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Mini-Pfannenstiel Incision Approach to Giant Ovarian Cyst Mimicking Mesenteric Cyst: A Rare Case Report

Mezenterik Kisti Taklit Eden Dev Over Kistine Mini-Pfannenstiel İnsizyon ile Yaklaşım: Nadir Bir Olgu Sunumu

Rabia Merve PALALİOGLU [1] Orcid ID:0000-0003-2717-7925
Aytakin MAHAMMADALİYEVA [2] Orcid ID:0000-0002-8801-5607
Halil İbrahim ERBİYİK [3] Orcid ID:0000-0001-5526-2663
Murat MUHCU [4] Orcid ID:0000-0001-7039-375X

[1] Department of Obstetrics and Gynecology, University of Health Sciences Umraniye Training and Research Hospital, İstanbul, Turkey.

[2] M.D. Aytakin Mahammadaliyeva, Department of Obstetrics and Gynecology, University of Health Sciences Umraniye Training and Research Hospital, İstanbul, Turkey.

[3] M.D. Assistant Professor, Operation Room Services, Uskudar University, Dr. Moral Obstetrics and Gynecology Clinic, İstanbul, Turkey

[4] M.D. Professor, Department of Obstetrics and Gynecology, Maternal-Fetal Unit, University of Health Sciences Umraniye Training and Research Hospital, İstanbul, Turkey.

ÖZ

Tüm vücut dokularında kistler oluşabilir, ancak overler dışındaki organlarda oluşan kistler, disfonksiyon oluşturmaları nedeniyle semptomları daha hızlı gösterir. Over kistleri diğer organlarla temas halinde olmadıkları ve tipik olarak rutin kontroller sırasında tespit edildikleri için sıklıkla şikayete neden olmazlar. Çeşitli boyutlarda kistlerle karşılaşılsa da dev over kistleri son derece nadirdir. Bu olgu ile kliniğimize kasık ağrısı, karın şişliği ve kabızlık şikayetleri ile başvuran 36 yaşında kadın hasta sunulmaktadır. Ultrasonografik muayenede sol adneksiyel alandan kaynaklandığı düşünülen dev bir kistik kitle izlendi. Sol over kitlesi için cerrahi operasyon yapılmasına karar verildi. Mezoileumdan kaynaklanan 15 × 20 cm boyutlarında kistik kitle mini-pfannenstiell insizyon ile peroperatif aspirasyon sonrası, duvarı ile birlikte eksize edildi. Bu olgudan yola çıkarak dev over kistlerinin mezenterik kistlerle karıştırılabileceğini ve dev benign kistlerin mini-pfannenstiel insizyon ile eksize edilebileceğini göstermeyi amaçladık.

Anahtar kelimeler: akut batın, adneksiyel kitle, dev over kisti, mezenter kisti, mini-pfannenstiel insizyon, pelvik kitle

ABSTRACT

Cysts can occur in all body tissues, but cysts in organs other than the ovaries present symptoms more rapidly due to the resulting dysfunction. Ovarian cysts often do not cause complaints because they are not in contact with other organs and are typically detected during routine checks. Although cysts of various sizes are encountered, giant ovarian cysts are extremely rare. This report presents the case of a 36-year-old female patient admitted to our clinic with complaints of inguinal pain, abdominal swelling, and constipation. In the ultrasonographic examination, a giant cystic mass thought to originate from the left adnexal area, was observed. A decision to perform surgical operation for the left ovarian mass was made. The cystic mass, 15 × 20 cm in size and originating from the mesoileum, was excised with its wall after peroperative aspiration with a mini-pfannenstiel incision. Considering this case, we aimed to demonstrate that giant ovarian cysts can be confused with mesenteric cysts and that giant benign cysts can be excised with a mini-pfannenstiel incision.

