

Rectal Endometriosis Revealed by a Colonic Tumor Obstruction: A Case Report

Bouchra Fakhir^{1*}, Fatima Boutaibi¹, Abderrahim Aboulfalah¹, Abderraouf Soummani¹, Khalid Rabbani², Ayoub Kazza², Abdelwahed Louzi², Issam Azzahiri³, Btissam Zouita³, Hicham Jalal³, Brahim Benhami⁴

¹The Department of Gynecology Obstetrics at Mohammed VI University Hospital Center, Cadi Ayyad University, Arrakech, Morocco

²The Department of General Surgery at Mohammed VI University Hospital Center, Cadi Ayyad University, Marrakech, Morocco

³The Department of Radiology at Mohammed VI University Hospital Center, Cadi Ayyad University, Marrakech, Morocco

⁴Zhoro Elhadika Elkobra Anatomical Pathology Laboratory, Marrakech, Morocco

Email: *fakhirb@gmail.com

How to cite this paper: Fakhir, B., Boutaibi, F., Aboulfalah, A., Soummani, A., Rabbani, K., Kazza, A., Louzi, A., Azzahiri, I., Zouita, B., Jalal, H. and Benhami, B. (2023) Rectal Endometriosis Revealed by a Colonic Tumor Obstruction: A Case Report. *Open Journal of Obstetrics and Gynecology*, 13, 1625-1631.

<https://doi.org/10.4236/ojog.2023.139136>

Received: June 13, 2023

Accepted: September 24, 2023

Published: September 27, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Endometriosis is defined as the presence of endometrial tissue that is located outside the uterine cavity, associated with fibrosis and inflammatory reaction. The most common atypical locations are the gastrointestinal tract, urinary tract, lung, as well as abdominal surgical scars. Its diagnosis is still very difficult, especially when it manifests itself as an acute large bowel obstruction. We report the rare case of a 41-year-old patient diagnosed with acute colonic obstruction following a rectal tumor. She had undergone colonostomy even though colonoscopy biopsies were nonspecific, and a computed tomography (CT) scan was requested. It showed an adnexal heterogenous mass, therefore the patient had a laparotomy and a subtotal hysterectomy with bilateral salpingo-oophorectomy and a biopsy of the recto-colonic hinge. Histologic examination revealed a diagnosis of rectal endometriosis. The purpose of this work is to report a rare case of colonic endometriosis responsible for an acute large bowel obstruction.

Keywords

Endometriosis, Rectal Endometriosis, Colonic Obstruction, Rectal Tumor

1. Introduction

Four to seventeen % of reproductive age women have endometriosis, a benign illness. The third and fourth decades have its highest incidence. Its cause is unknown, however infertile women and those with a family history are more likely to develop it than other people [1]. The presence of extra-uterine endometrial

tissue is what characterizes it [2].

Bowel 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 obstruction. The histological analysis of the surgical recto-colonic hinge specimen revealed the diagnosis of colonic endometriosis.

2. The Case Report

The patient was a 41-year-old married patient nulligravida diagnosed with 6-years history of primary infertility. She reported a chronic cyclic pelvic pain and dyspareunia treated with simple analgesics. In May 2021, she presented to the emergency room with absence of bowel activity to faeces and flatus, this was associated with vomiting all of five days duration. She had a distended abdomen with diffuse tenderness, 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 obstruction upstream of tumor thickening stenosis of the middle and upper rectum tense at the recto sigmoid hinge, infiltrating locally. There was a moderate left hydronephrosis above the level of the rectal tumor.

The patient was operated for an exploratory laparotomy: and we have objectified.

A colonic distension upstream of a tumor at the level of the rectosigmoid junction, this tumor was fixed to the posterior plane, it was adherent to the uterus and the bladder.

The presence of abundant serous effusion was also noted.

On exploration, no signs of liver metastases or peritoneal carcinomatosis were found.

The surgical act consisted in making defunctioning colostomy stoma.

The colonoscopy has showed: stenosing tumor located 5 cm from the anal margin. The pathological examination of the multiple biopsies of this tumor found an acute inflammatory lesion with no sign of malignancy.

