



Introduction

Endometriosis is a benign condition, affecting 4 to 17% of menstruating women. It has a peak incidence in the third and fourth decade. Its etiology is unknown, although there is a high incidence in infertile females as well as in those who have a family history. It is characterized by the presence of extra-uterine endometrial tissue. [1,2]

Digestive endometriosis represents 5 to 12% of deep endometriosis, largely dominated by far by the involvement of the rectosigmoid hinge (65%). [3]

Clinically, the symptoms of bowel endometriosis are numerous and include abdominal pain, rectal pain, tenesmus, per rectal bleeding and constipation. Classically, the symptoms are worse during menses, but this is not always the case. This myriad of symptoms can make the condition difficult to diagnose acutely.

We report the case of a young female who presented with acute bowel occlusion. The histological analysis of the surgical recto-colonic hinge specimen revealed the diagnosis of intestinal endometriosis

The case report:

A 41 year old married patient nulligravida with 6-years primary infertility situation. She reported a cyclic pelvic pain and dyspareunia treated with first level analgesics.

On May 2021 she presented to the emergency room with a cessation of materials and gases associated with vomiting during the last five days. She had a distended abdomen with diffuse sensitivity, rectal exam showed semi-circumferential rectal process at 4 cm from the anal margin fixed and not bleeding on contact.

Abdominal CT scan revealed an organic colonic occlusion upstream of tumor thickening stenosis of the middle and upper rectum tense at the recto sigmoid hinge, infiltrating locally

With a moderate Uterohydronephrosis left upstream.

The patient underwent surgery with exploration: distention of the entire colonic frame in upstream of a tumor at the level of the recto sigmoid hinge fixed with respect to the posterior plane, adherent to the uterus and bladder with low abundance serous effusion without liver metastasis or peritoneal carcinomatosis.

The surgical act consisted in making a relief colostomy upstream of the tumor.

Several colonoscopies were carried out which showed: stenosing process measuring 10cm from the anal margin and the pathological examination of the multiple biopsies found an acute inflammatory lesion with no sign of malignancy Thoracic- abdominal and pelvic CT scan revealed: Stenosing tumor thickening of the rectum stretched at the recto sigmoid hinge, infiltrating locally with moderate uterohydronephrosis on the left without detectable lesion of secondary appearance PELVIC IMR has been accomplished showing a large tumoral process measuring approximately 70x63x110mm, located 4 cm from the anal margin; involving the upper, middle and lower rectum, classifiable as T4bN2 It was responsible for an important infiltration of the mesorectum. Above and anteriorly this process infiltrated the posterior wall of the uterine body as well as the cervix and the upper 1/3 of the vagina. From behind it infiltrated the pre-sacred space and comes into intimate contact with the sacred vertebral bodies with loss of the fatty border of separation. Laterally, it infiltrated the levator ani muscle and the ischioanal fossae. Bilateral and pre-sacral hypogastric adenopathies with infracentimetric size has been detected.

Pelvic MRI showed also a large lateral left uterine cystic formation of 65x78x95 mm seat of multiple partitions enhanced after the injection of the contrast product classified O-RADS 3. It was responsible of a compression of the pelvic ureter with a major left uterohydronephrosis. (Figure 1)

Subsequently the patient underwent an exploratory laparotomy in a median approach down the middle of the abdomen along the linea Alba, extended to supra umbilical area which objectified a multiple parietal and pelvic adhesions and the presence of a left ovarian mass and peritoneal ascites.

We faced a hard adhesions between the tumor and the posterior wall of the uterine body as well as the cervix and the upper 1/3 of the vagina, so we could performed just a subtotal hysterectomy without adnexal preservation. At the end of the intervention we were able to reach the tumor which was hard fixed fibrosis adhered to the rectum and the recto sigmoid hinge, we performed a biopsy of the tumor.

The final pathological examination revealed (figure2)

The biopsy of the tumor was rectal endometriosis.

A left ovarian serous cystadenoma with foci of adenomyosis.

Cytology study of peritoneal fluid was hemorrhagic without of malignant tumor.

Subsequently the patient did not need treatment with estrogen-progestogens or GnRH antagonists, because the bilateral adnexectomy ensured "the definitive blocking" of the hypothalamic-pituitary axis

The post-operative follow-up went without incident and the patient reported considerable improvement in digestive symptoms and gynecological pain. Control MRI at 6 months (figure3) showed a significant regression of the rectal mass.

Prior to the recovery of digestive symptoms, the staff of the department of general surgery has decided to maintain clinical radiological surveillance.

Discussion

Digestive endometriosis constitutes for 8 to 12% of all types of deep endometriosis, with recto sigmoid localization accounting for 80 to 90% of all cases. A slow-evolving condition, deep endometriosis was typically identified between the third and fourth decade. [4]The unusual occlusive complication indicated a significant recovery in digestive symptoms and gynecological pain. [5]

Establishing the pathogenesis of rectal endometriosis is challenging, because gastrointestinal symptoms might be non-specific and big tumors can cause acute occlusion that looks like colon cancer. There are a number of theories that have been developed, but all point to the fact that none of them can fully explain this disease. The most persuasive theories are those that relate to menstruation reflux and metaplasia.

Careful questioning to look for gynecological discomfort (disabling dysmenorrhea, deep dyspareunia, and persistent pelvic pain) and digestive symptoms (constipation, abdominal pain) of a cyclical nature with a peak during the menstruations might help diagnose digestive endometriosis.

