INTERVENÇÕES DE ENFERMAGEM DE REABILITAÇÃO NA PREVENÇÃO DAS HÉRNIAS PARAESTOMAIS

INTERVENCIONES DE ENFERMERÍA DE REHABILITACIÓN EN LA PREVENCIÓN DE LAS HERMIAS PARAESTOMALES

NURSING REHABILITATION INTERVENTIONS IN THE PREVENTION OF PARASTOMAL HERNIAS

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RESUMO

A Cirurgia abdominal e a confeção de um estoma provocam um trauma na musculatura abdominal.

A qualidade de vida e a adaptação da pessoa com ostomia estão condicionadas pelas complicações que eventualmente possam surgir no período pós-operatório. Entre as complicações das ostomias, as hérnias paraestomais são as que apresentam uma maior incidência, tornando-se assim essencial o desenvolvimento de intervenções direcionadas especificamente para a sua prevenção.

Grande parte das complicações podem ser evitadas com a execução de um programa de exercícios de fortalecimento da musculatura abdominal e pélvica previamente, principalmente nas pessoas com ostomias definitivas estes tipos de exercícios poderão proporcionar melhor qualidade de vida e, desta forma, diminuir as taxas de complicações e os dias de internamento.

A Associação de Enfermeiras de Estomaterapia do Reino Unido em 2016⁽¹⁾ recomendou que os ostomizados fossem sujeitos a um programa de exercício abdominal apropriado após a cirurgia para fortalecer a musculatura abdominal e reduzir o risco de hérnia.

O processo de ensino/aprendizagem do ostomizado deve começar no pré-operatório, com a finalidade de este conseguir uma adaptação mais célere às mudanças necessárias no seu do estilo de vida, assegurando assim uma gestão mais eficaz do seu regime terapêutico e, consequentemente, uma melhor qualidade de vida.

Palavras chave: estomia; hérnia incisional; terapia por exercício; enfermagem de reabilitação

RESUMEN

La cirugía abdominal y la confección de un estoma provocan un trauma en la musculatura abdominal.

La calidad de vida y la adaptación de la persona con ostomía están condicionadas por las complicaciones que puedan surgir en el periodo posquirúrgico. Entre las complicaciones de las ostomías, las hernias paraestomales son las que presentan una mayor incidencia, por lo que es esencial el desarrollo de intervenciones dirigidas específicamente a su prevención.

La UK Association the Stoma Care Nurses, en 2016⁽¹⁾, recomendó que los ostomizados fueran sujetos a un programa de ejercicio abdominal apropiado después de la cirugía para fortalecer la musculatura abdominal y reducir el riesgo de hernia.

El proceso de enseñanza / aprendizaje del ostomizado debe empezar en el periodo posquirúrgico, a fin de lograr una adaptación más rápida a los cambios necesarios en su estilo de vida, asegurando así una gestión más eficaz de su régimen terapéutico y, consecuentemente, una mejor calidad de vida.

Palabras clave: estomía; hernia incisional; terapia por ejercicio; enfermería de rehabilitación

ABSTRACT

Abdominal surgery and the stoma creation causes trauma to the abdominal muscles.

The quality of life and the adaptation of the person with ostomy are conditioned by complications that may arise in the postoperative period. Among the complications of ostomies, parastomal hernias are those with a higher incidence, making it essential to develop specifically targeted interventions for their prevention.

The UK Association of Stoma Care Nurses in 2016⁽¹⁾ recommended that patients with a stoma were subjected to an appropriate abdominal exercise program after surgery to strengthen the abdominal muscles and reduce the risk of hernia.

The teaching / learning process of the patients with a stoma should begin in the preoperative period, in order to achieve a faster adaptation to lifestyle modifications, ensuring a more effective management of the therapeutic regimen and, consequently, a better quality of life.

Keywords: ostomy; incisional hernia; exercise therapy; rehabilitation nursing

INTRODUCTION

Rolstad and Boarini (1996) cited by Bland et al (2015) ⁽²⁾ define parastomal hernia as "a bulging of the stomach skin, indicating the passage of one or more bowel cycles through a fascia flaw around the stoma and subcutaneous tissue". According to these authors, parastomal hernia represents the most common complication associated with the creatoin of intestinal stomas.

Abdominal surgery and the creation of a stoma cause trauma to the anterior abdominal muscles. The Association of Stoma Care Nurses of the United Kingdom (ASCN-UK) in 2016 ⁽¹⁾, recommended that all people with an ostomy be subjected to an appropriate abdominal exercise program after surgery, to strengthen the abdominal muscles and the floor pelvic in order to reduce the risk of developing hernias.

