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A DERMOID CYST IN THE CECAL COLON MIMICKING AN OVARIAN CYST: A RARE CASE REPORT

ÇEKAL KOLONDA OVER KİSTİNİ TAKLİT EDEN DERMOİD KİST: NADİR BİR OLGU SUNUMU

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ABSTRACT

Dermoid cysts are benign tumors and occur very rarely in the cecum. To date, the literature shows very few cases to have been reported of a dermoid cyst in the cecum, one of which was laparoscopic. Even though dermoid cysts have ultrasonographic characteristic appearances, other pathologies in the pelvis can mimic this appearance. A 35-year-old female patient who had had a dilation and curettage a week prior was examined with a complaint of abdominal pain. A semisolid mass lesion with a size of 105x77 mm originating from the right lateral of the uterus was detected by transvaginal ultrasonography. During the operation, the frozen section of the mass was shown to not be malignant. The mass was removed by ileocecal resection. The surgery was terminated after ileocolonic anastomosis. The mass was examined histomorphologically and was reported as a dermoid cyst in the cecal colon. Cecal dermoid cysts should be considered for a differential diagnosis of pelvic cysts. A more detailed preoperative radiological imaging could have contributed significantly to the diagnosis. Surgical resection of a dermoid cyst in the cecal colon is a curative treatment. Due to the rarity of such cases, conduct a prospective study is quite difficult, which is what makes this study important.

Keywords: Dermoid cyst, colon, tumor

ÖZET

Dermoid kistler iyi huylu tümörlerdir ve çekumda çok nadir görülürler. Literatürde bugüne kadar biri laparoskopik olmak üzere çok az sayıda çekumda dermoid kist olgusu rapor edilmiştir. Dermoid kistler ultrasonografik karakteristik görünümlere sahip olsa da pelvisteki diğer patolojiler de bu görünümü taklit edebilirler. Karın ağrısı nedeni ile başvuran 35 yaşındaki kadın hasta muayene edildi. Hastaya bir hafta önce küretaj yapılmıştı. Transvajinal ultrasonografide uterusun sağ lateralinden kaynaklanan 105x77 mm boyutlarında kitle lezyonu tespit edildi. Operasyon sırasında kitlenin frozen incelemesinde malign olmadığı görüldü. Kitle ileoçekal rezeksiyonla çıkarıldı. İleokolonik anastomoz yapıldıktan sonra ameliyat sonlandırıldı. Kitle histomorfolojik olarak incelendi ve çekal kolonda dermoid kist olarak rapor edildi. Pelvik kistlerin ayırıcı tanısında çekal dermoid kistler de düşünülmelidir. Ameliyat öncesi radyolojik görüntülemenin daha detaylı yapılmasının tanıya önemli katkı sağlayacağı düşünüldü. Çekal kolondaki dermoid kistin cerrahi olarak rezeksiyonu küratif bir tedavidir. Vaka sayısı çok az olduğundan prospektif bir çalışma yapmak oldukça zordur. Bu bakımdan bu çalışma önemlidir.

Anahtar Kelimeler: Dermoid kist, kolon, tümör

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INTRODUCTION

Dermoid cysts are benign tumors that involve all three germinal layers and have a malignancy risk of 1-2% (1). Benign dermoid cysts of the cecum are very rarely seen (2). The literature shows dermoid cyst cases in the cecum to very rarely have been reported, with one of these being laparoscopic. This type of case is rarely seen distally on the abdominal wall in the peritoneum, omentum, or cecum (3). Even though dermoid cysts have ultrasonographic characteristic appearances, other pathologies in the pelvis can mimic this appearance (4). The current case report presents a patient who was thought to have a cystic lesion originating from the right ovary but who underwent an ileocecal resection due to having a dermoid cyst.

CASE PRESENTATION

A 35-year-old female patient who had three previous caesarean sections and dilation and curettage one week prior at the gynecology and obstetrics clinic presented with abdominal pain, abdominal swelling, and constipation complaints after the curettage. The patient had no comorbidities. On physical examination, tenderness and pain were present in the right lower quadrant of the abdomen. She had no muscular defense or rebound tenderness in her abdomen.