Thoracic-abdominal and pelvic CT scan revealed: Stenosis and the wall thickening of the colon arrived to the recto sigmoid hinge, with moderate uterohydronephrosis on the left side without detectable lesion of secondary appearance.

PELVIC magnetic resonance imaging has showing a large tumor measuring approximately $70 \times 63 \times 110$ mm, located 4 cm from the anal margin; involving the upper, middle and lower rectum, classifiable as T4bN2. This tumor was re-

sponsible for an important infiltration of the mesorectum. Above and anteriorly this tumor infiltrated the posterior wall of the uterine body as well as the cervix and the upper 1/3 of the vagina. It infiltrated the pre-sacred space and comes into intimate contact with the sacred vertebral bodies. Laterally, also 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 65 × 78 × 95 mm 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 adhesion 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 have 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 (**Figure 2**).

- 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 (**Figure 3**) showed a significant regression of the rectal mass.

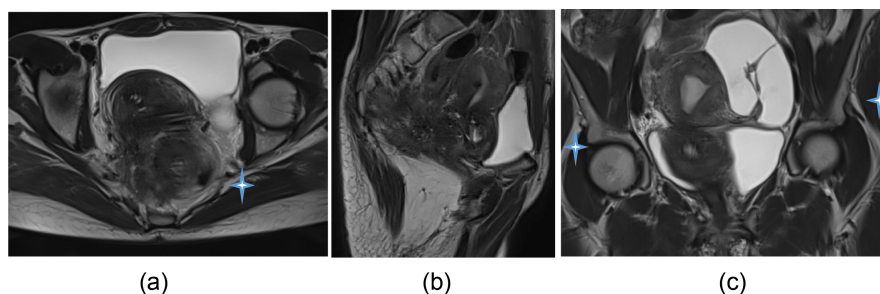


Figure 1. Large tumoral process involving the lower, middle and upper rectum extended at the recto sigmoid hinge. Located 4 cm from the anal margin measuring badly limited budding and stenosed hypointensity in T1 ((a) axial section), heterogeneous hypersignal in T2 ((b) sagittal section) heterogeneously enhanced after gadolinium injection and ((c) axial section) Lateral left uterine cystic formation classified O-RADS 3.

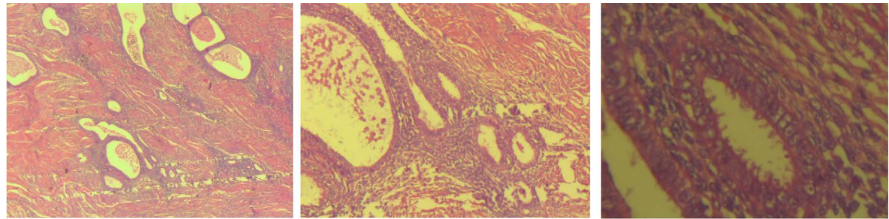


Figure 2. Macroscopic study: four fragments measuring between 0.4 and 1 cm. Microscopic study shows endometriotic foci without malignant tumor proliferation.

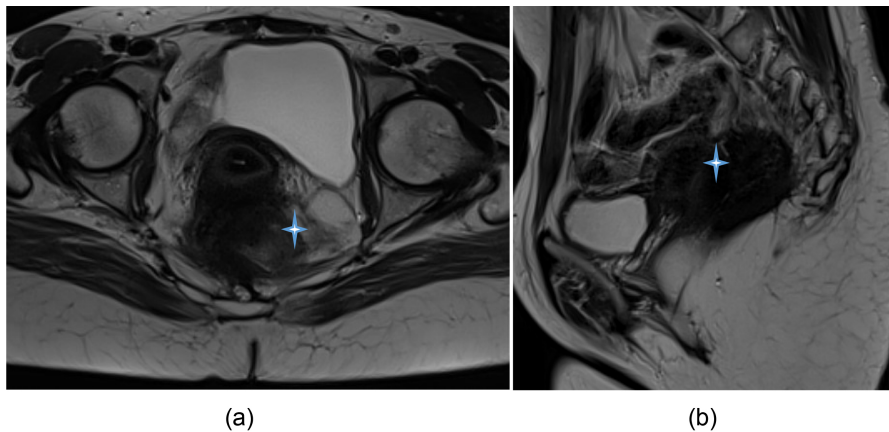


Figure 3. persistence with a reduction in volume of the lesional process involving the lower, middle and upper rectum extended at the recto sigmoid hinge. Located 4 cm from the anal margin measuring badly limited budding and stenotic hypointensity in T1 ((a) axial section), heterogeneous hypersignal in T2 ((b) sagittal section) measuring $35 \times 37 \times 41$ mm vs $70 \times 63 \times 100$ mm.

