

Acute stomal necrosis, conservative management. Case report and literature review

Necrose estomal aguda, tratamento conservador. Relato de caso e análise literária

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ABSTRACT

It is estimated that in the world in 2019 there were 1.3 million people living with an ostomy, and that each year in the US around 100,000 colostomies are made, most of which are performed due to trauma or cancer, offering a fairly good alternative In acute cases but they are not exempt from complications , one of the less frequent is ostomal necrosis which is generally managed surgically , we present the case of a patient who due to advanced cervical cancer had to undergo an urgent loop colostomy due to intestinal obstruction , which on the second day presented a purplish coloration and was managed conservatively and resolved spontaneously . We present this case as an alternative treatment for this ostomy complication for the knowledge of the scientific community.

Keywords: surgery, digestive surgery, ostomy.

RESUMO

Estima-se que, em 2019, havia 1,3 milhão de pessoas no mundo com estomia. 3 milhões de pessoas vivendo com uma ostomia, e que a cada ano nos EUA cerca de 100.000 colostomias são feitas, a maioria das quais são realizadas devido a trauma ou câncer, oferecendo uma alternativa bastante boa em casos agudos, mas não estão isentas de complicações, uma das menos frequentes é a necrose ostomal, que geralmente é tratada cirurgicamente, Apresentamos o caso de uma paciente que, devido a um câncer cervical avançado, teve que ser submetida a uma colostomia em alça de urgência devido a uma obstrução intestinal, que no segundo dia apresentou uma coloração arroxeada e foi tratada de forma conservadora, resolvendo-se espontaneamente. Apresentamos esse caso como um tratamento alternativo para essa complicação de ostomia para o conhecimento da comunidade científica.

Palavras-chave: cirurgia, cirurgia digestiva, ostomia.

1 INTRODUCTION

In 2019 there were about 1.3 million people in the world who lived with ostomies, this corresponds to a type of surgery usually performed in all hospitals in the world, its main indications are cancer and in trauma situations.

They are generally used as an acute and effective treatment for resolution of intestinal obstructions such as anastomosis dysfunction in various types of surgery.

Despite its usual practice, it is not uncommon for complications to occur, one of these being stoma necrosis of the externalized intestinal loop, surgical treatment being indicated in most cases. We present this case by proposing conservative treatment in selected groups of patients.

2 CLINICAL CASE

This is a 50-year-old woman with no significant pathological history, who presented abnormal transvaginal bleeding 2 months ago, attended gynecological control where an indurated lesion of the cervix was evidenced, where a sample was taken for a biopsy, finding a moderately differentiated squamous cell carcinoma.

An MRI was performed where bilateral parametrial tumor invasion was evidenced, being classified as stage IIB, not being a candidate for surgical treatment, medical treatment with concomitant chemotherapy and radiotherapy was sent.

In the last week, she presented abdominal pain accompanied by abdominal distension and constipation. On physical examination and imaging studies, intestinal obstruction was evidenced by pelvic tumor growth. An emergency colostomy was performed, apparently without complications.

At 48 hours, a purplish coloration of the colostomy is evident that progresses to black (figure 1). A glass tube test is performed, and it is found that said coloration extends to above the abdominal fascia.

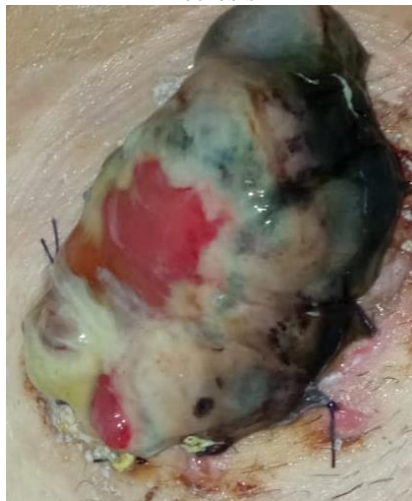
Figure 1. Postoperative loop stoma, mucosal necrosis extending to above the abdominal fascia.



A fine-needle circulation test is performed where circulation is evident, so it is decided to bet on conservative treatment with exhaustive continuous monitoring and laboratory control twice a day.

After 5 days, the patient evolved without decompensation and desquamation of areas of necrosis with epithelialization of normal mucosa in a bed of desquamation was evident in the colostomy (figure 2). A decision was made to discharge him from the hospital with warning signs and a weekly appointment with the digestive surgery service.

Figure 2: Desquamation of necrotic areas with new epithelialization of healthy mucosa in a bed of mucosal necrosis



After 2 weeks, a complete correction of the mucosa is evident, with no evidence of an area of necrosis which has completely sloughed off (Figure 3). The patient is momentarily discharged from the Digestive Surgery Service to continue specific oncological treatment.

Figure 3: Full recovery of stoma.



