

Letters to the Editor

Enterovesical fistula and intestinal obstruction by ileal endometriosis

Key words: Endometriosis. Ileum. Fistula. Intestinal obstruction. Crohn's disease.

Dear Editor,

Endometriosis is one of the most common gynecological diseases, is characterized by the presence of endometrial tissue outside the uterine cavity in women of reproductive age or perimenopausal. Endometriosis "infiltrative in depth" is defined as one that penetrates more than 5 mm in the affected tissue, occurs in one third of all cases and is usually located in pelvic structures. At ileum is very rare, 1-7 % of cases of intestinal involvement, with series and case reports in which the common denominator is usually a result of intestinal obstruction in the same (1,2). Perforation is even stranger and we have not found any published case that has caused enterovesical fistula as presented.

Case report

This is a 45 years old patient diagnosed with Crohn's disease when having episodes of abdominal pain, with terminal ileal stenosis objectified in a barium transit. Enter by pneumaturia and fecaluria, in CT scan highlights the dilatation of a segment of small intestine with stenotic area and bladder contrasted with the image of a possible fistulous tract that seems to contact with the area of stenosis of ileum (Fig. 1). At the intervention, short

stenosis can be seen very close to the ileocecal valve without Crohn's appearance, coupled with the bladder dome by the tract. Ileocecal and indurated bladder wall segment resection was performed. *Histology:* Endometriosis in the mesenteric side of the ileocecal valve and fibrinous inflammatory area corresponding to the fistula, without histological lesions in ileal mucosa. Bladder wall with nonspecific mixed inflammation and giant cell reaction (Fig. 2). The postoperative progressing well and remains asymptomatic and untreated twelve months later.

Discussion

Endometriotic foci, when implanted in the digestive tube would produce, according to the novel "neurological hypothesis", progressive infiltration into the muscularis propria and submucosa along the nerve fibers (3). The mucosa is affected only rarely so the endoscopic study with biopsy is usually unspecific and this is one of the diagnostic difficulties. If we add that the symptoms are not typical for gynecological endometriosis, the problem of diagnosis is even greater (4).

When affected terminal ileum, stenosis occurs suggesting Crohn's disease, as in our case, being this the most important aspect since both diseases have different treatments. There are numerous reported cases of ileal endometriosis mimicking Crohn and eight cases where both diseases coexist (5). The multislice CT can make suspect this entity (2,6), but possibly the only thing conclusive is the exploratory laparoscopy and the diagnosis is still given by the histological study (7).

Our patient began with intestinal obstruction and enterovesical fistula. There have been at least 14 reported cases of intestinal perforation by endometriosis and 3 fistulation but have not found a case like the one presented (5,8,9). Why does this happen? It is noteworthy that in most of the few reported cases the patients were pregnant, were in the postpartum period, in oral contraceptives or other hormonal therapy to cure the activity of endometriotic foci. This hormonal influence may produce an initial decidualization and endometrial tissue growth, making it more infiltrating in depth, coming to pass the mucous not only producing stenosis but perforation or fistulation (3,8).

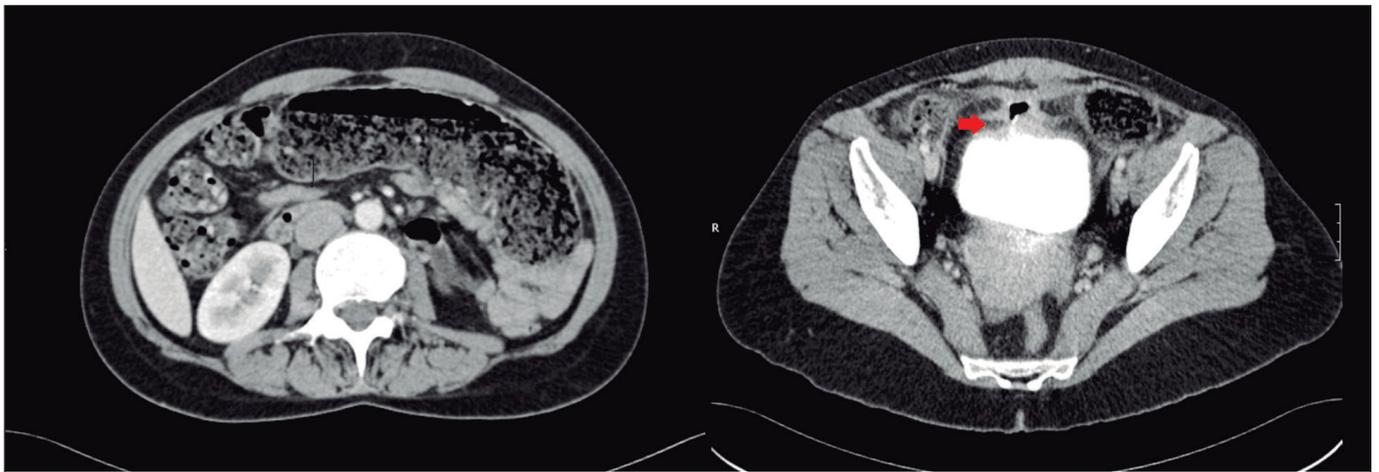


Fig. 1. CT scan which shows the large dilated loop of intestine longstanding stenosis (left) and contrast-filled bladder with fistula-ileum area (arrow).

