

Ovarian cyst in a 12-year-old pre-menarchal female: A Case Study

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Introduction

- Abdominal pain is a frequent chief concern in the pediatric emergency department
- Ovarian cysts are rarely the primary cause of abdominal pain in premenarchal patients
- If found:
 - less than 3 cm
 - Asymptomatic
- Increased gonadotrophin secretion at puberty makes ovarian cysts more likely to be found in post-menarchal patients¹

Patient History

- 12-year-old female
 - No prior surgeries or chronic medical conditions
- Had previously been seen by pediatrician + outside emergency department for abdominal pain
 - Constipation
 - MiraLAX, enemas, suppositories

Initial Presentation

- Presented to the pediatric emergency department with abdominal pain
 - 9/10
- Six week history of intermittent + increasing abdominal pain + distension
 - Liquid stools did not relieve abdominal pain
- Reported back pain + sore throat from acid reflux
 - Not relieved with OTC medication
- Denied vomiting, anorexia, and hematuria
- Denied systemic symptoms and felt well otherwise
- A KUB and subsequent ultrasound and CT were performed

Imaging

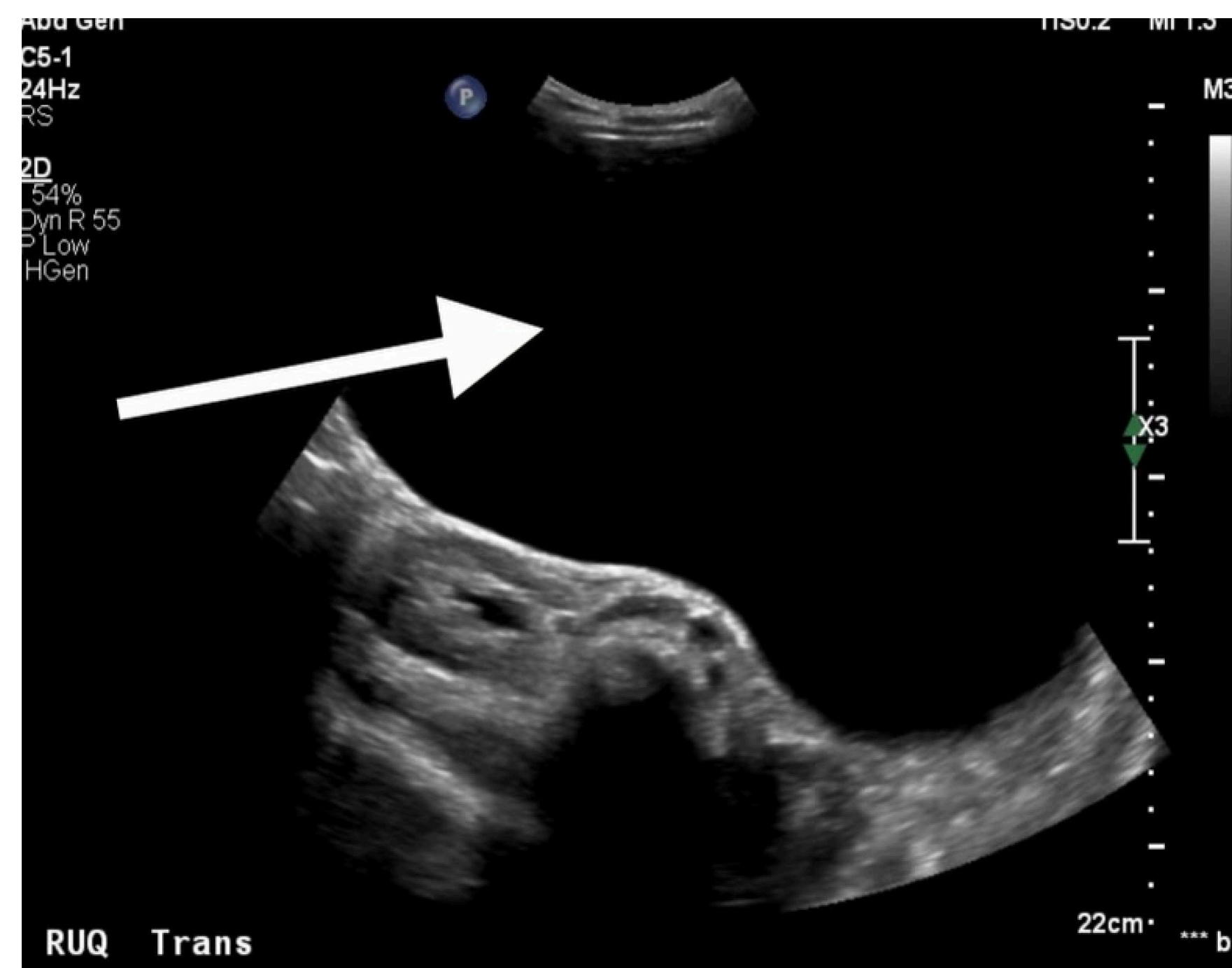


Figure 1: Abdominal Ultrasound



Figure 2: CT Abdomen and Pelvis

Interpretation

- The abdominal ultrasound (Figure 1) and CT abdomen and pelvis (2) showed a large cystic mass (white arrow) within the abdomen displacing bowel (black arrow)
 - The cystic abdominopelvic mass measured 34x18x11cm in the right adnexal area
 - Hydronephrosis and duplicated collecting systems were also seen
 - Bladder decompression via Foley catheter

Next Steps

- Pediatric surgery was consulted + patient was admitted for preoperative management
- Laparotomy was performed the next day
- Right ovary appeared to be normal and intact
- Entire left ovary was covered in a cystic mass
 - Six liters of serous cystic fluid was drained
 - Partial cystectomy was performed

Diagnosis + Management

- Diagnosed with large left ovarian cyst
- The patient recovered rapidly
 - Discharged on postop day 1

Discussion + Learning Points

- Cysts larger than 5cm are rare
 - High rate of complications including ovarian torsion
- In pre- and peri-menarchal patients with abdominal pain: CT/MRI have limited utilization in workup of ovarian pathologies
- Pelvic ultrasound may be more beneficial than CT/MRI in distinguishing ovarian cysts from other causes of abdominal pain²
 - Constipation
 - Appendicitis
- Surgical consult is recommended if clinical findings are suggestive of an ovarian pathology

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References

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