3 DISCUSSION

Nearly 100,000 ostomies ranging from end colostomies to temporary ileostomies are created each year in the United States alone, and are created for a wide variety of conditions, both benign and malignant, including trauma, inflammatory bowel disease, intestinal obstruction, cancer, anastomotic leak, severe perineal injury. (1)

It is estimated that in 2019 there were around 1.3 million people living with ostomies in the world (2), the ostomy is a surgical technique in the abdomen that aims at the external diversion of feces or urine, for which which leads or exteriorizes an intestinal loop (if the deviation is digestive) towards the abdominal wall and the skin of the patient (2). The term "ostomy" derives from the Greek "stoma" which means mouth.(3)

Temporary ostomies are generally performed routinely to improve or protect anastomoses or leaks after colorectal surgery, and permanent ostomies are often used as a definitive solution to an underlying problem when there is no other solution for it (3).

The classification of intestinal ostomies is given according to the segment of intestine that is externalized from the body. Those of the small intestine are called ileostomies and those of the large intestine are called colostomies(4) ileostomies are preferably created in the right abdomen and colostomies in the left abdomen. In terminal ostomies, the intestine is divided and the proximal stump is removed, and in loop ostomies, the intestine is not sectioned, only its anterior wall is sectioned, both can be temporary or permanent (4).

A special form of ostomy is the Kock container, in which a bag is created and fitted with a valve system, this valve prevents feces from leaking which makes it possible in theory to live without an ostomy bag and is emptied by self-catheterizing. , which increases the quality of life of the patient who has a much higher reoperation rate. (5).

The intention of any ostomy, whether it is an ileostomy or a colostomy, is to seek its closure, although despite this, there is a 20% chance that a temporary mostomy will become a permanent one (6). Elective ostomies have been shown to be they close more frequently than emergency ostomies, likewise it is known that loop ostomies close much more frequently than end ostomies. (7)

Along with the creation of the ostomy, a change in the total body physiognomy is achieved, especially intestinal physiology, due to the decrease in the surface area available for the reabsorption of nutrients and water. colostomies, each day approximately 1.5 to 2 liters of liquid pass through the ileocecal valve, which should be absorbed in the large intestine.(3)

The risks of nutritional disorders are related to the segment or length of the small intestine that has been avoided or lost. The acceptable average amount of fluid that an ostomy

spends is approximately 500ml/day, however amounts greater than 1.5 are not rare. in clinical practice. (8).

Ostomies drastically change the lifestyle and quality of this in the patient, the physical and psychological consequences have been extensively detailed (9) , in fact there are studies that confirm the complications related to the stoma and the deterioration of the quality of life of the affected person. (10).

Ostomy complications occur between 10 to 70%, and these are derived from early events and late events. Early complications are those that occur within the first 30 days such as bleeding, bruising, ostomy edema, peristomal dermatitis, ulcer and ostomy necrosis, which is the case that we present in this paper. (eleven)

Late complications are those that occur after 30 days of stoma formation, and the most frequent include prolapse, retraction, stenosis, and parastomal necrosis; all of these are due to factors related to the patient or the surgical technique; For example, obesity and intra-abdominal pressure have been shown to increase the risk of ostomy prolapse and parastomal hernia (12).

As is the subject of this work, we will focus on the complication of stoma necrosis, which occurs in approximately 13 to 20% of patients with an ostomy in their immediate period (13), the factors involved in stoma necrosis include the operation emergency, inadequate mobilization of the intestine, excessive mesenteric resection leading to inadequate arterial blood supply or venous drainage of the intestine, excessive constriction of the abdominal wall due to extremely small openings, abdominal wall or skin. (14,15).

The obese patient is seven times more likely to experience stoma necrosis than the non-obese patient (16), stoma necrosis is less common in loop ostomies due to its afferent and efferent circulation. (1).

The evaluation of a possible ischemia should always be carried out before leaving the operating room, and if there is any concern, the stoma should be reviewed in the operating room (13) , excessive trimming of fat and mesentery should be avoided; It is normal to see the mucosa slightly dark in the immediate postoperative period, and this is generally due to venous congestion, which improves as the operative edema of the mucosa improves. (3).

If there is suspicion of necrosis secondary to inadequate arterial risk, it is imperative to delineate the extension with a flexible pediatric endoscope, proctoscope, or even a transparent test tube. If necrosis is evident below the fascia of the abdominal wall, immediate surgical intervention via laparotomy is indicated. If the necrosis is limited to the intestine distal to the fascia, observation with gentle debridement or watchful waiting may be considered, although it has been shown that this could lead to a late complication such as retraction or stricture. (17)

When opting for conservative treatment, one must be cautious because the necrosis could be self-limiting in the first hours, either to the mucosa or transmurally to the entire intestine in question and may extend to below the fascia, despite the fact that In the initial evaluation, it does not present below this, for this reason, in case of suspicion of ischemia of the ostomy, an examination of this should be carried out at least twice a day. (18).

Likewise, the vital parameters of the patient must be carefully monitored and at the slightest suspicion of hemodynamic decompensation or signs of systemic inflammatory response, exploration in the operating room by means of laparotomy is indicated to rule out intestinal ischemia that is causing the focus of septic origin. (18-20)

4 CONCLUSIONS

We must consider the alternative of conservative management in this type of complications in this common surgical practice to avoid subjecting the patient to a new surgical stress.

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