

Research Letter

Incidental diagnosis of a mesenteric cyst mimicking
an ovarian cyst during laparoscopyCheng-Yu Long ^{a,b,*}, Chiu-Lin Wang ^b, Eing-Mei Tsai ^{a,c}^a Department of Obstetrics and Gynecology, Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan^b Department of Obstetrics and Gynecology, Kaohsiung Municipal Hsiao-Kang Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan^c Department of Obstetrics and Gynecology, Kaohsiung Medical University Chung-Ho Memorial Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan

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Mesenteric and omental cysts share similar pathogenesis, arising from benign proliferation of ectopic lymphatic tissue lacking communication with the normal lymphatic system [1]. The preoperative diagnosis of mesenteric cysts has been reported [2]. In other cases, however, the absence of specific clinical findings may make correct diagnosis of a mesenteric cyst difficult. We herein report a case of a mesenteric cyst that had been initially interpreted as an ovarian cyst.

A 35-year-old woman, Para 2, had exhibited intermittent right abdominal pain for the past 3 months. Her liver was not palpable. This patient had one prior Cesarean section 5 years previously and had denied any medical disease. There was no history of fever, jaundice, or swelling of the extremities. Laboratory tests, including complete blood count, erythrocyte sedimentation rate, liver function tests, and tumor markers (CA125 and CA19-9) were all within normal range. An abdominal ultrasonography was performed using a 3.75-MHZ convex transducer (Toshiba SSA-340A, Tokyo, Japan) and revealed right pelvic ovoid cyst of probable ovarian origin, measuring 7.2 cm in maximal diameter. No solid part or septum was found on ultrasound. No ascites was demonstrated. Therefore, she was admitted to our hospital under the impression of right adnexal mass. Laparoscopy showed a mesenteric cyst lying within the pelvic cavity, just beside the right ovary, and the uterus and both ovaries were intact (Fig. 1). No cystic torsion or ascites was found. After complete resection, histopathologic examination confirmed the diagnosis of a mesenteric cyst. The postoperative recovery was uneventful, and no sign of recurrence was found after 1 year of follow-up.

Mesenteric and omental cysts arise from benign proliferation of ectopic lymphatic tissue and lack of communication with the normal lymphatic system [1]. Mesenteric and omental cysts are usually movable in all directions, probably mimicking ascites [3], gallbladder [4], or ovarian cysts [5]. The average incidence of mesenteric cysts is one in 100,000 to 250,000 hospital patients [2]. Mesenteric cysts are most common in the fourth decade of life, whereas omental cysts occur more frequently in childhood, with 68% of the cases being encountered before 10 years of age [6]. They may vary from a few centimeters to a huge mass occupying the entire abdominal cavity.

The most common symptom for a mesenteric cyst is abdominal pain, followed by abdominal distension or mass [1]. In children, an acute presentation is more common because of small bowel obstruction [1]. Other complications include torsion, bleeding, and rupture [3]. Rupture of a mesenteric cyst is a rare condition and usually occurs following abdominal trauma [7] or intracystic infection [5]. The most common finding on physical examination is a palpable abdominal mass that is smooth and compressible. However, this mass was not palpated in our patient, possibly because of the early diagnosis of this kind of tumor. In complicated cases, peritonitis or intestinal obstruction signs may be present [1,5].

Diagnostic tools for an abdominal mass include plain abdominal radiographs, barium studies of the gastrointestinal tract, ultrasonography, computed tomographic scan, and magnetic resonance imaging. In equivocal cases, computed tomography and magnetic resonance imaging could provide better information than ultrasonography regarding the exact extension and margins of cystic lesions [8]. However, ultrasonography is the first-line diagnostic method in clinical practice of gynecology. A pelvic cyst suggestive of an ovarian tumor seems reasonable for a gynecologist.

A mesenteric cyst lying within the pelvic cavity, as seen in this case, may be misdiagnosed as an ovarian cyst. The absence of specific clinical findings in our patient makes

* Corresponding author. Department of Obstetrics and Gynecology, Kaohsiung Municipal Hsiao-Kang Hospital, No. 482, Shan-Ming Road, Hsiao-Kang District, Kaohsiung 812, Taiwan.

E-mail address: urolong@yahoo.com.tw (C.-Y. Long).

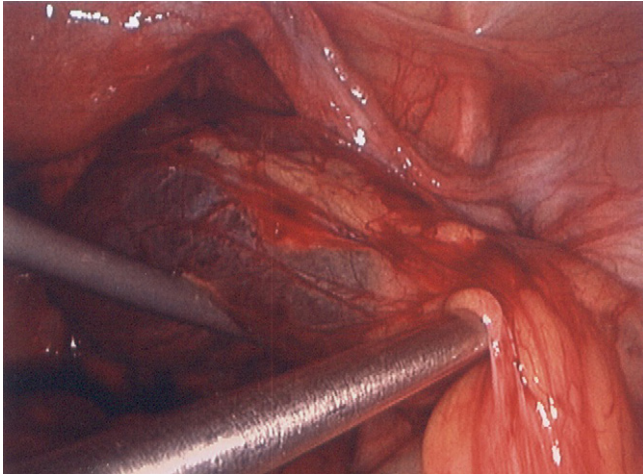


Fig. 1. Laparoscopy showed a mesenteric cyst lying beside right ovary.

preoperative diagnosis of a mesenteric cyst difficult. Differential diagnoses include ovarian cysts, omental cysts, and enteric duplications. Fortunately, we removed this unruptured mesenteric cyst safely without endangering the bowel vessels, but in some cases, partial bowel resection may be required.

In conclusion, mesenteric cysts should be considered in the differential diagnoses when a pelvic cyst is found in a woman.

In addition, we believe that the laparoscopic approach is an appropriate procedure for the management of mesenteric cysts, especially in cases with equivocal preoperative diagnoses.

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