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Acute colonic occlusion over endometriosis: About a case

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ABSTRACT

The gastrointestinal tract is the most common site of extra pelvic endometriosis, with the rectum and sigmoid colon being the most frequently affected areas. Its diagnosis is still very difficult, especially when it manifests itself as an acute occlusion. We report the case of a patient admitted to the emergency room for an occlusive syndrome on a sigmoid process and who was operated on with colorectal resection and it was the anatomopathological examination that led to the diagnosis of endometriosis.

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1. Introduction

Endometriosis is defined by the presence of endometrial glands and stroma outside the uterine cavity and uterine muscularis [1]. Endometriosis is present in 6–10 % of women of childbearing age and approximately 50 % of women will experience pelvic pain, menstrual disorders and infertility [2]. The sigmoid colon and rectum are the areas most frequently involved in women with intestinal endometriosis and the differential diagnosis of colorectal endometriosis compared to other malignant tumors of the colon and rectum is difficult due to similar colonoscopy and radiology findings [1]. The objective of our work is to report a case of colonic endometriosis responsible for an acute intestinal occlusion and the role of the pathologist in the diagnosis of this condition. This case is reported in line with the SCARE criteria [3].

2. Material and method

This is a 47-year-old patient, diabetic on insulin, without any particular pathological history, admitted to the emergency room for an occlusive syndrome made of material and gas stoppage with bilious vomiting, at the examination of the distended abdomen, tympanic, at the rectal examination, empty rectal ampulla. At the abdomino-pelvic CT scan: presence of an important distension of the colic frame of 90 mm and hail of 27 mm with a stercoral stasis of hydro-aeric levels, peritoneal effusion blade.

The patient was operated on having had a sigmoid colostomy of discharge with, at the exploration: Presence of a 5 cm stenosing mass at the level of the sigmoid responsible for a colic and hail distension upstream, no hepatic metastases, no carcinoid nodules and the rest of the exploration was without particularity.

For the extension assessment, a colonoscopy was requested showing the presence of a stenosing ulcerative process at 20 cm from the anal margin. At the anapath: chronic non-specific interstitial colitis. A second colonoscopy was requested but was inconclusive. Tumor markers were normal CA19.9 at 37ui/mL, ACE at 1.09 g/l.

We opted for a discharging sigmoid colostomy first as the patient was admitted as an emergency and after extension assessment she was taken back for carcinological resection.

The patient was re-operated on suspicion of the neoplastic origin of the occlusion having benefited from an anterior colorectal resection with protective ileostomy. For the postoperative follow-up, the ileostomy was functional on day 2, patient declared outgoing on the 5th day. At the anapath: appearance of colonic endometriosis, absence of signs of malignancy. The restoration of ileal continuity was done 3 months later (Figs. 1–4).

3. Discussion

Endometriosis of the gastrointestinal tract was first described in 1950 by Marshak et al. It is still very difficult to diagnose, especially when it manifests itself as an acute occlusion. It is a condition of women during periods of genital activity. The average age of onset is 32–35 years with extremes ranging from 16 to 60 years [4].

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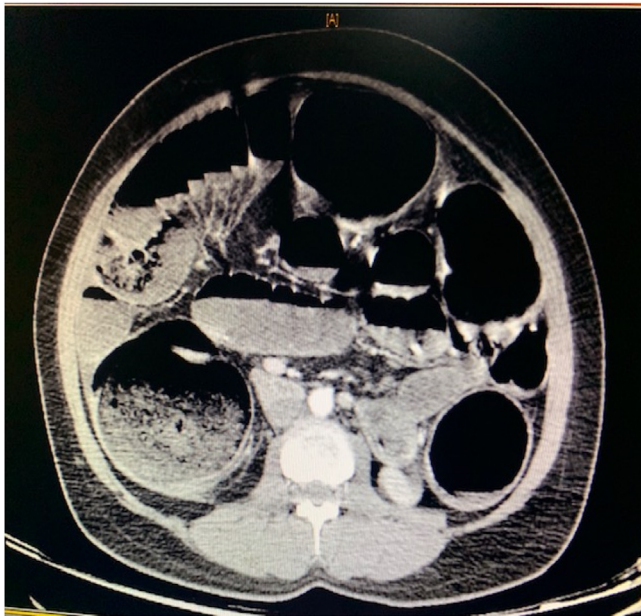


Fig. 1. Distension of small and large intestine with air-fluid levels.