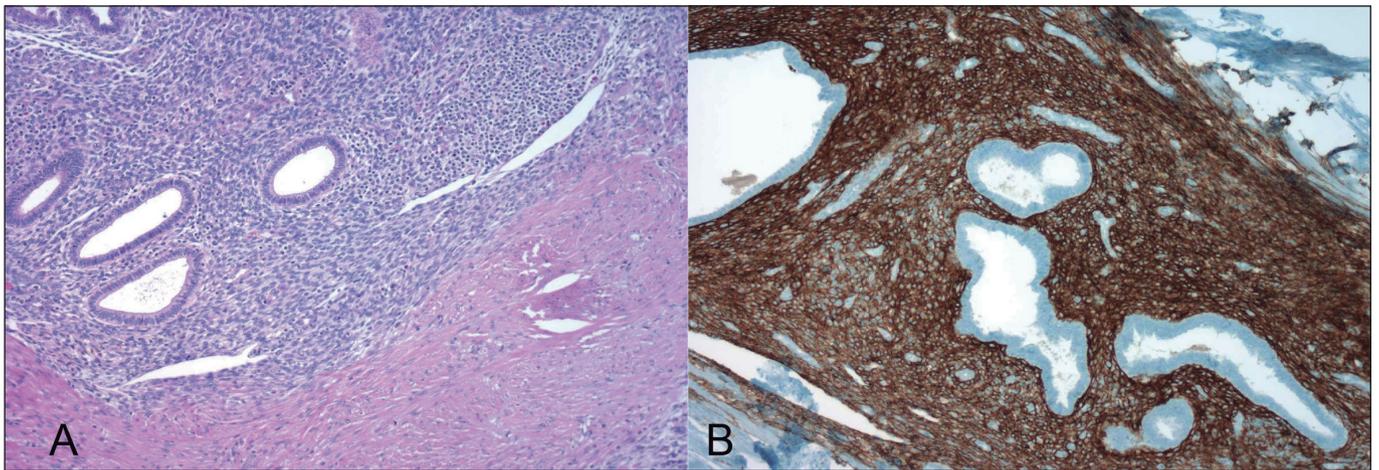


Fig. 2. A. Histology showing endometrial tissue in the muscular enteric layer without affecting the mucosa (HE x10). B. Immunohistochemistry which demonstrates the presence of endometrial tissue (CD10 x10).

The widely recommended treatment in all cases of intestinal endometriosis is surgical resection. When an implant is appreciated by chance, might be consider performing a simple nodulectomy without bowel resection, but there are studies that show that it can be microscopically incomplete (10).

In conclusion, in front of a patient of childbearing age with abdominal pain or bowel obstruction, endometriosis with gastrointestinal involvement should be considered in the differential diagnosis, even without perimenstrual symptoms. It can simulate a stenosing or fistulizing Crohn's disease. The diagnosis and treatment will be surgical exploration with resection.

Juan Antonio Asanza-Llorente¹, Anastasio Serrano-Egea²,
Antonio López-López¹, Mónica García-Aparicio¹, Teresa
Calderón-Duque¹ and Jesús Timón-Peralta¹

¹Departement of General and Digestive Surgery. ²Department of Pathology. Hospital Nuestra Señora del Prado. Talavera de la Reina, Toledo. Spain

References

1. De Ceglie A, Bilardi C, Bianchi S, Picasso M, Di Muzio M, Trimarchi A, et al. Acute small bowel obstruction caused by endometriosis: A case report and review of the literature. *World J Gastroenterol* 2008;14:3430-4.
2. Fernández Rey CL, Álvarez González SA, Díaz Solís P, Blanco González A, Costilla García S. Endometriosis ileal como causa de obstrucción de intestino delgado: diagnóstico por tomografía computarizada multicorte. *Rev Esp Enferm Dig* 2009;12:872-4.
3. Anaf V, El Nakadi I, Simon P, Van de Stadt J, Fayt I, Simonart T, et al. Preferential infiltration of large bowel endometriosis along the nerves of the colon. *Hum Reprod* 2004;19:996-1002.
4. Yantiss RK, Clement PB, Young RH. Endometriosis of the intestinal tract: A study of 44 cases of a disease that may cause diverse challenges in clinical and pathologic evaluation. *Am J Surg Pathol* 2001;25:445-54.
5. López PA, Martín L, Vicente M, Girón O, Del Pozo M. Ileal endometriosis and Crohn's disease. A difficult differential diagnosis. *Cir Esp* 2007;82:122-4.
6. Biscaldi E, Ferrero S, Fulcheri E, Ragni N, Remorgida V, Rollandi GA. Multislice CT enteroclysis in the diagnosis of bowel endometriosis. *Eur Radiol* 2007;17:211-9.
7. Cameron IC, Rogers S, Collins MC, Reed MW. Intestinal endometriosis: Presentation, investigation and surgical management. *Int J Colorectal Dis* 1995;10:83-6.

8. Kalu E, Richardson R, Sellu D, Kubba F. Endometriosis-associated ileo-cecal perforation in a woman on the pseudopregnancy regimen. *J Minim Invasive Gynecol* 2008;15:764-6.
9. Sriganeshan V, Willis IH, Zarate LA, Howard L, Robinson MJ. Colouterine fistula secondary to endometriosis with associated chorioamnionitis. *Obstet Gynecol* 2006;107(2 Pt 2):451-3.
10. Remorgida V, Ragni N, Ferrero S, Anserini P, Torelli P, Fulcheri E. How complete is full thickness disc resection of bowel endometriotic lesions? A prospective surgical and histological study. *Hum Reprod* 2005;20:2317-20.