

EXPLORATORY LAPAROTOMY OF STRANGULATED VOLUMOUS VENTRAL HERNIA: A CASE REPORT

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Abstract: A ventral hernia is by definition a protrusion through the fascia of the anterior abdominal wall, with or without complications. This article aims to discuss a case of strangulated ventral hernia, which progressed with mesenteric ischemia, and resulted in a large resection of the intestinal loops of the jejunum and ileum and did not evolve with short bowel syndrome. Short bowel syndrome is a rare disorder, but its management requires information about the patient's intestinal physiology and nutritional status, so it is important to understand an individual's electrolyte and dietary needs. In this case, the remaining amount of intestine was sufficient to meet their nutritional demands, with the support of pharmacological therapy and food supplements. In addition, the support of the nutrition team contributed to the gradual transition between TPN and oral feeding, allowing better adaptation of the patient in the postoperative period, which reduced the occurrence of complications.

Keywords: Ventral hernia. Mesenteric ischemia. Short bowel syndrome.

INTRODUCTION

A ventral hernia is by definition a protrusion through the fascia of the anterior abdominal wall. They can be classified as primary (umbilical hernia, epigastric hernia, Spieghelel hernia) and secondary (incisional hernia). When symptomatic, surgical correction is necessary with or without the use of meshes. Patients with hernias may experience complications such as strangulation and entrapment. This occurs when the bulge becomes permanent, and is not reduced through manipulation and, despite causing pain, emergency surgery is indicated when there are signs of intestinal obstruction. That one is a case of medical-surgical emergency since the hernial ring is retained, compromising the blood flow, which

can lead to ischemia and necrosis of the incarcerated intestine for more than six hours.

In strangulated hernia, in cases of necrosis, resection is essential surgery of the affected segments, being a major surgery morbidity and mortality for the patient. Determining the viability of the bowel is an important aspect of the surgery, since unnecessary resections lead to short bowel syndrome and insufficient resections imply operations repeated. Short bowel syndrome (SBS) results from an inadequate total length of small intestine to satisfactorily maintain oral nutrition. It is a disabling disabsorptive condition as a result of the anatomical or functional loss of this organ. It results from surgical resection, bypass of intestinal transit or loss of mucous cells. Nutritional therapy is fundamental in the process of recovery from this syndrome and is intended to optimize the absorption process, reduce the symptoms presented and the recovery or maintenance of the patient's nutritional status. In the most severe cases, it is possible for patients to become chronically dependent on total parenteral nutrition (TPN). The objective is, therefore, to discuss a case of strangulated ventral hernia, which progressed with mesenteric ischemia, and resulted in the resection of the jejunum and ileum loops. We also emphasize its clinical aspects, diagnoses, the therapy used and the postoperative result achieved.

OBJECTIVE

This article aims to discuss a case of strangulated ventral hernia, which progressed with mesenteric ischemia, and resulted in a large resection of the intestinal loops of the jejunum and ileum.

CASE REPORT

D.R.M., male, obese, 46 years old, from Ribas do Rio Pardo - MS, was referred to the General Surgery Emergency Room of the

“ Hospital Universitário Maria Aparecida Pedrossian” (HUMAP) due to excruciating abdominal pain, abdominal distention and of elimination of flatus and feces for two days. Associated with tachycardia, tachypnea, fever and sweating. He had a bulging abdomen characteristic of a ventral hernia, not reducible to the Trendelenburg position, with the presence of hyperemia, local hematoma and pain on palpation. He denied nausea and vomiting. There was an attempt to reduce the Emergency Care Unit in the city of origin, without success. Regarding the pathological antecedents, he mentions a longstanding umbilical hernia. He denied hospitalizations and previous surgeries. This is a hypertensive patient using losartan 50mg/day. On physical examination, the patient was uncommunicative, drowsy, poor general condition, regular nutritional status, anicteric, acyanotic, fever of 38.7°C, pale (1+/4+), dehydrated (2+/4+), with a heart rate of 140 beats per minute, respiratory rate of 30 breaths per minute and 98% saturation in ambient air. Examination of the pulmonary, cardiac and extremities apparatus without alterations. Abdomen globular, tense, distended, bowel sounds abolished, painful on diffuse palpation, sudden negative decompression and negative Murphy's sign. Presence of ventral hernia and periumbilical hematoma. On rectal examination, the ampoule is free of stool. Admitted for general surgery, being requested hospitalization, vigorous hydration and emergency surgery. An exploratory laparotomy was performed, with enterectomy due to severe necrosis with the 'stop' point 30 cm after the Treitz angle up to 10 cm from the ileocecal valve. Necrosis was identified in the paravental hernial sac and fetid liquid from loops of the ischemic small intestine. Primary anastomosis was performed with jejunoileal side-to-side linear stapling with double suture. Ascending, transverse, descending, sigmoid

and rectum colon without signs of ischemia and other macroscopic alterations. The patient remained sedated, intubated and on vasoactive drugs in the Intensive Care Unit for seven days for continued care, and was extubated on the sixth day. After 48 hours of extubation, he was discharged to the ward. He needed a parenteral diet and supplementation, evolving with an oral diet and supplementation, with good acceptance until hospital discharge. He presented dehiscence of the skin suture in the surgical wound, periumbilical, being carried out daily washing in Admission, without signs of infection at the time of discharge, in good conditions for home care and in UBSF. He used Meropenem and Teicoplanin for 21 days. She also evolved with an ulcer in the left gluteal, undergoing debridement on the twenty-ninth day of hospitalization in the surgical center and being followed up by the hospitalization nursing team. She used Meropenem and Daptomycin for eight days due to her condition, with improvement. Presence of granulation tissue at medical discharge. The patient was discharged from the hospital accepting an oral diet, walking, without pain, nausea or vomiting. In use of Loperamide and flora replenisher to control watery stools.

DISCUSSION

The most feared complication of abdominal hernias is strangulation, which occurs when the organ passing through the hernia becomes trapped in the hernia ring. Strangulation is a surgical emergency, increasing the complexity of the surgery and the risk of postoperative complications, which can lead to death. In cases where surgery results in mesenteric resection, it is necessary for the surgical team to understand the viability of the remaining organ. When the remaining postduodenal small intestine in continuity is less than 200 cm, malabsorption of macronutrients and/

or water, electrolytes and micronutrients occurs, called short bowel syndrome. The patient in the late postoperative period needs monitoring by the multidisciplinary team to help institute nutritional therapy, whose objective is to start TPN, but progress to enteral nutrition and oral feeding to ensure the individual's nutritional needs.

The present report illustrates a case in which the patient managed to evolve without SBS, which can be attributed to the success of the surgical procedure and the multidisciplinary follow-up that the patient received throughout the hospitalization. In this case, the remaining amount of intestine was sufficient to meet their nutritional demands, with the support of pharmacological therapy and food supplements. In addition, the support of the nutrition team contributed to the gradual transition between TPN and oral feeding, allowing better adaptation of the patient in the postoperative period, which reduced the occurrence of complications.

CONCLUSION

Short bowel syndrome is a rare disorder, but its management requires information about the patient's bowel physiology and nutritional status, so it is important to understand an individual's electrolyte and dietary needs. In addition, the adopted approach requires indefinite multidisciplinary follow-up, which can take years or even a lifetime, for the patient to adapt to their new postoperative conditions and manage to live without nutritional deficits and other pathologies resulting from this. The social aspect must not be forgotten either, in order to contemplate the patient as a whole and make him return to a life as close as possible to the one previously led.

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