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

3. Discussion

Eight to twelve % of all deep endometriosis cases involve the bowel, and 80 to 90% of those instances are localized in the recto sigmoid. Deep endometriosis is a slow-evolving disorder that is often discovered during the third and fourth decade of life [4].

Because gastrointestinal symptoms of rectal endometriosis are not always distinct and large tumors may induce abrupt occlusions that resemble colon cancer, determining the pathophysiology of the condition is difficult [5]. Many theories have been explored, however they all indicate that none of them can completely explain this illness. The menstrual reflux and metaplasia theories are the most convincing ones [6].

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 bowel 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 thickened 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 endometrioses [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 are 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. Because of the substantial fibrosis brought on by the continuous inflammation of the endometriosis, deep infiltrating endometriosis frequently manifests at a late stage with several problems.

In this stage of the disease, hormonal and anti-inflammatory treatments have little to no benefit in terms of improving symptoms [9].

Several authors recommend Segmental versus large colorectal resection [10]. It is important to understand that no approach that is considered the gold standard. Depending on the patient's specific circumstances, an individualized approach should be considered [11].

The pathological examination can significantly aid in the diagnosis, treatment plan, and patient follow-up. In our situation, the pathological anatomy permitted the diagnosis to be radically changed even though the physicians had described a tumor lesion that was thought to be malignant [12].

However, it appears that the rates of pain recurrence can reach up to 40% after 5 years and up to 20% at 2 to 3 years, while the rates of symptomatic recurrence necessitating additional surgical intervention vary between 15% and 20% at the same time [13] [14].

Given the high percentage of patients who have received prior surgical therapy, these high recurrence rates are not surprising. Results also support the use of complementary medicinal treatment to lower recurrence rates. Many professional proposals suggest postsurgical hormone suppression since it has been found to have lower recurrence rates; however, this strategy is obviously inappropriate for patients desirous of fertility [15].

The European guidelines recommend the use of gonadotropin-releasing hormone agonists rather than combined oral contraceptive pill, citing lack of efficacy, but they make no distinction between combined oral contraceptive pill and progestagen-only pill [16].

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 with bilateral salpingo-oophorec-

tomy was the most suitable therapeutic plan for our patient.

