity and local oedema. Otherwise, there will be serious necrosis after a short time. Severe necrosis is black, dry and hard in the colostomy mucosa and has lost its normal gloss. Some patients may also have colostomy bleeding, abdominal pain and other discomfort. Serious cases may need further surgery, which will be more painful and affect the post-operative period.

2.3 Colostomy Stenosis

Colostomy stenosis is mainly due to scar tissue formation after surgery and mucosal retraction. Based on the extent of the narrowing, these are divided into mild narrowing, moderate narrowing and serious narrowing. Patients with mild stenosis do not feel any obstruction during defecation and only have mild pain at the colostomy site after a bowel movement; their stools are normal in appearance and do not need special care. Regular observation is enough. Slight narrowing reduces the

feeling of rectal fullness and is usually associated with soft stools and frequent bowel movements. Some patients will have abdominal distension and abdominal pain and need timely dilation and other treatments[2]. Severe stenosis will reduce the diameter of the colostomy significantly, prevent normal stool passage, and thus lead to serious symptoms such as severe abdominal distension, abdominal pain, nausea, vomiting, etc., due to intestinal obstruction. If not dealt with in time, there will be an increase in intestinal obstruction and serious harm to the intestines.

3. Causes of Complications

3.1 Surgical Factors

Another reason for the occurrence of complications after colostomy surgery is surgical factors. The main reasons are incorrect colostomy position, blood supply damage and poor suturing. The main reason for the incorrect colostomy site is that the abdominal anatomy of the patient was not properly evaluated before surgery. The colostomy is in a skin fold, bone spur or near the incision; it is easy for the colostomy bag to slip, and thus excrement may leak out and cause skin problems. If the surrounding blood vessels of the colostomy are damaged during surgery, there will be reduced blood supply to the colostomy mucosa, and it will be prone to ischaemia and necrosis. Poor suturing techniques, such as tying too tightly or too loosely, placing the sutures incorrectly, etc., can cause compression of the blood supply to the colostomy mucosa; if the sutures are too loose, there will be colostomy retraction and stenosis. Place the sutures correctly so as not to damage the surrounding tissue and cause an infection.

3.2 Patient's Own Factors

The patient is in a bad state and is at risk of harm. The main reasons are poor nutrition, other illnesses and so on. Malnourished patients have a weak ability to repair themselves, suffer from poor wound healing, have reduced resistance in the colostomy mucosa and surrounding skin, and are thus more prone to infection, damage and other problems. Patients with chronic diseases such as diabetes, hypertension and arteriosclerosis have poor blood vessels and are prone to ischaemia in the stoma mucosa. Uncontrolled blood sugar can worsen infections and affect the recovery of other diseases. Due to changes in the body shape of the patient caused by the stoma, negative emotions such as anxiety and depression may occur; these emotions will reduce the patient's desire to take good care of the stoma, increase the risk of complications, and weaken the body's immune system, thus affecting postoperative recovery.

3.3 Nursing Factors

The main reason for complications in colorectal stoma is poor postoperative care. The main problems are poor cleaning, failure to change the stoma bag on time, and lack of attention. Insufficient cleaning will leave residues of excrement and secretions on the skin around the stoma, and if they are not removed in time, they can cause skin irritation and allergic reactions, infections, damage to the normal function of the stoma mucosa, and other problems. If the stoma bag is not changed in time, there will be an accumulation of feces in the bag, an increased risk of leakage, and prolonged soaking of the skin around the stoma, which may lead to skin damage[3]. Insufficient observation cannot promptly find changes in the colour and shape of the stoma mucosa or other abnormal skin conditions; thus, early intervention for complications is delayed, mild complications may become serious, the patient's condition will worsen, and the difficulty of treatment will increase.

4. Prevention of Complications

4.1 Preoperative Preparation

All pre-operative preparations will be made to reduce the risk of colorectal stoma complications. The first two are Stoma Placement and Health Education. A general examination will cover many areas, such as the patient's physical condition, nutrition, underlying illnesses, shape of the abdomen, etc. Know the individual circumstances of the patient well enough to provide a foundation for developing a surgical plan, and assess how well the patient understands and accepts the idea of stoma surgery. Stoma placement should be carried out by professional medical staff, choose a flat area free from folds and bony protrusions, and ensure that the stoma is easy to care for to reduce the risk of postoperative leakage[4]. Health education should explain to the patient and their family the reasons for, the course of, and precautions during the aftercare of stoma surgery; improve their cognitive ability and understanding; reduce their anxiety; and enhance their ability to follow medical instructions.

