

Case Report**A giant mesenteric cyst mimicking adnexal mass in a middle- aged woman: case report****Mustafa Ulubay¹, Fahri Burçin Fıratlıgil¹, Ulaş Fidan¹, Uğur Keskin¹, Mustafa Öztürk², Murat Dede¹, Müfit Cemal Yenen¹**¹ Gulhane Military Medical Academy, Obstetrics and Gynecology, Etlik, Ankara/ Turkey.² Etimesgut Military Hospital, Obstetrics and Gynecology, Etimesgut, Ankara/ Turkey.**Abstract**

Mesenteric cyst (MC) is one of the benign intraabdominal tumors which are generally developing asymptotically, and MC that locates in pelvic cavity can mimick adnexal cysts. Insufficient imaging techniques can cause difficulties in specific diagnosis of MC's that locate in pelvic cavity and can result in out-of field surgical operations. The objective of this study is to discuss the diagnosis of a middle- aged healthy women with an asymptomatic MC, which can mimick adnexal mass.

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Introduction

Mesenteric cyst (MC) is one of the benign intraabdominal tumors which was firstly defined by Italian anatomist Benevieni in 1507 [1]. These cysts are benign tumors that are rarely encountered clinically and their incidence is nearly 1/250000 [2].

These lesions are generally developing asymptotically, while in some cases, they can cause symptoms such as abdominal pain, instability in the bowel habits, nausea, vomiting as well as abdominal distension [3]. Although they are mostly benign lesions, in some cases, mesenteric cysts can cause complications that require emergent surgical operations. These are intestinal obstruction, volvulus, torsion and hemorrhagic shock table that can develop due to cyst rupture [4]. In these cases, emergent

surgical cyst resection can be necessary. The first resection to MC was performed in 1880 by French surgeon Paul Jules Tillaux [5].

MC are clinically encountered with the diameter and dimensions that are between 2 and 35 cm [6]. In this case, a giant MC mimicking adnexal mass, was presented. The primary purposes of this case are to evaluate the cystic lesions located at the pelvic cavity by suitable and sufficient imaging methods in preoperative period and to prepare the patients to the operations in a suitable way.

Case Report

A female patient with the age of 42, having the story of Gravida 1, Para 1 (spontaneous vaginal delivery), applied to our clinics for a routine gynecological examination.

In gynecological examination of the patient, external genitals were evaluated as normal. In the transvaginal ultrasonographic evaluation which was performed by General Electric Logiq S6® (1.5-4.5 MHz prob, Waukesha, WI U.S.A.) uterus was evaluated in 6x8.5x4 cm dimensions, myometrium was homogen and no focal lesion was seen within it; the endometrial three layer

pattern measured at 4 millimeters, the right adnexal area was assessed as normal and in the left adnexal area was revealed a 10-cm cystic mass with no septations, well- demarcated, hypoechoic mass consistent with a large cystic mass lesion, most likely ovarian in origin by location alone (Fig. 1).



