



SUCCESSFUL LAPAROSCOPIC MANAGEMENT OF GIANT PARAOVARIAN SEROUS CYSTADENOMA DURING EARLY PREGNANCY: A CASE REPORT

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ABSTRACT

Adnexal masses during pregnancy pose a diagnostic and therapeutic challenge. Paraovarian cysts are rare and often asymptomatic, but giant cysts may cause pain, pressure symptoms, or complications such as torsion or rupture. We report a case of a 24-year-old primigravida at 8 weeks of gestation who presented with severe abdominal distension and pain. Imaging revealed a giant paraovarian cyst. Laparoscopic cystectomy was performed safely during early pregnancy, and histopathology confirmed a benign serous cystadenoma. Pregnancy is currently ongoing without complications. This case demonstrates that early surgical intervention, when indicated, can be safely performed in pregnancy with favorable outcomes.

KEYWORDS

Paraovarian Cyst, Pregnancy, Laparoscopic Cystectomy, Adnexal Mass, Serous Cystadenoma, First Trimester Surgery

INTRODUCTION

Adnexal masses complicate 1 in 600 to 1 in 1500 pregnancies. While many are functional and resolve spontaneously, some may persist or become symptomatic. Paraovarian cysts account for approximately 10% of adnexal masses and are usually benign. Large or symptomatic cysts may require surgical intervention. Minimally invasive surgery during pregnancy, when appropriately timed and carefully executed, is both feasible and safe. This case highlights the successful laparoscopic management of a giant paraovarian cyst diagnosed in the first trimester.

Case Report

A 24-year-old primigravida, married for 1.5 years, presented at 8 weeks of gestation (LMP: 24/04/2025) with complaints of abdominal pain and distension.

On Examination

Abdomen was grossly distended up to midway between the umbilicus and xiphisternum. No guarding or rigidity was noted. Fetal viability was confirmed on ultrasound.

Imaging

Ultrasound and MRI abdomen revealed a large, well-defined cystic lesion suggestive of a giant left paraovarian cyst, measuring approximately 25 cm, displacing surrounding organs.

Surgical Intervention

Decision was made for laparoscopic intervention under general anesthesia due to persistent symptoms and massive cyst size.

- A supraumbilical Veress needle was inserted; the cyst was inadvertently punctured, leading to the drainage of approximately 2 liters of straw-colored fluid.
- A 5 mm supraumbilical port was created.
- Laparoscopy revealed a large paraovarian cyst occupying the entire abdominal cavity.
- Further 2.5 liters of fluid was aspirated through cyst wall puncture.
- Cyst wall was carefully excised and retrieved using an endobag.
- Hemostasis achieved using bipolar cautery.
- Right ovary showed a corpus luteum. Left ovary and both fallopian tubes were normal in appearance.
- No intraoperative or postoperative complications occurred.

Postoperatively, the patient received progesterone support. Fetal heart rate was confirmed post-surgery.

Histopathology

The excised specimen was reported as a benign serous cystadenoma.

Follow-up

The patient is currently at 14 weeks + 1 day of gestation. Pregnancy is progressing well without complications.

DISCUSSION

Giant paraovarian cysts in pregnancy are rare and may mimic ovarian

masses. Their origin is usually from mesosalpinx or remnants of the Wolffian duct. Surgical management is indicated in cases of large size, rapid growth, symptomatic presentation, or suspicion of malignancy.

Laparoscopy is considered safe in pregnancy when performed by experienced surgeons, especially in the second trimester. However, in selected first-trimester cases, early intervention may be warranted to prevent complications which include torsion, enlargement and mass effect on uterus, bleeding, rupture. In this patient, surgery provided symptomatic relief and allowed safe continuation of pregnancy.

Histology confirmed a benign lesion, justifying conservative ovarian-sparing surgery. Progesterone support post-cystectomy is prudent to maintain luteal phase hormonal support in early pregnancy.

CONCLUSION

Giant paraovarian cysts, though rare in pregnancy, should be managed proactively when symptomatic. Laparoscopic cystectomy is a safe and effective option even in the first trimester, provided careful intraoperative planning is ensured. Favorable maternal and fetal outcomes can be achieved with timely intervention.



Figure 1: Magnetic Resonance Image Of Left Adnexal Cystic Lesion

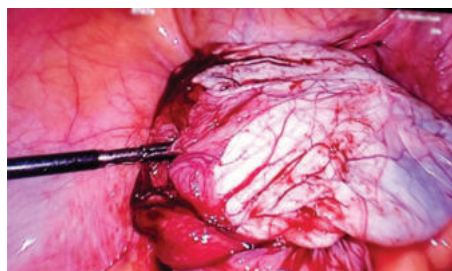


Fig 2: Intra-op View Of The Para-ovarian Cyst



Fig 3: Resected Specimen- Cyst Wall

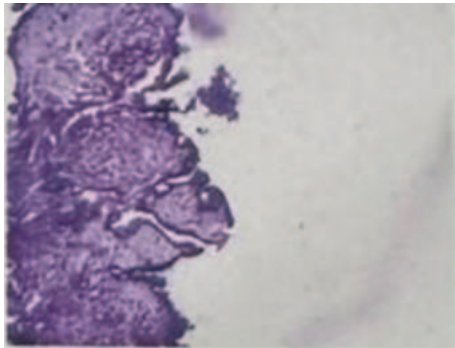


Fig 4: Histopathology Image Of The Cyst Wall Lined With Ciliated Columnar Epithelium With Adjacent Ovarian Stroma

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