Keywords: acute abdomen, adnexal mass, giant ovarian cyst, mesentery cyst, mini-pfannenstiel incision, pelvic mass

Sorumlu Yazar/ Corresponding Author:
Rabia Merve Palalioglu
Adres: Department of Obstetrics and Gynecology, Saglik Bilimleri University Umraniye Training and Research Hospital, Elmalikent Mh. Adem Yavuz Cd. No:1, Umraniye / Istanbul 34764 / Turkey.
E-mail: drmerbiyik@gmail.com

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INTRODUCTION

Giant ovarian cysts are rare ovarian tumors that typically occur in sizes >10 cm (1). Ovarian cysts are usually asymptomatic in the early stages, but after reaching very large sizes, they cause nonspecific symptoms, such as abdominal distension, abdominal pain, constipation, early satiety, vomiting, frequent urination, and compression of the organs. Giant ovarian cysts can be confused with mesenteric cysts, intra-abdominal acid, peritoneal inclusion cysts, and lymphangiomas (2). The development of the mesenteric cyst cannot been completely elucidated. However, the major rationale for the formation of such cysts include embryological development defect, obstruction of the lymphatic ducts, degenerative changes of lymph nodes, and trauma (3). This case report aims to emphasize that giant ovarian cysts can be confused with mesenteric cysts having otherw clinical presentations, as in our case, and can also cause acute abdomen. Written consent was obtained from the patient.

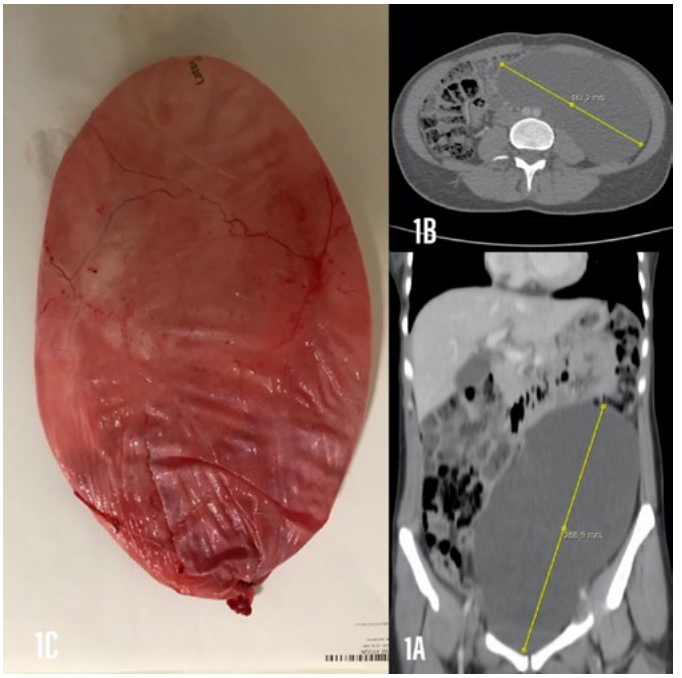
CASE REPORT

The 36-year-old nulliparous patient was admitted to our gynecology emergency department with complaints of inguinal pain, abdominal swelling, and constipation. No remarkable feature was detected in her medical history. The physical examination showed abdominal distention and defense findings in addition to rebound tenderness.

The patient was admitted to the gynecology service for follow-up. The patient's hemogram, biochemistry, and serum tumor markers (CA125, CA15-3, CA19-9, and CEA) were reported to be at normal levels. The complete abdominal examination and Doppler sonography revealed a cystic mass of size 15 × 22 cm in the midline of the abdomen, spanning the entire abdomen up to the epigastrium, with an undetectable origin. Current was encoded in both ovaries; no signs of torsion were observed.

Computed tomography (CT) was performed on the patient who experienced severe abdominal pain during the service follow-up. CT revealed the presence of a cystic formation that has lost its tension with an iso-hypodense homogeneous liquid content, sharply delimited by a thin, smooth wall, reaching an axial diameter of 8–12 cm and extending from the left adnexal area to the splenorenal recess along a 20-segment (Figure 1a).

Figure 1a: CT revealed the presence of a cystic formation with an iso-hypodense homogeneous liquid content, sharply delimited by a thin, smooth wall, reaching an axial diameter of 8–12 cm and extending from the left adnexal area to the splenorenal recess along a 20-segment. Figure 1b: No apparent solid component or pathological contrast enhancement was observed in the cyst during CT. Figure 1c: A cystic mass, approximately 15 × 20 cm in size, was observed in the abdominal exploration.