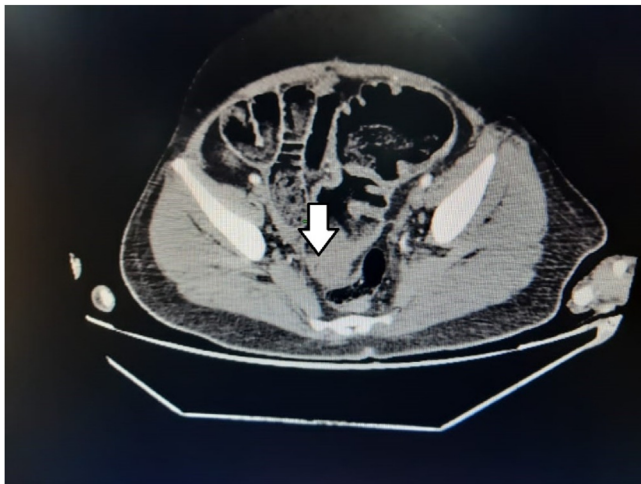


Fig. 2. Presence of a stenosing sigmoid colon.

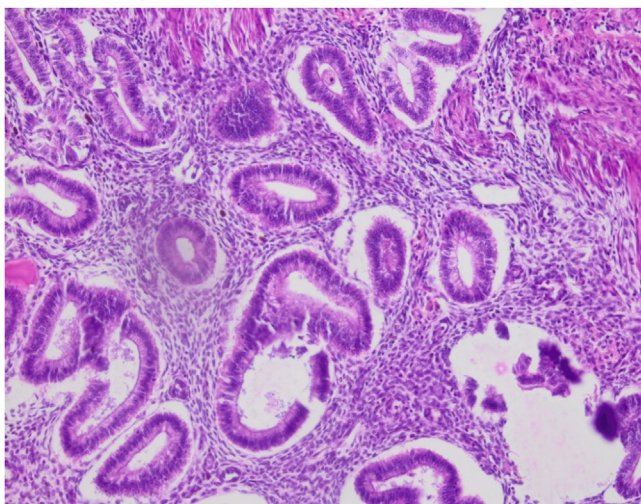


Fig. 3. Presence of endometrial cells in colonic tissue related to colonic endometriosis (magnification times 20) presence of endometrial glands with a pseudo-stratified columnar epithelium within a cytotrophoblastic chorion.

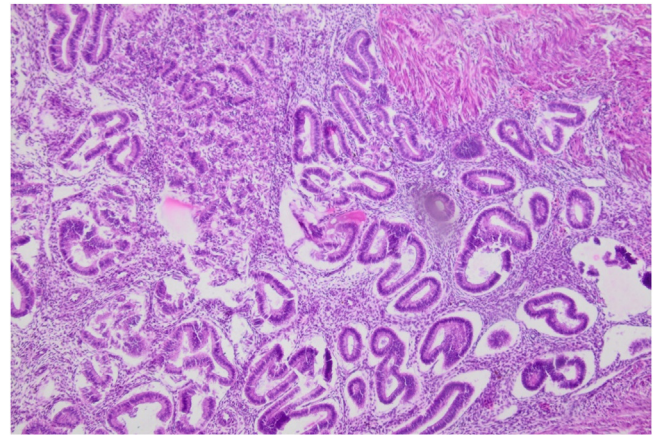


Fig. 4. Presence of endometrial cells in colonic tissue related to colonic endometriosis (magnification times 10).

It is a common, but poorly understood, condition in women of childbearing age. Many theories exist to explain the deposition of estrogen-dependent endometrial tissue outside the uterus; they include retrograde menstruation, metaplastic transformation of the peritoneal mesothelium, lymphatic or hematogenous spread or iatrogenic displacement. Typical symptoms may be non-specific, but typically include pelvic pain, infertility and dyspareunia [5].