The present work has as objectives:

- Raise awareness of parastomal hernias;
- Identify strategies that allow the person with an ostomy to reduce the likelihood of developing parastomal hernias in the postoperative period;
- Contribute to the improvement of nursing care in the prevention of parastomal hernias;
- Promote quality of life for people with ostomy;
- Contribute to the development of Rehabilitation Nursing practice;
- Contribute to the development of stoma therapy nursing practice.

METHOD

It is a simple review of the existing literature on the topic, using Boolean research, due to the difficulty in finding literature on the subject, based on the keywords: parastomal hernia, guidelines, person with ostomy, published between January 2009 and October 2017.

RESULTS

Despite technological and scientific advances in the surgical area, postoperative complications continue to exist and constitute one of the main barriers to the adaptation of the person to the new transition processes that surgeries implie.

In the area of stomatherapy, complications can occur in the first days after surgery (early or immediate complications) or a few weeks/months later (late complications). Therefore, the recognition of the signs and symptoms of complications, as well as the implementation of interventions as early as possible, are essential to ensure a more effective adaptation of the person to the ostomy with a consequent improvement in their quality of life.

According to a study carried out on patients at a University Hospital in Switzerland by Carlsson et al (2016) ⁽³⁾, parastomal hernia was the most common

surgical complication (20%), and significantly more in women (69%) and in emergency surgeries, occurring in patients with colostomy and ostomy ≤ 5 mm.

In a study carried out at the Centro Hospitalar e Universitário de Coimbra by Melo et al (2014) ⁽⁴⁾, the incidence of parastomal hernia was 40.6% and other complications 6.25% (infection of the surgical wound, stoma stenosis, or others).

According to the data previously presented, parastomal hernias appear as the main late complication after the construction of an ostomy. According to Devlin (1983) cited by Târcoveanu et al (2014) ⁽⁵⁾, there are 4 types of parastomal hernia: interstitial, in which one or more cycles of the herniated intestine occur next to the stoma, penetrating between the intermuscular planes; subcutaneous, the most common, appears in the same way as the previous one but affects the subcutaneous tissue; intraestomal (usually occurs in ileostomy) that occurs along the intestine towards the stoma; peristomal where the stoma is prolapsed and cycles of the herniated intestine appear through the stoma.

According to ASCN-UK (2016) ⁽¹⁾, paraestomal hernias have a multifactorial etiology. However, there are some risk factors that healthcare professionals should be aware of:

- Type, location and size of the stoma;
- Obesity (high body mass index);
- Lifting weights in professional practice;
- Multiple abdominal surgeries;
- Type of surgery (emergent or scheduled);
- Infection of the surgical wound;

• Pathologies that trigger an increase in abdominal pressure (ascites, prostate hypertrophy, etc.);

- Advanced age;
- Chronic cough or vomiting;
- Constipation;
- Lifestyle (smoking or sedentary lifestyle).

According to Meleis et al. (2000) ⁽⁶⁾, "all transitions trigger change and to understand it, is essential to identify the effects and their meanings. These must be explored according to their nature, temporality, severity and personal, family and social expectations. The change may be related to critical events or imbalances that lead to changes in ideals, perceptions, identities, relationships and routines".

The teaching-learning process of the person with ostomy must start in the preoperative period, with the purpose of achieving a faster adaptation to the changes that might be necessary in their lifestyle, without forgetting the help in raising their health status and supporting the transition conditions.

Therefore, and taking into account the main risk factors for the development of previously identified

parastomal hernias, there are several Nursing interventions that can be implemented at the level of teaching/instruction/training of the person with ostomy, with a view to their recovery as early as possible.

Preoperative Nursing Interventions

• Marking the stoma location within the rectus muscles (ASCN-UK, 2016) ⁽¹⁾;

• Encouraging smoking cessation before surgery (ASCN-UK, 2016) ⁽¹⁾;

• Encouraging losing excess weight (ASCN-UK, 2016)

Postoperative Nursing Interventions

- Teach/instruct/train care for stoma and peristomatic skin;
- Teach how to support the abdominal area when coughing or sneezing, during the postoperative period;
- Advise the use of a brace, at least 3 months after surgery, without hole (ASCN-UK, 2016)
 (1);
- Avoide lifting weights (more than 2.5 kg) during the first 6 to 8 weeks after surgery;
- Promote the resumption of physical exercise 6 weeks after surgery and after indication by the multidisciplinary team (ASCN-UK, 2016) ⁽¹⁾;
- Promote adequate hydration and nutrition, adjusted to the type of ostomy and the specific characteristics of the person with an ostomy (ASCN-UK, 2016) ⁽¹⁾;
- Teach/instruct/train exercises to strengthen the abdominal muscles and pelvic floor, as well as to maintain the correct body posture, with body alignment (ASCN-UK, 2016) ⁽¹⁾;
- Teach how to identify signs and symptoms indicative of paraestomal hernia: decreased stool output, pain, colic, nausea or vomiting, change in stoma color.