A semisolid heterogeneous mass lesion with a size of 105x77 mm and originating from the right lateral of the uterus was detected by transvaginal ultrasonography (Figure 1). The laboratory tests showed her β-hCG (56 U/L) level to be high, the tumor marker values to be normal, and leukocytes to be 11.100/μL. The patient presented only with pain in the right lower quadrant of the abdomen in her physical examination and was operated on by gynecologists with prediagnoses of uterine myoma and cyst originating from the right ovary.

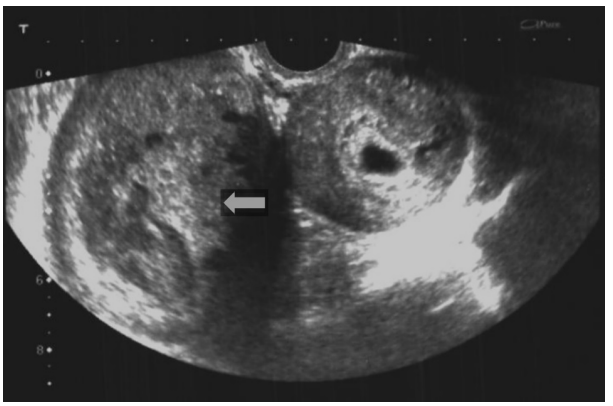

Figure 1: Appearance of the mass on the transvaginal ultrasound.

During the operation, the mass was seen to originate from the cecum, and the patient was consulted to general surgery. The size of the mass, which contained solid and cystic components, was approximately 10x7x7 cm. During the operation, a frozen section of the mass was seen to not be malignant. The mass was removed by ileocecal resection. The surgery was terminated after ileocolonic anastomosis (Figure 2).

Upon macroscopic examination of the tissue, the solid yellow cystic formation with thick walls located at the base of the cecum was not associated with mucosa, was 10 cm at its widest diameter, and contained white paste-like material. The microscopic examination revealed a keratinous material in the lumen of the cystic structure that had been laid with squamous epithelium (Figure 3).

A giant cell reaction in the form of a serosal foreign body secondary to the cystic lesion was found in the colon samples (Figure 4). The mass was examined histomorphologically and was reported as a dermoid cyst in the cecal colon.

Regression was observed in the patient's complaints during the postoperative period, and she was discharged on the 7th postoperative day. No recurrence was observed during the patient's follow-up one year later.

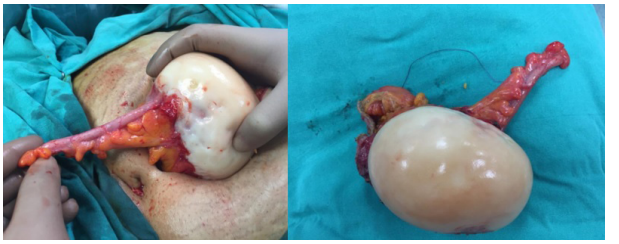

Figure 2: Dermoid cyst of the cecum.

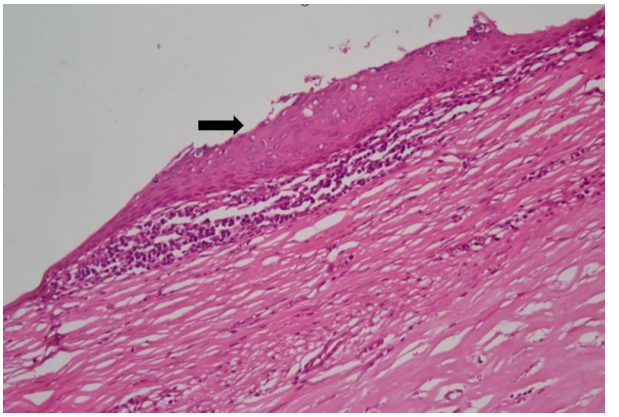

Figure 3: Squamous epithelium covering the lumen of the cyst (asterisk) (x20 H&E).

