Intestinal Obstruction Secondary to Endometriosis. Case Report

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ABSTRACT

We present the case of a 56-year-old female patient who consulted for abdominal pain associated with distension, nausea, vomiting, and absence of gas elimination. Complementary laboratory and imaging studies confirmed the suspicion of intestinal occlusion. Subsequent exploratory laparoscopy confirmed the presence of a stenosing tumor close to the ileocecal valve, whose pathology proved to be gastrointestinal endometriosis.

Gastrointestinal endometriosis, although rare, can produce a picture of an acute abdomen and, for its diagnosis, requires a high index of suspicion. Therapeutic management included resection of the affected segment with intestinal anastomosis.

Keywords: intestinal endometriosis; intestinal occlusion; acute abdomen; exploratory laparoscopy.

Obstrucción intestinal secundaria a endometriosis. Informe de caso

RESUMEN

Se presenta el caso de una paciente de 56 años que consulta por dolor abdominal asociado a distensión, náuseas, vómitos y ausencia de eliminación de gases. Los estudios complementarios de laboratorio e imagenológicos confirmaron la sospecha de oclusión intestinal. La laparoscopia exploradora posterior confirmó la presencia de una tumoración estenosante próxima a la válvula ileocecal, cuya anatomía patológica resultó ser endometriosis gastrointestinal.

La endometriosis gastrointestinal, aunque rara, puede producir un cuadro de abdomen agudo y, para su diagnóstico, requiere un alto índice de sospecha. El manejo terapéutico incluyó la resección del segmento afectado con anastomosis intestinal.

Palabras clave: endometriosis intestinal, oclusión intestinal, abdomen agudo, laparoscopia exploradora.

INTRODUCTION

Endometriosis is a most common gynecological condition that involves the presence of ectopic endometrial tissue. It rarely affects the gastrointestinal tract, as in the case presented below. Its presentation as an intestinal obstruction is even more uncommon and requires surgical intervention with resection of the affected segment. This situation poses a challenge for diagnosis and management since we cannot rule out an oncologic cause. Intestinal obstruction in patients with endometriosis not only highlights the systemic effects of this disease but also underscores the importance of thorough clinical evaluation and a multidisciplinary approach.

CLINICAL CASE

We present the case of a 56-year-old female patient who came to the Emergency Medical Service with

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generalized abdominal pain of 24 hours duration, associated with distension, nausea, vomiting, and absence of gas elimination. Her relevant medical history included isolated episodes of self-limiting abdominal pain, with no other diseases or history of surgery. On physical examination, the patient was hemodynamically stable, with tachycardia and a soft, distended abdomen that was tender on deep palpation.

As a complementary study, we requested laboratory tests showing leukocytosis (13,000 white blood cells). In addition, an abdominal ultrasound revealed distension of the thin loops associated with free intraloop fluid, prompting the request for a contrast-enhanced abdominopelvic CT scan. That showed distension of the thin loops with liquid content inside, submucosal edema in the distal ileum, and free fluid in the pelvis (Fig. 1).

It was initially diagnosed as a small bowel obstruction, leading to the placement of a nasogastric tube for decompression, the initiation of digestive rest, and the implementation of a parenteral hydration plan. Due to worsening pain and a decline in the patient's general condition, we performed exploratory laparoscopy. That did not reveal peritoneal carcinomatosis but did show significant bowel distension, prompting conversion to open surgery. Intraoperative exploration revealed a stenotic mass 5 cm from the ileocecal valve, with no macroscopic features indicating malignant or benign etiology. A right hemicolectomy was performed with a side-to-side isoperistaltic ileotransverse anastomosis using mechanical suturing, and a surgical drain was placed at the anastomosis site (Fig. 2).

The immediate postoperative period was uneventful, with adequate pain control through an epidural analgesia catheter. Within the first 48 hours, oral intake was resumed with good tolerance, and the epidural catheter was removed with continued adequate pain management. The patient was discharged on postoperative day 4. During outpatient follow-up, no complications were observed.

Histopathological examination of the surgical specimen revealed the presence of müllerian-type glands with hypercellular stroma, a finding consistent with endometriosis.

Informed consent was obtained from the patient for the surgical procedure and the scientific dissemination of the case. The principles of the Declaration of Helsinki were upheld.

DISCUSSION

Endometriosis is a very prevalent gynecological condition, with a reported prevalence of 10–15% among women of reproductive age[1]. This disease is defined by the presence of endometrial tissue outside the uterine cavity; the most widely accepted explanation is Apson's theory of retrograde menstruation[2]. Such extrauterine implants may be intraperitoneal (most frequently affecting the ovaries and uterosacral ligaments) or extraperitoneal (vagina, vulva, and perineum). Among the intraperitoneal

Figure 1. Abdominopelvic computed tomography showing a small-to-large bowel transition in the distal ileum.

Figura 2. Surgical specimen showing a stenotic area in the distal ileum near the ileocecal valve.

forms, gastrointestinal or intestinal endometriosis –first described in 1950 by Marshak et al.[3]– has a prevalence of approximately 5% among women with the condition. It primarily involves the rectosigmoid colon (70%), while the terminal ileum (7%), ileocecal valve, and appendix (3-18%)[3],[4] are affected less frequently.

Clinically, it may be asymptomatic or present with nonspecific symptoms such as recurrent abdominal pain, which may be related to the menstrual cycle. The incidence of intestinal obstruction is less than 1%, being more common at the rectosigmoid junction and under 0.7% in the small intestine[1,2].

Mucosal involvement occurs rarely, while serosal involvement happens frequently. Endometrial cells invade through the intestinal wall, which explains the involvement of the colonic mucosa at the histological level. That causes the release of inflammatory mediators (prostaglandins, cytokines, and interleukins), which increases the presence of fibroblasts and the consequent fibromuscular fibrosis, potentially occluding the intestinal lumen. In postmenopausal women, endometriosis may be less active due to decreased serum estrogen levels, but it can still cause significant symptoms if residual lesions affect the intestine. In cases of chronic partial obstructions, magnetic resonance imaging and the measurement of the tumor marker CA-125 help determine the etiology[3,5,6].

A presumptive diagnosis requires a high index of suspicion, as it can mimic colon carcinoma; therefore –despite preoperative imaging (abdominopelvic computed tomography) and surgical findings– the definitive results depend on pathological anatomy[2],[7]. For this reason, exploratory or diagnostic laparoscopy is the procedure of choice (gold standard). However, suspicion of malignancy will lead to oncological surgery[2].

Treatment in acute or complicated cases will include resection of the affected segment along with the mesocolon and mesentery, followed by intestinal anastomosis[4]. As mentioned, the extent of the resection depends on the intraoperative suspicion of malignant disease as a differential diagnosis. In cases without oncological suspicion, resection of the corresponding mesentery is not necessary. Post-surgical medical treatment (danazol) has not shown benefits and is reserved for patients who cannot undergo surgery[1],[3]. In patients without signs of complete obstruction, medical treatment[2] or endoscopic dilation[8] may be attempted initially. The latter therapy has the advantage of serving as a bridge until surgery to optimize the patient's hydroelectrolytic balance. However, several sessions are usually required to restore intestinal patency, it carries risks, and it often ultimately ends in surgical intestinal resection[8].

CONCLUSION

In conclusion, this case illustrates the diagnostic and therapeutic complexity of intestinal endometriosis due to the nonspecific clinical presentation and the fact that the surgical approach, including the extent of resection, will be determined by the degree of suspicion of this rare pathology. Furthermore, this highlights the importance of a multidisciplinary approach combining clinical, imaging, surgical, and pathological findings to reach a definitive diagnosis.

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