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Case Report / Olgu Sunumu

Rare Case of Mechanical Intestinal Obstruction: Cecal Endometriosis

Mekanik Barsak Obstruksiyonun Nadir Bir Sebebi: Çekal Endometriozis

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ABSTRACT

Cecal endometriosis is an extremely rare condition. Mechanical intestinal obstruction is a rare clinical entity, particularly due to cecal endometriosis. We discuss a case of mechanical intestinal obstruction due to cecal endometriosis. A 28-year-old woman was admitted to the general surgery department with complaints of abdominal pain, nausea, vomiting, and obstipation for 1 week. A mass in the cecum was found, and right hemicolectomy was performed. Pathological examination revealed cecal endometriosis. Intestinal endometriosis is a diagnosis that should be considered in patients with nonspecific gastrointestinal complaints and masses causing mechanical intestinal obstruction in women of reproductive age.

Keywords: Endometriosis, bowel obstruction, cecal endometriosis

ÖZ

Çekal endometriozis nadir görülen klinik bir tablodur. Rektosigmoid bileşke tutulumuna bağlı olarak gelişen mekanik barsak obstruksiyonu görece sık görülebilse de çekal endometriozise bağlı mekanik barsak obstruksiyonu karşımıza ender olarak çıkmaktadır. Olgumu sunumumuzda çekal endometriozise bağlı gelişen mekanik barsak obstruksiyonu gelişen bir olguyu tartışacağız. Yirmi sekiz yaşında kadın hasta bir haftadır devam eden karın ağrısı, bulantı, kusma ve kabızlık şikayetleriyle genel cerrahi servisine başvurdu. Çekum tümörü ön tanısıyla hastaya sağ hemikolektomi uygulandı. Patolojik incelemede çekal endometriozis saptandı. Barsak endometriozisi, spesifik olmayan gastrointestinal şikayetleri olan ve üreme çağındaki kadınlarda mekanik barsak tıkanıklığına neden olan kitleleri olan hastalarda akılda tutulması gereken bir tanıdır.

Anahtar Kelimeler: Endometriozis, barsak obstruksiyonu, çekal endometriozis

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INTRODUCTION

Endometriosis is the presence of endometrial tissues outside the uterus. It is a chronic estrogen-dependent condition that affects 10% of reproductive women.[1] It often causes complaints such as dysmenorrhea, heavy and irregular menstrual bleeding, pelvic pain, or dyspareunia.[2] Although the most common site of involvement is in the pelvic region, extrapelvic involvement may occur in the gastrointestinal, pulmonary, abdominal wall, and even the central nervous system.[3] Rectum and colon are the most common sites of involvement in the gastrointestinal system. Cecal endometriosis is extremely rare. Cramping abdominal pain, tenesmus, abdominal distension, changes in bowel habits, and hematochezia may occur due to gastrointestinal system endometriosis.[4] Mechanical intestinal obstruction is a rare clinical entity, especially due to cecal endometriosis. We discuss a case of mechanical intestinal obstruction due to cecal endometriosis.

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CASE REPORT

A 28-year-old woman (Gravida: 0, Parida: 0, Abortus: 0) was admitted to the general surgery department with complaints of abdominal pain, nausea, vomiting, and obstipation for 1 week. When the patient's history was further investigated, it was determined that her complaints had been going on for approximately 3 months, with occasional cramping and abdominal pain and bloody mucous stool. Three months ago, colonoscopy was performed due to complaints of abdominal bloating, abdominal pain, nausea, vomiting and bloody mucous stool. During colonoscopy, the colonic loops were suboptimally examined with a dirty appearance. The colonoscope was advanced to the cecum, visualizing the ileocecal valve, and advancing 10 cm into the terminal ileum. The terminal ileum mucosa was normal, as well as the mucosa in the cecum, ascending colon, hepatic flexure, transverse colon, splenic flexure, descending colon, sigmoid colon, and rectum. The submucosal vascular appearance was also normal. The patient had been investigated for infertility, although the specific details of the infertility investigation are unknown; the patient's history indicates a history of infertility.

Diffuse abdominal distension and metallic bowel sounds were found during physical examination, and computed tomography revealed a 4.5-cm mass in the cecum causing mechanical obstruction. The patient was surgically explored with a preliminary diagnosis of mechanical bowel obstruction due to a cecal mass. On exploration, a 4-cm mass was found in the ileocecal region, causing obstruction. There were no signs of carcinomatosis in the peritoneal cavity or liver metastasis; however, bulging lymph nodes were observed in the colon mesentery.

Right hemicolectomy and end-to-end anastomosis were performed; the right hemicolectomy material is shown in Figure 1. Postoperatively, the patient was discharged on 6th day without any complications. The patient had no complaints at the outpatient clinic control at the 3rd postoperative week. Pathological examination revealed bowel obstruction caused by diffuse endometriosis in the bowel wall and 80 reactive lymph nodes. Macroscopically, a 2.5-cm long colon segment was observed from the pathology container. A mucosal surgical border of 2.5 cm in diameter was observed on one side of the material and 4 cm in diameter on the other side. When examined by cutting from the anteroenteric line, a 3.8x3.2x3 cm sized fibrotic lesion with completely narrowed lumen was observed. Diffuse endometriosis, endometriosis-related fibrosis, and almost complete bowel obstruction were observed in the bowel wall. In addition, histopathological examination of the lymph nodes revealed significant dilatation in the sinuses, histiocyte proliferation, and increased vascularity. The patient provided an informed consent form.