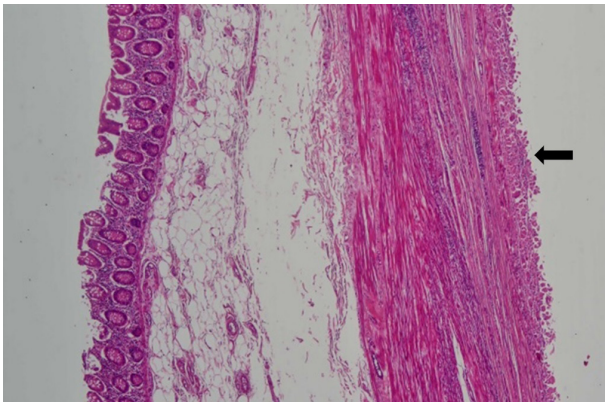

Figure 4: A foreign-body giant cell reaction that developed on the serosal surface of the colon. Serosal surface is covered by lots of giant cells (asteriks) (x40 H&E).

embryogenesis (5). In this present case, the patient had a history that included three abdominal operations.

Although the cause of extragonadal cysts is not known exactly, dermoid cysts seen on the midline (e.g., the mediastinum, anterior side of the neck, and central nervous system) frequently occur in the omentum in the abdomen (6, 7). Further related studies will help to better understand the subject (3). The cases with full texts in the literature are shown below Table 1.

Dermoid cysts in the cecal colon are frequently seen in the middle adult age group. However, the literature does show that they can also be seen congenitally in the pediatric age group.

Pathological examination is essential for the diagnosis of these dermoid cysts. Pre-surgery cross-sectional imaging is required for these cysts, which can cause abdominal pain and intestinal obstruction. Therefore, total excision is sufficient for these benign cysts. Unnecessary resection and lymph node dissection should be avoided.

Table 1: Reported cecal dermoid cyst cases in the literature (including the present case)

Case	Sex	Age	Symptom	Tumor size	History of surgery	Surgery	Year	Reference
1	F	1	Abdominal mass	8 cm	No	Terminal ileum and cecum resection	1971	Kay (8)
2	F	53	Melena	4 cm	Hysterectomy/ Appendectomy	Laparotomy- Right hemicolectomy	1977	Mossey (9)
3	F	34	Colic pain in the lower abdomen	10 cm	3 Caesarean sections	Laparotomy- Right hemicolectomy	1996	Wilkinson (2)
4	F	39	Abdominal distension and pain	20 cm	No	Laparotomy- Right hemicolectomy	2000	Mellado (10)
5	M	34	Lower abdominal pain	7.5 cm	No	Laparotomy- Cystectomy and appendectomy	2001	Nirenberg (11)
6	M	30	Right lower abdominal pain	8 cm	No	Laparotomy- Right hemi-cholectomy	2002	Schuetz (12)
7	F	41	Weight and mass	10 cm	No	Laparotomy- Right Mikulicz colostomy	2016	Nahidi (13)
8	M	2	Abdominal distension	6 cm	Anorectal malformation surgery	Laparotomy- Right hemi cholectomy	2019	Destro (14)
9	F	35	Right lower abdominal pain	10 cm	No	Laparoscopic cystectomy	2020	Mishra (3)
10	F	37	Right lower abdominal pain and distension	7 cm	Three Caesarean sections	Terminal ileum and cecum resection	2020	The present case

DISCUSSION

Dermoid cysts, also known as mature teratoma cysts, are classified as congenital or acquired. Acquired dermoid cysts may develop due to previous operations or trauma. They can also develop congenitally through ectoderm implantation during

CONCLUSION

In this present case, the preoperative ultrasonography conducted by gynecologists was observed to have been insufficient at detecting the origin of the mass, and additional imaging methods may be needed in such cases. Although cecal dermoid cysts are rarely seen, they should be considered for the differential diagnosis of pelvic cysts. Surgical resection of a dermoid cyst in the cecal colon is a curative treatment. Due to this type of case occurring very rarely, conducting a prospective study is very difficult, which is why this study is important.

Informed Consent: Written informed consent was obtained from patient who participated in this study.

Peer Review: Externally peer-reviewed.

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