

Case Report

Transanal irrigation in a patient after intestinal transit reconstruction surgery

Irrigação transanal em paciente pós cirurgia de reconstrução do trânsito intestinal

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ABSTRACT: Objective: To report the experience of caring for a patient with fecal incontinence after intestinal transit reconstruction surgery and the use of transanal irrigation. Method: Descriptive study, to case report of carried out in January 2022, during the residency internship in Public Health. Results: In order to reconstitute the control over the intestinal elimination, the transanal irrigation technique is used, which corresponds to the administration of water at body temperature, through the anuses, allowing the patient to program his evacuations and keep the colon empty for periods longer. The training to carry out this procedure is carried out by a stomatherapist nurse or a trained professional who will guide the procedure to be carried out in the home environment. It is evident the importance of training in the use of the device for intestinal irrigation adapted for transanal intestinal irrigation, once patients manage to manipulate it with ease and independently, after or training. Final considerations: The transanal intestinal irrigation procedure is successful, given tolerance by the patient, or it can lead to a significant improvement in intestinal function and quality of life.

Keywords: Fecal incontinence; Therapeutic irrigation; Quality of life; Enterostomal therapy; Nurse.

RESUMO: Objetivo: Relatar a experiência no atendimento a um paciente com incontinência fecal pós cirurgia de reconstrução do trânsito intestinal e o uso da irrigação transanal. Método: Estudo descritivo, do tipo relato de caso, realizado em janeiro de 2022, durante o estágio de residência em Saúde Pública. Resultados: Com a finalidade de reconstituir o domínio sobre a eliminação intestinal, utiliza-se a técnica da irrigação transanal, que corresponde a administração de água na temperatura corporal, através do ânus, permitindo ao paciente programar suas evacuações e manter o cólon vazio por períodos mais longos. O treinamento para efetuar este procedimento é realizado pelo enfermeiro estomaterapeuta ou profissional capacitado que orientará o procedimento para ser realizado no ambiente domiciliar. Evidenciou-se a importância da capacitação na utilização do dispositivo para irrigação intestinal adaptado para irrigação intestinal transanal, uma vez que os pacientes conseguem manipulá-lo com facilidade e de forma independente, após o treinamento. Considerações finais: O procedimento de irrigação intestinal transanal obteve sucesso, visto tolerância pelo paciente, o que pode levar a uma significativa melhora da função intestinal e da qualidade de vida.

Palavras-chave: Incontinência fecal; Irrigação terapêutica; Qualidade de vida; Estomaterapia; Enfermeiro.

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INTRODUCTION

The adult population often has problems with constipation (IC) and fecal incontinence (FI), being treated as taboo, since the problem is often not reported, which can lead to underreporting and bring damage to the quality of life (QoL) of the patient, besides being costly, associated with the expense of treatment¹. IC is determined by frequent or occasional difficulty in defecating, causing discomfort and other disorders to the individual, and can occur alone or secondary to a comorbidity². FI, on the other hand, is defined as loss of voluntary fecal control and/or the inability to maintain physiological control of bowel contents at any time of life³.

In Brazil, colorectal cancer is a disease that represents a major public health problem, with an estimated 36.360 new cases in 2018⁴. It is the most common neoplasm of the digestive tract, with important morbidity and mortality rates, and tumor resection surgery is the reference treatment for these cases. After resection of colorectal cancer, some patients may present functional comorbidities and relevant changes in their bowel habits⁵. Resection and restoration of bowel continuity have several consequences for the healthcare user, and patients subject to low colorectal anastomoses with sphincter preservation may progress to Low Anterior Resection Syndrome (LARS). LARS symptoms present as variation in stool frequency, watery stools, fecal impaction, and fecal incontinence⁶.

Fecal incontinence and constipation lead to important psychosocial alterations, pertinent to the loss of independence, social withdrawal, and emotional impact, which are capable of altering daily life, health in general, and the QL of these patients⁷.

Fecal incontinence, like the other symptoms of the LARS syndrome, has an unfavorable impact on the patient's QoL⁸. This impact occurs in the sexual, social, and psychological health of the individual, interfering directly with the quality of life⁹. The definition of QoL is a comprehensive assessment of the individual's perception of various areas of life, such as financial, material, cultural, parenting, and social issues¹⁰.