Additionally, no apparent solid component or pathological contrast enhancement was observed in the cyst during CT (Figure 1b). Approximately 4 cm of free fluid was observed in Douglas. The patient, whose complaints of pain increased and general condition deteriorated, developed hypotension and tachycardia, was taken to emergency surgery with the preliminary diagnosis of ruptured giant ovarian cyst. Signed consent was obtained from the patient. Due to the young age of the patient, the absence of malignancy findings, and the patient's aesthetic concerns, surgical exploration was performed with a mini-pfannenstiel incision. A ruptured cystic mass, approximately 15 × 20 cm in size, was observed in the abdominal exploration (Figure 1c). First, free fluid in Douglas was sent to frozen for cytological examination. When the frozen result was benign, approximately 4 L of clear fluid was extracted without any spillage. When it was observed that the cyst originated from intestinal mesentery, and not the ovary, the patient was consulted for peroperative general surgery, which was performed by a general surgery specialist. A cystic mass of 15 × 20 cm size, originating from the mesoileum, was excised along with its wall. The operation was terminated by placing a Jackson-Pratt drain in the abdomen.

On the second postoperative day, the patient was transferred to the general surgery service. On the third postoperative day,

the drain was removed and the patient was discharged. The pathological result of the patient was interpreted as serous cystadenoma. The study's registration /ethics committee approval was unnecessary due to the nature of the study.

DISCUSSION

Giant ovarian cysts have nonspecific clinical features, making their diagnosis difficult in practice. Hence, various differential diagnoses are required, including mesenteric cysts, pelvic endometriosis, intra-abdominal acid, intra-abdominal cysts of various origins, cystic lymphangiomas, hydronephrosis, and peritoneal inclusion cysts (4-6). Although giant ovarian cysts are asymptomatic, they can cause serious complications, such as acute abdomen, resulting from intestinal and urinary system obstruction, torsion, bleeding, or rupture (7, 8). Similar symptoms that may occur in other situations, which can be confused with giant ovarian cysts, can also occur. Although ultrasonography is the preferred primary radiological examination for diagnosing ovarian cysts, it may not be sufficient for making a definitive diagnosis in giant ovarian cysts. CT is often preferred in emergency cases. However, in our case, although the origin of the cystic mass in the abdomen could not be clearly revealed in physical examination, ultrasonography, and CT, the diagnosis could be made by laparotomy.

Mesenteric cysts can have very different localizations ranging from the duodenum to the sigmoid mesentery and even into the retroperitoneum. However, as in our case, they are typically seen in the mesoileum. Although mesenteric cysts are noticed incidentally, they sometimes occur with abdominal complaints. As there are no symptoms specific to mesenteric cysts, they can be confused with many other intra-abdominal pathologies during evaluation. Cysts may be unilocular or multilocular, and may contain serous, chylous, hemorrhagic, or purulent fluid. The content of the cyst is influenced by the etiological reason. The diagnosis of a mesenteric cyst can be accurately made with the help of a detailed physical examination and appropriate radiological tests. Abdominal radiographs are not specific. Cystic or solid intra-abdominal masses can be distinguished by ultrasonography, which is the primary diagnostic method for patients with suspected mesenteric cysts. With the help of ultrasonography, the fluid content of the cystic structure and septations can be detected, in addition to detection of debris, bleeding, and internal echoes of infection. Tomography is useful in eliminating other pathologies, such as appendicitis, bowel obstruction, inflammation, free fluid, pneumoperitoneum, and perforation, during diagnosis as it provides information about the cyst's origin (9).

There are various approaches and techniques in the surgical treatment of ovarian cysts, and there is no consensus among gynecologists about surgical treatment modalities (10). Although the gold standard laparoscopy method is recommended in the literature for cyst excision, laparotomy may be indicated in patients with giant cystic tumors. The maximum size of ovarian cysts that require removal via laparotomy is controversial (11). A few investigators suggest that laparotomy is indicated for mature cystic teratomas >10 cm (12). Optimal surgical management of ovarian masses depends on patient-related factors (patient consent and compliance with laparoscopy), lesion-related factors (size, histology of the mass), and environmental factors (surgeon's skills and equipment availability). The decision regarding the appropriate treatment should be made after careful clinical evaluation, consultation, and consideration of the factors mentioned above (11, 12). There are cases in the literature showing that giant cystic structures can be excised with a mini-pfannenstiel incision (13-15). In our case, the patient underwent mini-laparotomic excision of the cyst.

In conclusion, it should be kept in mind that giant ovarian cysts can be confused with other diagnoses in practice and benign giant cysts can be excised with a mini-pfannenstiel incision. Apart from ultrasonography and CT, magnetic resonance imaging should also be included for accurate diagnosis. Mesenteric cyst should be considered during the differential diagnosis in female patients who present acute abdominal symptoms and have been diagnosed with a cystic mass >15 cm by ultrasonography or CT.

DECLARATIONS

All procedures were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from the patient included in the study.

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