Figure 1. Ultrasonographic view of the cystic lesion

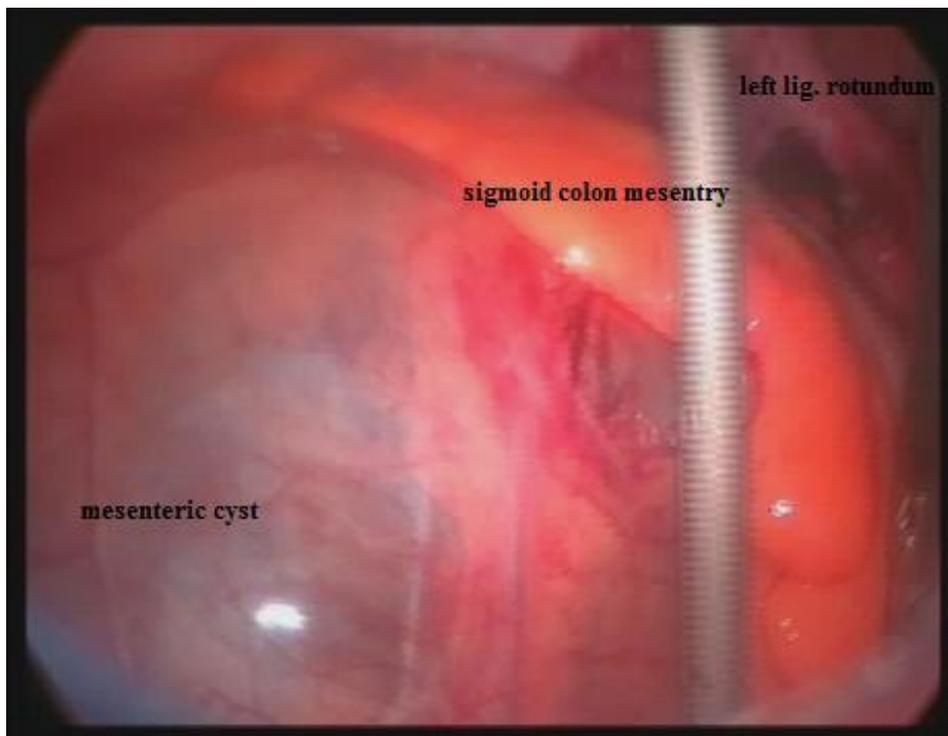


Figure 2. Laparoscopic view of the mesenteric cyst and the sigmoid colon mesentery

Another imaging modalities hadn't been used for evaluating the cyst or location, because of the well- being ultrasonographic findings.

A diagnostic laparoscopy was performed on the patient with the preliminary diagnosis of adnexal cystic mass lesion. When pelvic cavity was visualised, the uterus and the bilateral adnexal structures were assessed as normal. A giant cystic mass originating from mesentery of sigmoid colon, occupying partially entire pelvic cavity with 10 x 15 centimeters in diameter was determined (Fig. 2).

After that intraoperative findings, the patient was intraoperatively consulted to gastrointestinal surgery department and the operation was ended up for an elective cystic lesion surgery.

Discussion

When a general evaluation is performed for intraabdominal cystic lesions, it is seen that these lesions abundantly stem from solid organs such as liver and spleen. Apart from solid organ cysts, there are also other cysts that stem from mesentery, omentum and retroperitoneum [7]. These cysts are generally asymptomatic and rarely seen benign tumors which are commonly diagnosed coincidentally [2,3]. In some cases, the symptoms such as abdominal pain, instability in the bowel habits, nausea and vomiting that are related to the increase in dimension or compression, can be seen [3].

When the age group in which MC's are mostly seen, is evaluated, it can be observed that male children under the age of 10 take over [8]. In the histological evaluation; the cyst wall that is generated together with chronic inflammatory cells and fibrocollagen tissues, is present. This

wall is covered by single row of columnar or cubic epithelial cells. Beside this, cyst is filled with the liquid that is secreted from the epithelial cells covering the cyst wall [9].

MC's can be developed in any of gastrointestinal system mesentery from duodenum to rectum, but the most abundant space where it is seen is ileum mesentery [9]. Some of these cysts which are located in pelvic cavity, can mimic adnexal cysts [10]. To our knowledge, in English medical research literature, there are only 3 or 4 cases about mesenteric cyst mimicking adnexal mass.

Cases of MC, as mentioned above, can be wrongly diagnosed as adnexal masses. That is why, as in our case, inadequate diagnostic or imaging methods could misdirect the gynecologists to undergo misdiagnose or unnecessary gynecologic surgery. So we would like to mention a strategy for diagnosing MC, is called Tillaux's sign [3]. This sign is defined as, a lesion of the mesentery can be moved only horizontal but not to vertical direction. But this sign has to be confirmed with the imaging modalities like CT or MRI [11].

As a conclusion, MC's are usually asymptomatic and non- neoplastic lesions that locate anywhere in mesentery of gastrointestinal tract from duodenum to rectum. They can rarely cause abdominal pain, nausea and change in bowel habits [3]. MC that locates in pelvic space can mimic adnexal cysts. As indicated in our case, insufficient imaging techniques can cause difficulties in specific diagnosis of MC's that locate in pelvic space and can result in out-of field surgical operations. In this case, the importance of cooperative imaging techniques in specific diagnosis of pelvic masses was comprehended one more time.

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