With regard to physical activity, in 2005 and again in 2007, Thompson and Trainer ⁽⁷⁾, two nurses specialized stomatherapy in Ireland, implemented in in consultation a program of exercises and care in the prevention of parastomal hernias, before and after surgery, as well as healthy lifestyle advice. This program focused on 3 topics: awareness of the development of potential parastomal hernias, abdominal exercises to strengthen the muscles and the use of abdominal support belts for lifting heavy objects for 1 year after surgery. These authors found that most hernias occurred in the first months after the stoma was made. Patients' quality of life was monitored at the time: at discharge, after 3 months, 6 months and 1 year.

Other authors such as Williams (2003), Harris et al (2004), Cottam and Richards (2006) cited by Varma (2009) ⁽⁸⁾, found that after implementing an abdominal exercise program and advise on the use of clothing or

abdominal support seat belts, there was a reduction in the incidence of parastomal hernia from 28% to 15%.

For García et al (2016) ⁽⁹⁾, the incidence of parastomal hernias can be reduced through the implementation of a non-invasive prevention program that includes the reduction of maneuvers that increase abdominal pressure (coughing, carrying weights) during the three first months of the immediate postoperative period. Subsequently, hypopressive abdominal exercises should be performed to strengthen the abdominal muscles and the use of clothing and / or devices that help to homogenize abdominal pressure (such as the abdominal belt) from the immediate postoperative period.

DISCUSSION

Health education is a teach/instruct/train process that nurses do with users, with the aim of providing them with strategies that can help to minimize the impact that the transition processes have on their daily lives, contributing to their recovery and well-being, trying to identify the value they attach to the situation and the response patterns for assessing their involvement.

With the accomplishment of this work was verified the existence of little literature and research studies on this theme. Thus, it becomes pertinent to implement training and research in this area, given the increased incidence of people with ostomy in younger and more active age groups.

According to the literature review previously carried out, performing exercises to strengthen the abdominal muscles before surgery is one of the most important interventions to reduce the risk of developing parastomal hernia. These must be started after an evaluation by the multidisciplinary team and carried out daily. In the first 6 weeks, the exercises should be smooth and maintained according to the person's physical capacity.

Thus, in collaboration with the specialist nurses in rehabilitation and taking into account the recommendations of the international experts obtained through the consulted literature, it was possible for us to develop some practical exercises for later teaching to the person with an ostomy, in order to reduce the incidence of parastomal hernias in the institution where we develop our professional activity.

Exercise program to strengthen the abdominal and pelvic muscles

<u>Abdominal exercise</u> (lying with head supported on a pillow)

With hands gently resting on belly, inhale through the nose and when exhaling, gently pull your belly down towards the spine. As you feel that the muscles are contracted, hold for 3 seconds and then exhale normally.

<u>Pelvic tilt</u> (lying with head supported on a pillow)

Place your hands behind your lower back. Contract your belly muscles as in the previous exercise and with the help of your hands raise your hips for 3 seconds and then breathe out normally.

<u>Lumbar-sacred rotation</u> (lying with head supported on a pillow)

Contract your belly muscles like in the previous exercises. With the legs flexed and feet flat on the floor, rotate the lumbar-sacred region and legs to one side and the other. Slowly return to the starting position and relax.

Abdominal exercise (standing)

Standing and with your back against the wall and your feet as well, contract your belly muscles and keep your back in contact with the wall. Hold for 3 seconds and relax.

<u>According to ASCN-UK (2016)</u>⁽¹⁾, maintaining the exercise plan for at least 12 weeks after surgery reduces the risk of developing parastomal hernias.

CONCLUSION

Parastomal hernia continues to be a concern for healthcare professionals and the person with an ostomy. The weakening of the abdominal muscles increases the risk of hernia formation; therefore strengthening it with a specific exercise program seems to be the best option.

The non-invasive prevention program includes reducing maneuvers that increase abdominal pressure during the first three months of the immediate postoperative period. Subsequently, abdominal exercises should be performed to strengthen the abdominal muscles and the use of clothing and/or devices which help to homogenize abdominal pressure.

If the person with an ostomy is cognitively capable, teach/instruct/train exercises should be carried out regularly to strengthen and maintain the strength of the abdominal muscles. The exercises are easy, comfortable and without added costs, without the need for additional support (straps or underwear for support).

These exercises, in addition to reducing the risk of parastomal hernia, optimize biomechanical and postural problems, balance and coordination; increase the capacity to support intra-abdominal pressure, well-being and confidence.

Given the lack of bibliography and research in this area, studies that support the implementation of this specific care in consultation, directed to the person with ostomy, are emerging.

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