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Is Salpingo-Oophorectomy For Torsion Ovarian Cyst In 13 Weeks Of Pregnancy: A Significant Clinical Challenge?

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Abstract

Non-obstetric surgical emergencies during pregnancy present unique challenges for anesthesiologists and surgeons, as maternal safety must be balanced with fetal well-being. Ovarian torsion is a rare but potentially serious complication in pregnancy, often requiring urgent surgical intervention. We report the case of a 24-year-old primigravida at 13 weeks and 5 days of gestation who presented with acute abdominal pain and was diagnosed with torsion of a large ovarian cyst. The patient underwent emergency laparotomy and right salpingo-oophorectomy under spinal anesthesia. Anesthetic management was tailored to minimize fetal exposure to systemic drugs and maintain maternal hemodynamic stability. The intraoperative and postoperative course was uneventful, and fetal viability was confirmed postoperatively. This case underscores the importance of timely diagnosis, multidisciplinary coordination, and cautious anesthetic planning in ensuring favorable maternal and fetal outcomes in such high-risk situations.

Keywords: ovarian torsion, pregnancy, salpingo-oophorectomy, spinal anesthesia, non-obstetric surgery.

Introduction

Surgical interventions during pregnancy, although uncommon, may become inevitable due to acute abdominal emergencies such as appendicitis, cholecystitis, or adnexal torsion. The incidence of adnexal torsion in pregnancy is reported to be approximately 1 in 5,000 pregnancies, most often associated with ovarian cysts or masses. The condition poses significant risks of ovarian necrosis, peritonitis, and adverse pregnancy outcomes if not managed promptly.

For anesthesiologists, the clinical challenge lies in providing adequate anesthesia while minimizing risks to the fetus. Concerns include the teratogenicity of drugs, maternal hemodynamic fluctuations leading to compromised uteroplacental perfusion, and the effects of surgical stress. Neuraxial anesthesia, when feasible, can be advantageous by reducing fetal exposure to multiple anesthetic agents and maintaining stable maternal physiology.

We present a case of ovarian torsion at 13 weeks of gestation successfully managed with emergency laparotomy and right salpingo-oophorectomy under spinal anesthesia.

Case Report

A 24-year-old married woman, gravida 1, presented to the outpatient department with a history of 3 months of amenorrhea and acute-onset lower abdominal pain persisting for three days, which had worsened overnight. The pain was associated with fever and two episodes of vomiting.

On examination, the patient had localized tenderness in the right iliac fossa. Ultrasound revealed an enlarged uterus with a live intrauterine fetus corresponding to 13 weeks and 5 days of gestation. A heterogeneous, hyperechoic lesion measuring 9.0 × 8.6 cm was seen in the right adnexa, with features suggestive of ovarian torsion.

The patient was counseled about the diagnosis, risks of surgery, and potential effects of anesthetic drugs on pregnancy. After obtaining informed written consent, she was prepared for emergency laparotomy under ASA IIE status. Considering the gestational age and potential risks of general anesthesia (polypharmacy, airway changes, aspiration, and fetal drug exposure), spinal anesthesia was planned.

Spinal anesthesia was administered at the L4–L5 interspace using 2.8 ml of 0.5% hyperbaric bupivacaine via a 26G Quincke needle. Intraoperatively, right ovarian torsion with a necrotic cystic ovary was confirmed, and right salpingo-oophorectomy was performed. The procedure lasted 60 minutes with minimal blood loss.

The patient remained hemodynamically stable throughout surgery. Postoperatively, she was closely monitored in the recovery unit. A follow-up ultrasound on postoperative day 1 confirmed a live fetus with appropriate cardiac activity corresponding to 14 weeks of gestation. The patient's nutritional status improved, and she was discharged on postoperative day 3 in stable condition.

Discussion

This case illustrates the safe conduct of emergency laparotomy for adnexal torsion during early pregnancy under neuraxial anesthesia. Several key concerns arise in such scenarios:

1.Timing of Surgery:

Ovarian torsion requires immediate intervention to prevent ischemic necrosis, peritonitis, and systemic complications. Delay may jeopardize both maternal and fetal outcomes. Surgery during the second trimester (13–26 weeks) is considered relatively safer compared to the first trimester (risk of teratogenesis) and third trimester (risk of preterm labor). Our patient was at 13 weeks, marking the transition to the safer window for surgery.

2.Choice of Anesthesia:

Both general and regional anesthesia can be used, but each carries specific risks. General anesthesia may increase fetal exposure to multiple drugs and carries risks of airway compromise and aspiration due to pregnancy-related physiological changes. Spinal anesthesia was chosen here to provide adequate analgesia while minimizing systemic drug exposure and maintaining maternal hemodynamics.

3.Intraoperative Considerations:

•Hemodynamic stability is paramount, as maternal hypotension reduces uteroplacental perfusion. Adequate fluid preloading, left lateral tilt to reduce aortocaval compression, and vasopressors if needed help maintain stability.

•Minimal use of cautery is advised to avoid inadvertent uterine stimulation and fetal exposure.

•Maternal oxygenation and normocapnia must be ensured for optimal fetal oxygen delivery.

4.Postoperative Care:

Close monitoring is required for signs of preterm labor, miscarriage, or fetal distress. Ultrasound follow-up provides reassurance of fetal well-being. Multidisciplinary collaboration between obstetricians, anesthesiologists, and surgeons is crucial.

Our case demonstrates that with timely diagnosis, prompt surgical intervention, and carefully tailored anesthesia, both maternal and fetal outcomes can be favorable.

Conclusion

Salpingo-oophorectomy for ovarian torsion in early pregnancy represents a significant clinical challenge due to the dual responsibility of preserving maternal and fetal health. Regional anesthesia, particularly spinal anesthesia, may be a safe and effective alternative to general anesthesia in carefully selected cases. This case emphasizes the importance of early recognition, multidisciplinary decision-making, and vigilant perioperative management to optimize outcomes.

References

1. Haggerty E, Daly J. Anaesthesia and non-obstetric surgery in pregnancy. BJA Educ. 2020;20(2):38–44.

2. Balci O, et al. Adnexal torsion in pregnancy: A case series. Arch Gynecol Obstet. 2011;283(1):107–110.

3. Koo YJ, et al. Torsion of ovarian tumors: Preoperative diagnosis and emergency surgery. Yonsei Med J. 2008;49(3):422–426.

4. Mazze RI, Källén B. Reproductive outcome after anesthesia and operation during pregnancy: A registry study of 5405 cases. Am J Obstet Gynecol. 1989;161(5):1178–1185.

5. Reitman E, Flood P. Anaesthetic considerations for non-obstetric surgery during pregnancy. Br J Anaesth. 2011;107 Suppl 1:i72–i78.