Although our patient had these symptoms, the diagnosis had never been made since she had chosen the traditional medicine.

A CT scan of the pelvis or abdomen may show a thicker bowel wall and a constricted lumen. However, they are less effective in characterizing deposits and adhesions. Transvaginal ultrasonography (US) and pelvic magnetic resonance imaging (MRI) are better employed in evaluating endometriosis. [7]

Except in cases where lesions are approaching to blocking, as in the case of our patient, endoscopic evaluations typically do not reveal any pathology. Mucosa biopsies frequently come out normal. Laparoscopy and biopsy are the gold standard for diagnosis because they provide a complete evaluation of the pelvis and, if necessary, surgical resection. [8]

The management of rectal endometriosis is medical and surgical. The surgical technique to adopt that can achieve maximum lesion reduction with few complications is difficult to establish for this disease with a purely functional pathogenesis.

Some authors prefer mass resection, others segmental colorectal resection. It must be recognized that no technique can claim to be a "master key". The treatment must be adapted on a case-by-case basis, depending on the specificity of the patient [9]

In our case Treatment priority is in relieving the obstruction. With planned resection at a later stage and because the patient also presented ovarian formation related to a cystadenoma, a hysterectomy without preservation of the annexes was the most suitable therapeutic plan for our patient.

Follow-up, which shows laparoscopic surgery significantly improved quality of life and gynecologic and digestive symptoms.

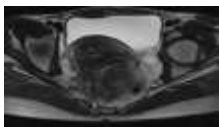


Figure 1: large tumoral process involving the lower, middle and upper rectum extended at the recto sigmoid hinge. Located 4 cm from the anal margin measuring badly limited budding and stenosed hypointense in T1 (A axial section), heterogeneous hypersignal in T2 (B sagittal section) heterogeneously enhanced after gadolinium injection and (C axial section) Lateral left uterine cystic formation classified O-RADS

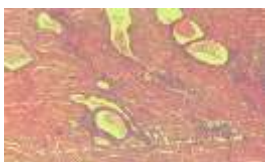


Figure 2
:Microscopic study: four fragments measuring between 0.4 and 1 cm.
: Microscopic study shows endometriotic foci without malignant tumor proliferation

Conclusion

The occlusive complication of rectal endometriosis is rare. It should be considered everytime we face a colorectal "tumor", especially in a young woman. The pathologist is the key player in the diagnosis of this condition

References

- 1.El Bakouri A, El Krouachi A, Bouali M, Khouaja A, Elhattabi K, Bensardi F, Fadil A, Karkouri M. Acute colonic occlusion over endometriosis: About a case. Int J Surg Case Rep. 2021 Mar;80:105615. doi: 10.1016/j.ijscr.2021.02.001. Epub 2021 Feb 3. PMID: 33592416; PMCID: PMC7893450.
2. Doh K, et al. Endométriose rectale : une cause exceptionnelle d'occlusion intestinale aiguë. Annales de pathologie (2016), <http://dx.doi.org/10.1016/j.anpat.2015.11.014>
3. Dr. Y. Janati-Idrissi "Acute Bowel Occlusion Complicating Ileocecal Endometriosis: About Two Cases" MAR Gynaecology 2.2
4. Leconte M, Borghese B, Chapron C, et al. Localisation digestede l'endométriose. Presse Med 2012;41:358—66 Doi : 10.1016/j.jpm.2011.07.017
5. Benbara, Amélie & Fortin, A. & Martin, B. & Palazzo, Laurent & Le Tohic, Arnaud & Madeleat, P. & Yazbeck, Chadi. (2008). Résection rectosigmoïdienne pour endométriose profonde : résultats chirurgicaux et fonctionnels. Gynecologie Obstetrique & Fertilité - GYNECOL OBSTET FERTIL. 36. 1191-1201. 10.1016/j.gybofe.2008.09.016.
6. Wenger JM, Loubeyre P, Marci R, et al. Prise en charge de l'endométriose. Rev Med Suisse 2009;5:2085—90.
7. Giudice LC. Clinical practice. Endometriosis. N Engl J Med. 2010 Jun 24;362(25):2389-98. doi: 10.1056/NEJMc1000274. PMID: 20573927; PMCID: PMC3108065.
8. Pramateftakis MG, Psomas S, Kanellos D, Vrakas G, Roidos G, Makrantonakis A, Kanellos I. Large bowel obstruction due to endometriosis. Tech Coloproctol. 2010 Nov; 14 Suppl 1:S87-9. doi: 10.1007/s10151-010-0616-x. PMID: 20683748.
9. Leconte M, Chapron C, Dousset B. Traitement chirurgical de l'endométriose rectale. J Chir 2007;144:5—10.

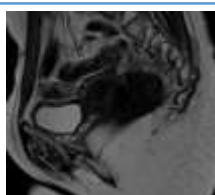
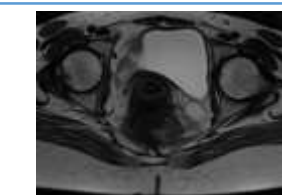


Figure 3: persistence with a reduction in volume of the rectal process involving the lower, middle and upper rectum extended at the recto sigmoid hinge. Located 4 cm from the anal margin measuring badly limited budding and stenosed hypointense in T1 (A axial section), heterogeneous hypersignal in T2 (B sagittal section) measuring 35x37x41mm vs 70x63x100mm