ROBOT-ASSISTED LAPAROSCOPIC EXCISION OF LARGE MESENTERIC CYST OF MULLERIAN ORIGIN

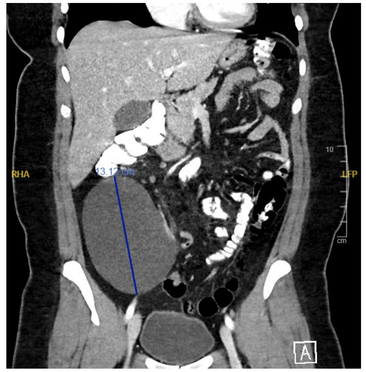
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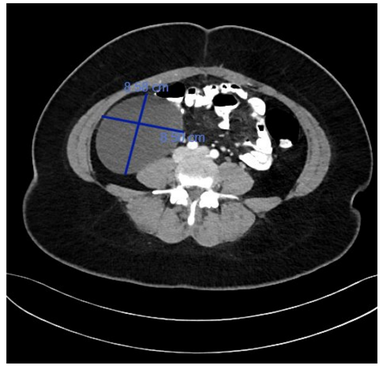
Introduction

Mesenteric cysts are rare, benign tumors of uncertain etiology presenting in 1/250,000 hospital admissions. Diagnosis is often difficult and treatment via resection is essential to avoid complications

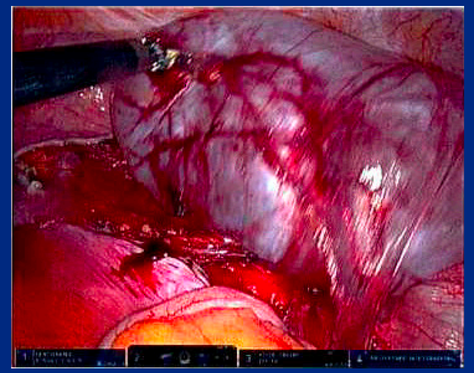
Case Presentation

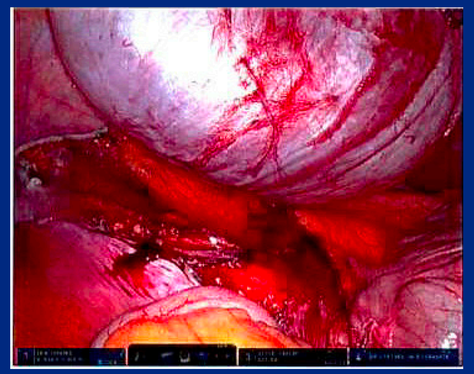
A 29-year-old obese female presented to the ED with gradually worsening intermittent RUQ abdominal pain for one week without other associated symptoms. Patient had a history of irregular menstruation and no prior surgeries. RUQ ultrasound showed no significant findings. A subsequent CT abdomen and pelvis revealed an 8.6x8.5x13.1cm unilocular fluid density structure in the RLQ with no solid or enhancing component, distinct from appendix and right ovaries. Tumor markers LDH, AFP, CA19-9, CEA, and CA125 were within range.

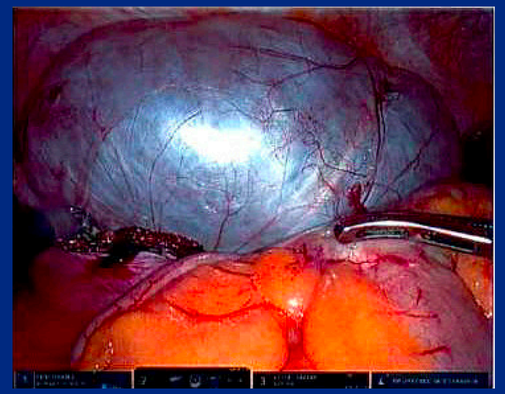




Early diagnosis and treatment are critical to prevent complications, including infection, peritonitis from rupture, volvulus, bowel obstruction, obstructive uropathy, and transformation to malignancy in 3%







Technique & Discussion

The patient underwent a robotic-assisted mesenteric cyst excision. The cyst was found in the RLQ area distinct from the right ovary, fallopian tube, cecum, and appendix. It was removed intact after blunt and sharp dissection and controlled aspiration of clear cystic fluid. Pathology results revealed a mesenteric cyst of Mullerian origin. Patient was discharged without complications

Mesenteric cysts are five times more common in children, with a female 2:1 to male ratio. They are often asymptomatic or present with nonspecific symptoms. Diagnosis may be missed even in large cysts. The most common symptom is abdominal pain, in 55-81% of patients. Abdominal tenderness can be located in a quadrant different from the cyst location Less common symptoms include a palpable mass, distention, nausea, vomiting, and diarrhea. Early diagnosis and treatment are critical to prevent complications, including infection, peritonitis from rupture, volvulus, bowel obstruction, obstructive uropathy, and transformation to malignancy in 3%. Complete excision with or without bowel resection through laparotomy is the most common approach. Marsupialization is a second-line approach Partial excision and drainage are associated with increased rates of recurrence with the latter showing increased mortality. Laparoscopic resection has increased in recent years as it is minimally invasive with a shorter hospital course, and less postoperative pain. It involves smaller more cosmetic-appealing scars, and infection risk, A 2020 series reported four successful laparoscopic mesenteric cyst excisions without recurrence.

Conclusion

Robotic assistance provides a less invasive avenue with increased precision and dexterity. As the technological advancements in robotics evolve, this approach may outpace non-robotic assisted laparoscopy for many procedures. This case further supports its use for excision of mesenteric cysts.

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