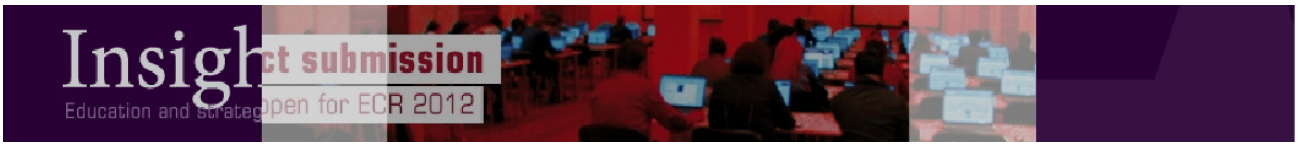

Case 8979

Intestinal endometriosis

Author(s) Antunes C, Marques P, Caseiro-Alves F.

Patient female, 36 year(s)

Clinical History

The woman was hospitalized four times because of abdominal pain in the right lower quadrant (RLQ), constipation, vomiting, anorexia and weight loss, with 8 months of evolution. On physical examination she presented an abdominal distension with a palpable and painful mass in the RLQ and signs of peritoneal irritation.

Imaging Findings

Abdominal ultrasound (Fig. 1) demonstrated a conglomerate of distended intestinal loops in the RLQ surrounded by fluid. Several bowel loops exhibited mural thickening. After some days, abdominal and pelvic CT did not show intestinal alterations and the woman felt better after medical therapy. Suprapubic US (Fig. 2) revealed in the left ovary a cystic lesion measuring 4.7 cm in the major axis. A small effusion was visible in the cul-de sac. Colonoscopy with ileoscopy was normal, without endoluminal or mucosal lesions. CT enteroclysis (Fig. 3) showed a mass in the terminal ileum, involving the ileocecal valve and conditioning dilatation of proximal loops.
An exploratory laparotomy with ileocecal resection was performed and histopathologic and immunohistochemical analyses yielded endometriosis of the ileocecal valve, cecum and appendix conditioning stenosis of the terminal ileum.

Discussion

Endometriosis is defined as the presence of functional endometrial glands and stroma outside the uterine cavity. There are three theories to explain this pathology – metastatic (retrograde menstruation), metaplastic, and induction theories, the first being the most accepted. According to this theory, endometrial cells leave the uterine cavity via retrograde menstruation and implant on serosal surfaces outside the uterus. However, presently, one is discussing a multifactorial aetiology.
Endometriosis affects women during their reproductive years but there are cases of endometriosis in the peri-/post–menopause. Ovaries are the most common site for endometriosis implants (76%), followed by the cul–de-sac (69%). Intestinal endometriosis is less common (3-37%) and generally affects the rectosigmoid colon (4%). Involvement of the small intestine is rare (0, 5 %) and reaches the last 10 cm of the terminal ileum.
Symptoms depend on the site of implants. Intestinal endometriosis causes cyclic abdominal pain, tenesmus, lower gastrointestinal bleeding and changes in bowel habits. Implants may erode subserosal layers but rarely invade the mucosa. Recurrent episodes may lead to segmental mural fibrosis with resultant intestinal stenosis, which manifests as intestinal obstruction.
Fluoroscopy shows an asymmetric narrowing of the affected intestinal wall with spiculated and tethering of folds. CT may reveal an eccentric mural thickening, indirect signs of stenosis (dilatation of proximal intestinal loops) or retraction of loops due to adhesions. Nevertheless, CT enteroclysis findings are not specific and may simulate others pathologies such as adenocarcinoma. MRI is considered as very valuable for the diagnosis of bowel endometriosis because of its high sensitivity. It will demonstrate focal intestinal wall thickening with low signal intensity and punctate hyperintense foci of haemorrhage on T2 weighted images.

Final Diagnosis

Endometriosis of ileocecal valve, cecum and appendix

Differential Diagnosis List

- Benign and malignant tumors of the ileocecal area
- Intestinal tuberculosis
- Crohn disease

MeSH

Endometriosis [C13.371.163]
A condition in which functional endometrial tissue is present outside the UTERUS. It is often confined to the PELVIS involving the OVARY, the ligaments, cul-de-sac, and the uterovesical peritoneum.
Tomography, X-Ray Computed [E01.370.350.825.810.810]
Tomography using x-ray transmission and a computer algorithm to reconstruct the image.

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Citation

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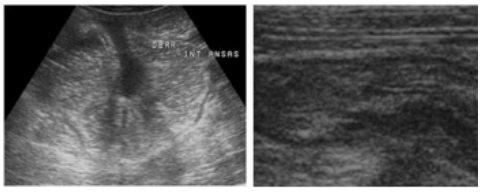
Figure 1

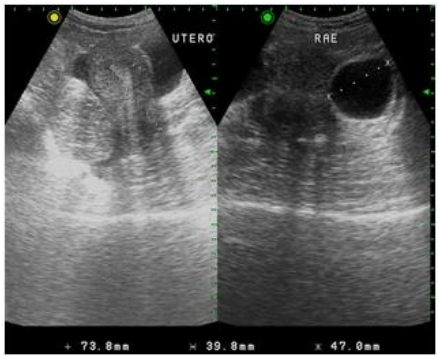
Adominal ultrasound



Distension and mural thickening of intestinal loops in the RLQ. Fluid between intestinal loops.

Figure 2

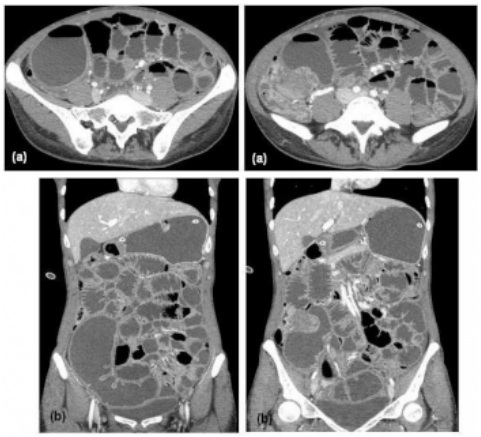
Suprapubic ultrasound



Normal uterus and endometrial echo for this age group. Left ovary cyst measuring 4.7 cm.

Figure 3

CT Enteroclysis



Axial (a) and coronal (b) planes. Mass involving the terminal ileum and the ileocecal valve. Proximal intestinal loops are distended.