

Large ovarian cyst with torsion

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Received: 4 August 2016 / Accepted: 9 August 2016 / Published online: 16 August 2016
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Patient presentation

A 20-year-old, otherwise healthy, G1P1 woman presents to the emergency department complaining of sudden onset right upper quadrant (RUQ) abdominal pain, for the prior 3 h, resolving prior to examination. The pain was associated with nausea and vomiting. For the past month, she had experienced sharp, intermittent, RUQ pain of fluctuating severity. She denied fevers, chills, dysuria, vaginal bleeding, discharge, or diarrhea. The physical examination was notable for blood pressure of 152/92 mmHg and BMI of 43.9.

Discussion

The workup demonstrated a negative pregnancy test and a mildly elevated AST/ALT. The emergency physician ordered RUQ and abdominal ultrasounds, which demonstrated a normal gallbladder but localized a 13.6 cm anechoic cystic structure at the level of the umbilicus. Within the cyst was a daughter cyst, without significant bloodflow (Fig. 1). An MRI of the pelvis revealed a 14.5 cm cyst arising from an edematous right ovary. The presence of an

internal daughter cyst was confirmed (Fig. 2). Given the history of intermittent abdominal pain and the imaging findings, concern arose for intermittent ovarian torsion. Laparoscopic right salpingo-oophorectomy was performed. The surgical pathology revealed a serous cystadenoma with edema and hemorrhage consistent with torsion.

Serous cystadenomas are thin-walled, usually unilateral, uni-/or multilocular cysts, ranging from 5 to over 20 cm, and are the most common benign ovarian neoplasms in women of reproductive age. Torsion is a complication of ovarian tumors, with an incidence 6.9 % of all ovarian tumors, with an average patient age of 29.8 (range 11–57), that occurs more commonly in pregnant than non-pregnant women with ovarian tumors (22.7 vs 6.1 %) [1]. Benign ovarian neoplasms are 12.9 times more likely to undergo torsion (CI 95 %, 10.2–15.9)—possibly related to the tendency of malignancies to adhere to local structures [2]. The presentation of ovarian torsion classically includes acute onset lower abdominal pain and a palpable adnexal mass; nausea and vomiting occur in 70 % of patients [3]. Ultrasound is a commonly used imaging modality in evaluating acute pelvic pain; cystic etiologies of torsion are easily visualized [3, 4].

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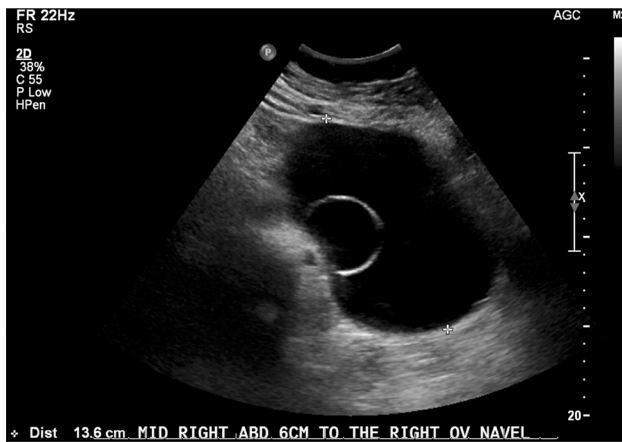


Fig. 1 Abdominal ultrasound demonstrating a 13.6 cm anechoic cystic structure at the level of the umbilicus. Within the cyst was a second cystic structure



Fig. 2 MRI of the pelvis revealed a 14.5 cm cyst arising from an edematous right ovary. The presence of an internal daughter cyst was confirmed

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Statement of human and animal rights All procedures performed in studies involving human participants 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 Informed consent was obtained from all individual participants included in the study.

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