To regain control over bowel movements and bowel function, the Transanal Irrigation Technique (TAI) is used, which consists of an infusion of drinking water at body temperature through the anus, allowing patients to schedule their bowel movements and preserve a clean bowel for a prolonged period. Thus, it prevents fecal incontinence and consequently impacts the quality of life of patients with defecation dysfunctions¹¹.

TAI is an ancient procedure, already used since 1,500 B.C., and is also known as a retrograde colonic enema. It was once used for detoxification, and since 1987 it has become a technique for the treatment of defecatory disorders and can be performed both in adults and children. Transanal irrigation aims at emptying the bowel, controlling

bowel movements, and thus preventing fecal leakage¹².

TAI is a possibility that is effective in most people with spinal cord injury, spinal cord, anorectal malformations, or cancer of the middle and lower rectum. The training for the practice of TAI is done by the stomal therapist nurse or trained professional who will guide the technique to be done in the home environment. The technique consists of using warm water infused initially every 24 hours and can be performed up to every 36 hours, in the anus, stimulating mass peristalsis, promoting the partial or total drainage of the fecal content in a single moment, thus keeping the colon emptied for a long period¹³.

The stomal therapist nurse can establish guidelines for the treatment of incontinence when pertinent, performing an individualized treatment¹⁴. Nursing consultation provides a unique form of care, making it more effective, humanized, and focused on the person, the family, and the community. The process of care based on the nursing consultation considerably increases the quality of care¹⁵.

Regardless of the ancient TAI method for the treatment of fecal incontinence, this case report is justified by the need to disseminate knowledge and foster nurses' abilities during nursing consultations, raising visibility in professional clinical practice. Moreover, this report allows reflections that lead to new work processes because it associates technical knowledge, communication skills, planning of the outpatient nursing consultation, and individualized attitude for the person's reinsertion into society together with his/her family members. Thus, the potential of the report is in the valorization of the stomal therapist nurse in the nursing consultation in the care of people with fecal incontinence.

The preparation of this article will help nurses in their clinical practice in the care of people with fecal incontinence since the dissemination of this technique will improve assistance, when the professional needs to implement and guide the patient. Despite being an old method, it has little indication by nursing professionals. This technique aims to benefit patients with bowel incontinence, thus obtaining a better quality of life and providing them to perform their work and social activities with greater tranquility, and safety, without fear or embarrassment that causes the involuntary loss of feces. This study aims to report the case of a patient with fecal incontinence after intestinal transit reconstruction surgery that underwent transanal irrigation.

METHODS

This is a descriptive study, of the case report type, which was carried out during the internship of the Integrated Health Residency program of the Public Health School of Rio Grande do Sul ESP/RS. The internship is experienced in the 2nd year of residency (R2) as an

optional activity. Participants in the study were professional residents, teachers, preceptors, and nurses, carried out in January 2022 in a stomal therapy service in southern Brazil. It was decided to carry out this study with the purpose of recording and disclosing the process, for being an uncommon procedure in this stomal therapy service.

The research respected the ethical precepts and follows the ethical recommendations of resolution 466/2012 and resolution 510/2016, on the practices of research with human beings, approved with CAAE no 17789319.6.0000.5338, under opinion nº 3.530.685. The researchers received the patient's consent, and the Free and Informed Consent Term was applied.

EXPERIENCE REPORT

C.S., 47 years old, was diagnosed with colorectal cancer in 2016, having undergone resection of the rectosigmoid in the same year, with the confection of a colostomy. C.S. had no other comorbidities. In 2019 they underwent intestinal transit reconstruction surgery, having presented fecal incontinence unresponsive to rehabilitation in physical therapy for a period of two years. The patient was directed by the attending physician to follow and guide the TAI procedure in the Stomal Therapy service. In the stoma area of the Stomal Therapy Service of the study site, the team consists of a stomal therapist nurse and three nursing assistants, working from Monday to Friday morning, where new patients are registered, materials are dispensed, and nursing consultations are held. Besides, this space is a training field for residency and undergraduate programs.