4.2 Intraoperative Procedures

Most ordinary intraoperative operations do not have serious complications. The first three are: standardisation of

operation, maintenance of blood supply, and precise suturing. At the time of operation, one must adhere to the surgical procedure strictly, properly separate the tissues, avoid injury to the surrounding blood vessels, nerves and other tissues, and minimise surgical trauma. Protecting blood supply should focus on protecting the blood supply to the stoma of the intestinal tube to prevent excessive traction and compression of the intestinal tube, ensure that the stoma mucosa is adequately supplied with blood, and reduce the occurrence of ischaemic necrosis. Precise suturing should be based on the particular circumstances of the stoma; control the tension, spacing and position of the sutures, avoid excessive tension that may cause blood supply compression and insufficient tension that may lead to stoma retraction; ensure a close fit at the suture site, reduce the risk of postoperative bleeding, infection and stenosis, maintain the normal shape of the stoma and facilitate postoperative care[5].

4.3 Postoperative Care

Scientific postoperative care can prevent many problems in the hospital. The first are: Stoma cleaning, Skin care and Diet. Stoma cleaning should be done with warm water or normal saline, gently wiping the stoma mucosa and surrounding skin every day; promptly remove excrement and secretions, keep the stoma and surrounding skin dry and clean, and avoid residual substances that can irritate the skin. Skin care should regularly check the condition of the skin around the stoma, and if there are any abnormal changes, such as redness or itching, they should be dealt with promptly; choose suitable stoma care products to prevent allergic reactions. The diet will be according to the degree of post-surgery recovery of the patients, and an individualised meal plan will be prepared. First, the infant will be given soft and easily digestible foods, and then gradually increased to a regular diet. Do not have spicy, pungent or gas-forming foods. Measures should be taken to reduce the irritation of excretions to the stoma and the surrounding skin, and promote the recovery of intestinal function.

5. Early Intervention Measures

5.1 Symptom Observation

The first step is to track symptoms for any adverse reactions. Examine the appearance of the patient, perform functional tests and determine the reasons for their complaints. Observation of appearance regularly records the colour, shape and size of the stoma mucosa and surrounding skin. There should be no bleeding, swelling, damage or infection of the stoma. Functional assessment observes a person's defecation conditions, such as the shape of the stool, frequency of bowel movements, and straining during defecation, to determine whether the function of the anus and rectum is normal. If there is difficulty in defecation, thin stool, etc., the reason should be found out promptly. Give due attention to the patient's complaints, such as pain, itching, abdominal distension, etc., and pay attention to what the patient wants. According to the results of appearance observation and functional assessment, one can promptly determine the kind and extent of complications to provide an early response.

5.2 Emergency Treatment

Immediately correct any initial problems with emergency treatment, such as ischaemia treatment, stoma dilation and skin care. Ischaemia treatment should promptly increase the blood supply to the stoma mucosa. For mild ischaemia, one can increase local heat and change body position to improve blood flow. For mild ischaemia, drugs to improve blood supply will be administered as directed by the doctor. In cases of serious necrosis, surgery is needed to remove the dead tissue and restore blood supply to the stoma. The doctor and the expander may need to carry out several dilations for serious stenosis frequently. Mild Stenosis can be managed at home. For moderate stenosis, it should be done under the guidance of medical staff. Severe Stenosis is to be treated surgically. According to the nature of the skin's problem, anti-allergy and antibacterial drugs will be prescribed. Wash the face and body properly to keep the skin clean and healthy; otherwise, it may get worse.

5.3 Rehabilitation Guidance

Rehabilitation guidance can help the patient recover better from surgery and reduce the risk of other problems. The first are suggestions for activities, emotional support and regular check-ups. Based on the postoperative recovery condition of the patients, activity suggestions should be made to help them engage in light daily activities. In the beginning, do not exercise too hard; increase the exercise gradually, promote intestinal movement and physical recovery, and avoid having the stoma area touched by others. Psychological support should focus on the mental and physical health of patients, quickly alleviate negative emotions, motivate patients to face their stoma positively, enhance the patients' self-care ability, and help them recover good health as soon as possible. Periodically remind the patients to have a general check-up at the hospital. According to the recovery status of the stoma and the effect of complication recovery, medical staff will decide whether further care and intervention are needed. Questions from patients should be answered and personalized rehabilitation guidance should be given to ensure smooth recovery of the patients.

6. Conclusion

Prevention and early treatment of complications associated with colostomy can help improve the overall health and quality of life for people with ostomies. Identify the main reasons and common problems of this illness in order to prevent it early. All the measures must be strictly implemented and improved upon through practice. Medical staff need to keep learning new knowledge and improving their skills regularly to give better care for the sick. In the future, we will continue to strengthen the intervention system and reduce the risk of complications so that patients with a colostomy can live a more normal life.

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