It can occur throughout the abdominal cavity and is often classified into three groups: peritoneal endometriosis, ovarian endometriosis and deep infiltrating endometriosis [6].

Digestive endometriosis accounts for about 8–12% of all forms of deep endometriosis, with the recto sigmoid location being by far the most common in 80–90% of digestive forms, followed by the recto vaginal septum, the distal part of the small intestine, the cecum and the appendix [7].

Endometriosis with mucosal involvement is rare while serous sigmoid involvement is not and differential diagnosis of colon cancer can be difficult due to the absence of pathognomonic symptoms and poor diagnostic performance of colonoscopy and colon biopsies as in the case of our patient who was asymptomatic and had no history of pelvic endometriosis and whose two colonoscopies were inconclusive. Tumor markers that were normal and the absence of neoplastic infiltration in the colonoscopy biopsy were inconsistent with a diagnosis of colon cancer. And the involvement of the colon mucosa at the histological exam in this case could be explained by the invasion of endometrial cells through the intestinal wall.

The clinical, radiological and endoscopic picture can be confused with neoplasms, ischemic colitis, inflammatory bowel diseases, post-radiation colitis, diverticular diseases and infections. Endoscopic biopsies do not provide sufficient tissue for an accurate pathological diagnosis, and endometriotic deposits can also induce secondary mucosal changes that mimic the results of other diseases such as inflammatory bowel disease, ischemic colitis or even neoplasms. A CT scan or a barium enema usually reveals extrinsic intestinal compression, stenosis or a filling defect. MRI appears to be the most sensitive imaging technique for intestinal endometriosis. However, laparoscopy or laparotomy remains the reference for diagnosis [8].

When bowel resection surgery is indicated, a laparoscopic or conventional approach may be chosen depending on the intra-abdominal circumstances and the surgeon's experience. In the case of acute bowel obstruction, it may be of future interest to determine whether a temporary endoscopic stent inserted into the colon can pass the elective surgery period [9].

The treatment of intestinal endometriosis is, in most cases, surgical, as pending treatments (danazol, a gonadotropin-releasing

hormone-analogous agonist) are generally ineffective and reserved for patients who cannot be operated on. The choice of technique to be used depends mainly on the extent and depth of the disease and colorectal endometriosis can be treated by local excision, ablation or bowel resection [10].

Laparoscopy must be considered as the reference in the diagnosis of endometriosis. At present, clinical evaluation, imaging and serological markers can lead to a correct diagnosis, leaving surgery to selected patients with a see and treat logic. This is also true for deep infiltrating endometriosis; in fact, the intravaginal ultra probe has a sensitivity of 91 % and a specificity of 98 % in the detection of intestinal localizations. In addition, elevated serum CA-125 levels can be considered for diagnosis [11].

The pathological examination can make a significant contribution to the diagnostic process, the management strategy and the follow-up of patients. In our case, the surgeons reported a tumor lesion suspected of malignancy, but the pathological anatomy allowed the diagnosis to be completely corrected. It was not a tumor lesion but a dystrophic lesion with purely functional pathogenesis. The diagnosis of endometriosis is histological [7].

4. Conclusion

Intestinal endometriosis as a cause of intestinal obstruction is often a diagnostic challenge mimicking a wide spectrum of diseases. This diagnosis should be included in the differential in women of childbearing age with any symptoms of bowel obstruction.

Acute colonic occlusion without an evocative context on endometriosis is rare. It is necessary to think about it when faced with a colorectal tumor, a fortiori in a young woman, and always keep in mind the possibility of a non-tumoral lesion.

Declaration of Competing Interest

The authors report no declarations of interest.

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Ethical approval

I declare on my honor that the ethical approval has been exempted by my establishment.

Consent

Written informed consent for publication of their clinical details and/or clinical images was obtained from the patient.

Author contribution

El karouachi Asmaa: Corresponding author writing the paper and operating surgeon.

El Bakouri Abdelilah: writing the paper and operating surgeon.
Bouali Mounir: writing the paper.
Khouaja Ayoub: writing the paper.
El Hattabi Khalid: study concept.
Bensardi Fatimazahra: study concept.
Fadil Abdelaziz: correction of the paper.
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