The nursing consultation was the first nursing intervention for a patient with fecal incontinence after intestinal transit reconstruction surgery in the Stomal Therapy Service. The nursing consultation aimed, to orient and train the user for the TAI. The patient's registration in the stomal therapy service was reactivated in the first consultation with the stomal therapist nurse because when the surgery of intestinal transit reconstruction was performed his registration was closed. It was also explained how the TAI procedure is performed and the equipment to be used was presented.

The patient came to the clinic for a new consultation, accompanied by his spouse. There was a moment of dialogue, in which doubts and the benefits that the procedure would bring were clarified. The assembly of the equipment and its connections with the water bag and the cone were thoroughly explained.

The irrigation technique procedure comprises three moments: water infusion, drainage or discharge, and residual drainage. The following materials are needed: a transparent container (bag) with a volume scale, which has a capacity of 2,000 ml and a temperature measuring device; an extender or transparent tube connected to a water

infusion speed controller; a flexible cone (latex-free) with an extender to fit the bag connector; water-based lubricant; serum support; and procedure glove. The irrigation set can be used several times, has an average durability of six months to one year, and care must be taken to preserve it, such as proper cleaning and storage.

The nurse who conducted the training provided 1.5 liters of warm water, approximately between 37°C and 38°C, to be placed in the storage bag. The patient was then instructed on how to manipulate the speed controller, and it was explained that the place that indicates the temperature would change color according to the water temperature, indicating the ideal temperature.

Once the system was set up, the patient was instructed to sit on the toilet, keeping their body relaxed, with their feet completely firm on the floor, promoting an adequate relaxation of the abdominal and pelvic muscles. During the procedure at the institution, the bag was placed on an IV stand, and at home, the patient was instructed to use a wall fixture.

After the patient was positioned, the nurse applied lubricant to the cone and asked the patient to introduce the cone into the anal canal, start the infusion of water, and controlled the time of entry, which should be 5 to 10 minutes. The water infusion should not be too fast, to the point of causing cramps, but also not too slow, so that absorption occurs in the intestine. During the water infusion, the patient felt ill, became pale and dizzy, and said they were fasting because they were not used to eating in the morning. To perform the TAI, it is not indicated to be fasting, thus avoiding possible malaise and vasovagal reflex.

After the initial volume was introduced, the cone was removed and the feces present in the rectum came out. The patient was instructed to make an effort to evacuate to finish the evacuation process. During this time, the nurse left the bathroom to give the patient some privacy. This step may take 20 to 30 minutes, given the need for relaxation and complete evacuation.

At the end of the process, the patient and the companion were instructed on how to clean the equipment, which should be done with water and mild soap, and dries it off, leaving it in a clean, dry environment until the next day of use. The nurse's phone number was made available for contact via electronic message for communication about the progress of the process, and the patient was instructed to return for a face-to-face consultation after thirty days, or earlier if necessary.

Teleconsultation was performed every two days and the data from the consultations were recorded in the computerized system. This frequency was necessary because the patient was still a little insecure about the procedure, and with some doubts regarding the occurrence of symptoms or involuntary losses and their frequency. Thus, the nurse can clarify these doubts and encourage

perseverance in the procedure at this early stage.

As the patient's bowel function was greater after lunch, he preferred to perform the irrigation at this time, because in the first days he performed it in the morning and presented fecal loss after lunch. The patient was instructed to make daily records of probable stool leaks or gas throughout the day. In the first days, he was still insecure, but after a few weeks of using the ITA, the patient reported confidence when leaving home, without the fear of any involuntary fecal loss. The patient reported that he searched the literature on the subject to better understand

the irrigation technique, as he believed that the technique was not working, since on some days his bowel functioned normally before the procedure was performed and sporadic involuntary leakage occurred.

DISCUSSION

Nursing diagnoses, interventions, and expected outcomes were listed, which will be presented in the table below, according to NANDA I (2018-2020)¹⁶, NIC (NIC Codes - 5th edition - 2010)¹⁷; NOC (4th edition)¹⁸.

Chart 1 - Nursing Diagnoses, Interventions and Expected Outcomes in this case report, Porto Alegre, Rio Grande do Sul, Brazil, 2022.