DISCUSSION

Intestinal endometriosis is an unexpected diagnosis in right hemicolectomy material. This condition is related to low clinical suspicion, which is an unusual cause of bowel obstruction. However, it should be kept in mind, especially among young women.[5]

Although the pathophysiology of endometriosis is not clear, the generally accepted theory is that endometrial tissue attaches to different sites via retrograde menstruation.[1] The clinical features of intestinal endometriosis vary according to the extent and location of involvement. It is more common in the premenopausal period when endometrial cells are sensitive to hormonal changes during menstrual cycles. Intestinal endometriosis presents with different clinical features depending on the site of involvement. Acute appendicitis, gastro-intestinal system bleeding, intermittent abdominal pain, and, rarely, mechanical intestinal obstruction may occur.[6-8]

Intestinal endometriosis is often localized to the serosal surface of the intestine, and it may sometimes invade the subserosa.[9] Colonoscopic investigation will be normal

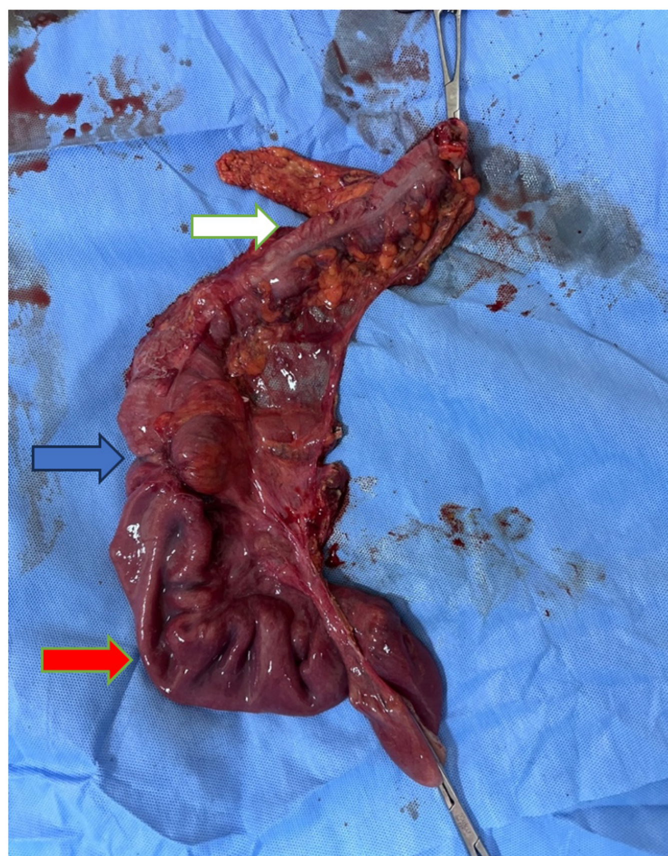

Figure 1. Right hemicolectomy material

White arrow: Transverse colon. Blue arrow: Endometriosis tissue causing intestinal obstruction. Red arrow: Dilated intestinal loops

if there is no mucosal involvement; however, a stenotic lesion may be observed in the intestinal wall. Mucosal involvement by endometriosis nodules is very rare, and endoscopy is usually aspecific and shows extrinsic compression of the mucosa, submucosal mass, and/or eccentric wall thickening.[5] In our case, colonoscopy performed 3 months previously was normal. Because there was no mucosal lesion and the endometriosis tissue was hormone-active tissue, it was expected that the colonoscopy performed 3 months ago would be considered normal, even though it was a suboptimal evaluation. Additionally, serosal lesions are not visible on colonoscopy, but they can be detected on diagnostic laparoscopy. Endometriosis tissue stimulated by hormonal stimulation obstructed the cecum and caused mechanical bowel obstruction.

Although thickening of the intestinal wall and adhesions to the uterus or adnexa can be visualized on radiological imaging, there are no clear pathogonomic features. Laparoscopy is the most effective method for demonstrating both gastrointestinal and pelvic involvement.[1] Intestinal endometriosis should be considered in infertile patients with complaints such as intermittent abdominal pain and bloody mucous stools. It has been reported that intestinal endometriosis may also develop in patients who undergo bilateral salpingoophorectomy with hysterectomy.[7]

It can be very difficult to differentiate intestinal endometriosis from other gastrointestinal pathologies because the disease has no pathognomic symptoms. It is often associated with irritable bowel syndrome, inflammatory bowel disease, ischemic colitis, and malignancy when it presents with signs of obstruction, as in the present case. Mechanical bowel obstruction is a rare complication of endometriosis that often develops due to the involvement of the rectosigmoid region.[3] All three cases reported by Pramateftakis had involvement of the rectosigmoid region.[6] Ruffo et al.[5] showed that 1.7% of patients who underwent colorectal resection due to endometriosis involvement had mechanical bowel obstruction. In all of these cases, the rectosigmoid region was involved. As observed in our case, the development of mechanical bowel obstruction due to cecal endometriosis is extremely rare. Surgical removal of all visible intestinal endometriosis and bowel resection are recommended in cases of severe endometriosis with bowel obstruction.[8]

CONCLUSION

Intestinal endometriosis is a diagnosis that should be considered in patients with nonspecific gastrointestinal complaints and masses causing mechanical intestinal obstruction in women of reproductive age.

Ethics

Informed Consent: The patient provided an informed consent form.

Authorship Contributions

Surgical and Medical Practices: C.U., Concept: C.U., Design: C.U., P.E.U., O.B., Data collection or Processing: C.U., P.E.U., Analysis or interpretation: C.U., P.E.U., O.B., Literature search: C.U., P.E.U., Writing: C.U., P.E.U.

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