4. 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 a key player in the diagnosis of this condition.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] El Bakouri, A., El Karouachi, A., Bouali, M., Khouaja, A., Elhattabi, K., Bensardi, F., Fadil, A. and Karkouri, M. (2021) Acute Colonic Occlusion over Endometriosis: About a Case. *International Journal of Surgery Case Reports*, **80**, Article ID: 105615. <https://doi.org/10.1016/j.ijscr.2021.02.001>
- [2] Parazzini, F., Esposito, G., Tozzi, L., Noli, S. and Bianchi, S. (2017) Epidemiology of Endometriosis and Its Comorbidities. *The European Journal of Obstetrics & Gynecology and Reproductive Biology*, **209**, 3-7. <https://doi.org/10.1016/j.ejogrb.2016.04.021>
- [3] Janati-Idrissi, Y. (2021) Acute Bowel Occlusion Complicating Ileocecal Endometriosis: About Two Cases. *Journal of MAR Gynecology*, **2**, 1-7.
- [4] Allan, Z. (2018) A Case of Endometriosis Causing Acute Large Bowel Obstruction. *International Journal of Surgery Case Reports*, **42**, 247-249. <https://doi.org/10.1016/j.ijscr.2017.12.031>
- [5] Gupta, R.K., Agrawal, C.S., Yadav, R.P., Uprety, D. and Sah, P.L. (2011) Rectosigmoid Endometriosis Causing an Acute Large Bowel Obstruction: A Report of a Case and a Review of the Literature. *Journal of Nepal Medical Association*, **51**, 83-86. <https://doi.org/10.31729/jnma.249>
- [6] Nezhad, C., Li, A., Falik, R., Copeland, D., Razavi, G., Shakib, A., et al. (2018) Bowel Endometriosis: Diagnosis and Management. *American Journal of Obstetrics & Gynecology*, **218**, 549-562. <https://doi.org/10.1016/j.ajog.2017.09.023>
- [7] Giudice L.C. (2010) Clinical Practice. Endometriosis. *The New England Journal of Medicine*, **362**, 2389-2398. <https://doi.org/10.1056/NEJMcp1000274>
- [8] Pramateftakis, M.G., Psomas, S., Kanellos, D., Vrakas, G., Roidos, G., Makrantonakis, A. and Kanellos, I. (2010) Large Bowel Obstruction Due to Endometriosis. *Techniques in Coloproctology*, **14**, S87-S89. <https://doi.org/10.1007/s10151-010-0616-x>
- [9] Baden, D.N., van de Ven, A. and Verbeek, P.C. (2015) Endometriosis with an Acute Colon Obstruction: A Case Report. *Journal of Medical Case Reports*, **9**, Article No. 150. <https://doi.org/10.1186/s13256-015-0609-5>
- [10] de Jong, M.J., Mijatovic, V., van Waesberghe, J.H., Cuesta, M.A. and Hompes, P.G. (2009) Surgical Outcome and Long-Term Follow-Up after Segmental Colorectal Resection in Women with a Complete Obstruction of the Rectosigmoid Due to Endometriosis. *Digestive Surgery*, **26**, 50-55. <https://doi.org/10.1159/000194197>
- [11] Rampinelli, F., Donarini, P., Visenzi, C., Ficarelli, S. and Ciravolo, G. (2018) Surgical Laparoscopic Treatment of Bowel Endometriosis with Transvaginal Resection of the Rectum Using Ultrasonically Activated Shears: A Retrospective Cohort Study

- with Description of Technique. *Archives of Gynecology and Obstetrics*, **297**, 985-988. <https://doi.org/10.1007/s00404-018-4692-x>
- [12] Alexandrino, G., Lourenço, L.C., Carvalho, R., Sobrinho, C., Horta, D.V. and Reis, J. (2018) Endometriosis: A Rare Cause of Large Bowel Obstruction. *GE—Portuguese Journal of Gastroenterology*, **25**, 86-90. <https://doi.org/10.1159/000480707>
- [13] Vignali, M., Bianchi, S., Candiani, M., Spadaccini, G., Oggioni, G. and Busacca, M. (2005) Surgical Treatment of Deep Endometriosis and Risk of Recurrence. *Journal of Minimally Invasive Gynecology*, **12**, 508-513. <https://doi.org/10.1016/j.jmig.2005.06.016>
- [14] Redwine, D.B. (1991) Conservative Laparoscopic Excision of Endometriosis by Sharp Dissection: Life Table Analysis of Reoperation and Persistent or Recurrent Disease. *Fertility and Sterility*, **56**, 628-634. [https://doi.org/10.1016/S0015-0282\(16\)54591-9](https://doi.org/10.1016/S0015-0282(16)54591-9)
- [15] Gambone, J.C., Mittman, B.S., Munro, M.G., Scialli, A.R. and Winkel, C.A. (2002) Consensus Statement for the Management of Chronic Pelvic Pain and Endometriosis: Proceedings of an Expert-Panel Consensus Process. *Fertility and Sterility*, **78**, 961-972. [https://doi.org/10.1016/S0015-0282\(02\)04216-4](https://doi.org/10.1016/S0015-0282(02)04216-4)
- [16] Kennedy, S., Bergqvist, A., Chapron, C., et al. (2005) ESHRE Guideline for the Diagnosis and Treatment of Endometriosis. *Human Reproduction*, **20**, 2698-2704. <https://doi.org/10.1093/humrep/dei135>