Nursing Diagnosis (NANDA I 2018 - 2020) ¹⁶	Nursing interventions (NIC -2010) ¹⁷	Nursing outcomes (NOC) ¹⁸
Intestinal Incontinence (Code 00014) Defined by the Inability to Delay Bowel Evacuation	Care in INTESTINAL Incontinence (0410) Definition: Promotion of bowel continence and maintenance of perianal skin integrity. Activities: Explain the etiology of the problem and the justification of the actions. Discuss the procedures and expected results with the patient. Implement the intestinal training program as appropriate. Offer liners/diapers for incontinence, as needed. Monitor the occurrence of proper bowel evacuation. Monitor food and liquid requirements.	Knowledge: Health Behavior Indicators - maintains 4; expected 5 Strategies for stress control - maintains 3; expected 5 Healthy nutritional practices - maintains 3; expected 5 Knowledge: Healthy Diet Indicators Nutrient intake suitable for individual needs - maintains 2; expected 5 Intake of liquids suitable for metabolic needs - maintains 3; expected 5
00153 - Risk of low situational self-esteem associated with functional impairment	Strengthening SELF-ESTEEM (5400) Definition: Patient care to improve the judgment of one's value. Activities: Reinforce the personal positives identified by the patient Encourage greater responsibility for yourself, as appropriate	Psychosocial Adaptation: Life Change Indicators: Maintains self-esteem - maintains 3; expected 5 Verbalize's optimism about the future - maintains 4; expected 5 Acceptance: State of Health Indicators: Recognizes the reality of the health situation - maintains 4; expected 5 Performs self-care tasks - maintains 3; expected 5

Source: The authors

The stomal therapist nurse is responsible for the education of the user in the management of self-care¹⁹. The stomal therapist can help reintegrate the person with an ostomy into social life and educate on self-care, creating strategies and guaranteeing support in physical, social, and emotional difficulties in the follow-up/care, impacting the QoL²⁰.

The equipment used for the TAI via colostomy is

adapted for transanal irrigation, shown to be very effective, since patients can handle it properly and self-sufficiently, after training⁵. Patients using larger volumes of water seem to benefit more than those using smaller volumes of water²¹.

It is recommended that the patient drink liquids and eat normally, observing and recording any involuntary losses, as well as the occurrence of other symptoms. The time of TAI should preferably be after the meal, to take

advantage of the gastrocolic reflex and promote more effective drainage of the bowel.

According to Rodrigues et al., after a period of use, a portion of patients discontinued the treatment. The low adherence occurs mainly because of the perception of reduced action in conjunction with fecal escape, and during the procedure, the spills of intestinal fluid followed expulsions of the catheter.

Telemedicine involves the application of mobile device technology; this segment is present in people's lives, bringing a different kind of access to care, especially for users, in the reduction of health care costs²². Support and assistance in the early stages are important to maximize adherence to treatment and the possibility of success²³.

The TAI was successfully established, with good acceptance by the patient, which may lead to considerable progress in bowel function. The nurse's monitoring, through training for self-care in a unique and individualized way according to the user's demand, promoting education and health, results in the advancement of the quality of life⁷. The limitation of this study is that it is a report of a single case and the theme of TAI is little addressed, with a scarcity of literature on this subject, which relates to assistance in stomal therapy. It is understood that this article

will contribute to the dissemination of the theme, helping stomal therapists or nurses trained in the care of people with fecal incontinence.

FINAL CONSIDERATIONS

TAI has been reported as a cheap and effective treatment for FI and low anterior resection syndrome. In bowel emptying, TAI assists in regaining mastery of defecation, allowing the patient to choose when to evacuate, and is also used in constipation, accelerating bowel transit and promoting regular evacuation.

Thus, the work done at the Stomal Therapy Service is a true example of the Unified Health System working as proposed in our legislation. The study showed that health education and systematic assistance to the patient and his family in their life and health context make it possible to provide quality care to patients with fecal incontinence and help in the process of empowerment of self-care. The viability of performing face-to-face consultations in the service articulated with teleconsultation enables involvement and interaction between patient and professional, increasing the expected results.

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