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A rare case of ileus caused by ileum endometriosis



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ABSTRACT

INTRODUCTION: We report our experience involving a rare case of ileum endometriosis complicated with small bowel obstruction.

PRESENTATION OF CASE: 33 years old female patient, admitted to emergency service with abdominal pain, abdominal distension, and vomiting. Abdominal X-ray showed dilated small bowel loops. Computerized tomography scan showed dilated small intestine segments excepting last ileum loop, gastric distension, enlarged ovaries.

Emergency laparotomy was performed, showing acute bowel obstruction due to a stenotic tumor placed on the terminal ileum, cecum tumors, multiple tumors in Douglas pouch, multiple mesenteric enlarged lymph nodes. Right colectomy is performed with an ileo-transverso stomy placed in right hypochondrium. Postoperative evolution without complication, patient discharged after 13-days hospitalization. After hormonal treatment, she returned for a second look and ileotransverso anastomosis.

DISCUSSION: Gastrointestinal involvement of endometriosis has been found in 3%–37% of menstruating women. Ileum localization is very rare (1%–7%), causing intestinal obstruction 7%–23% of cases. Intraoperative differential diagnosis is difficult, predisposing at confusion with other types of tumors. In the absence of fast microscopic exam, the tumor was considered malignant and imposed a right hemicolectomy.

CONCLUSION: Intestinal obstruction due to ileum endometriosis is a rare condition, however, it should always be considered in the differential diagnosis in women of reproductive age.

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1. Introduction

Endometriosis is characterized by the presence of functional endometrial tissue consisting of glands and stroma outside the uterus. This disease occurs in 5%–15% of menstruating women, ileum localization is rare, and intestinal obstruction due to this pathology is even rare, up to 23% of all cases with ileum involvement.

Endometriosis can be divided into intra and extra peritoneal sites. In decreasing order the intraperitoneal locations are ovaries, uterosacral ligaments and large ligaments, pelvic peritoneum, Douglas pouch, and gastrointestinal tract. The extra-peritoneal location includes cervix, vagina, and round ligament. Extra-abdominal organs such as lungs, urinary system, skin, and brain are rarely involved.

In this article, we reviewed a case with intestinal obstruction caused by ileum endometriosis.

2. Presentation of case

A 33-year-old woman was admitted to the emergency unit, with abdominal pain and distension, fecal vomiting, six days constipation. The patient had been complaining of lower abdominal pain for six months. She had no labor, regular menses, and no dyspareunia.

Painkillers and antispasmodic drugs were administered at gastroenterologist indication but the symptoms persisted.

Abdominal X-ray showed dilated small bowel loops. Computerized tomography scan showed dilated small intestine, except for the last 30 cm of the terminal ileum, gastric distension, enlarged ovaries, hip with osteocondensant lesions (Fig. 1).

Intravenous contrast could not be performed due to elevated kidney function tests. Oral contrast wasn't an option due to 6 days old ileus, fecal vomiting, and abdominal distension.

At that moment because of nonspecific symptoms, and due to the low sensitivity of standard computerized tomography, the causes for bowel obstruction were uncertain. Laparoscopy couldn't be performed due to important abdominal distension.

The patient underwent emergency laparotomy. Abdominal exploration revealed dilated small bowel loops due to a stenotic

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Fig. 1. Preoperative computerized scan aspect.



Fig. 2. Intraoperative aspect-dilated intestinal loops, ileum stenosis, and endometriosis lesions.

ileum tumor, cecum tumors, enlarged ovaries especially the right one, multiple tumors in Douglas pouch pressing on the anterior rectum wall, multiple enlarged mesenteric lymph nodes (Fig. 2).

Due to intestinal loops distension and edema and because of the pelvic masses we didn't perform an ileotransverso anastomosis, preferring an ileotransverso stomy (end ileostomy and transverse colon stoma acting like a mucous fistula) placed in the right hypochondrium.

During hospitalization, an IRM is performed showing ovarian cysts, pathological aspect on right ovary. The postoperative course was uneventful and the patient left hospital 12 days after surgical intervention.

Histological examination reveals bowel endometriosis (with endometriosis outbreaks in serosa and muscular layer for ileum, and endometriosis of muscular layer for cecum). Lymph nodes without atypia. The patient underwent hormonal therapy with gonadotropin releasing hormone analogue-Diphereline for 3 months.

After 3 months the patient returned for a second look. No endometrial tissue was found during surgery, Douglas pouch without modification. An ileotransverso anastomosis was performed and after an uneventful hospitalization, the patient was discharged.

Postoperative clinical and imaging evaluation at 6 and 12 months showed no signs of endometriosis recurrence.

3. Discussion

Endometriosis is a disease of uncertain etiology with many theories proposed during the time to explain it.

Sampson retrograde menstruation theory remains widely accepted. This theory is based on endometrial tissue reflux during menstruation through the fallopian tubes, implantation in abdominal organs serosa. It doesn't explain rare extra abdominal locations [1,6].

Minh's theory states that endometriosis is a metaplastic transformation of peritoneal mesothelium.

Other theories imply cell migration through the blood stream or lymphatic system, nervous spread, genetic and immunological factors. It could also result in caesarean section due to decidua displacement [1].

Most common become symptomatic in the reproductive period under ovarian hormones stimulation. Usually, the symptoms are nonspecific, frequently lower abdominal pain, infertility and sometimes dyspareunia [2–4].

For 70% of gastrointestinal endometriosis, the site is the rectosigmoid. Small bowel involvement is less than 7%, terminal ileum as an exclusive site is around 5% [1,5,7].

Histological the infiltration emerges from serosa and progressively invades the muscular layer. Mucosa is rarely involved. Local lymph nodes may be affected.

The differential histologic diagnosis of endometrioid adenocarcinoma and intestinal adenocarcinoma is difficult. Immunohistochemical CK7 and CK20 dosage are useful in separating this two malignancies.

The endoscopic examination has a low sensitivity because intestinal mucosa is rarely affected, or due to insufficient bioptic tissue for an accurate pathologic diagnosis. Magnetic resonance has a high sensitivity (up to 93%), multislice computerized tomography has also a high sensitivity compared with standard computerized tomography [1,5].

Cancer antigen CA-125 has been used to monitor the progress of endometriosis. CA-19.9 has a lower sensitivity.

Surgery in laparoscopic or open surgery approach remains the main treatment for endometriosis. For non-symptomatic endometriosis hormone, therapy may be considered [2,3,8].

For the case presented, the existence of appropriate imaging (MRI, CT scan with oral or IV contrast) or the possibility of a microscopic examination under emergency conditions should be useful for a correct diagnosis and a proper surgical approach. In the absence of such data, the ileum and the check tumors were interpreted as malignant and therefore right hemicolectomy was performed.

This type of intervention hasn't affected the subsequent evolution of the case, considering even that the existence of cecum endometriosis imposed a right hemicolectomy.

4. Conclusion

Preoperative ileum endometriosis distinction from other diseases is difficult in terms of symptomatology, radiological appearances, and surgical findings. Surgical approach may be challenging due to the slight line between cytoreduction, infertility, risk of recurrence and malignant potential.

Author contributions

Dan Bratu is the main author of article being along with Beli Laurentiu, and Alin Mihetiu involved in case management.

Alin Mihetiu, Adrian Boicean, Ciprian Tanasescu participated in the intellectual content, the analysis of data and the writing of

the manuscript. Radu Chicea and Dan Sabau have reviewed the manuscript, believe it represents valid work, and approved it for submission. All authors read and approved the final version of the manuscript.

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