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Navigating Acute Abdomen In Twin IVF Pregnancy: A Case Of Perforated Appendicitis With Emergency Cesarean Section

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Abstract
Background: *Appendicitis is the most frequent non-obstetric surgical emergency during pregnancy. Diagnosis is often delayed due to anatomical and physiological changes of pregnancy, increasing the risk of complications such as perforation.*
Objective: *To present a rare case of perforated appendicitis in a twin IVF pregnancy, highlight diagnostic challenges, and discuss management strategies to optimize maternal and fetal outcomes.*
Case Summary: *A 38-year-old primigravida with a twin IVF pregnancy at 31 weeks presented with abdominal pain, vomiting, and fever. Clinical evaluation and imaging suggested acute appendicitis. Exploratory laparotomy revealed a perforated appendix with localized peritonitis. An emergency cesarean section was performed for surgical access, and both twins were delivered. Appendectomy and peritoneal lavage followed. Histopathology confirmed necrotic perforated appendicitis. The patient recovered well postoperatively; both neonates were managed in NICU.*
Conclusion: *Prompt recognition and early surgical intervention are vital in managing appendicitis during pregnancy. Multidisciplinary coordination is essential for successful maternal and fetal outcomes, especially in IVF-conceived multiple gestations.*
Keywords: *Appendicitis, Pregnancy, IVF, Twin Gestation, Perforation, Surgical Emergency*

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I. Introduction

Appendicitis is the most common non-obstetric surgical emergency during pregnancy, occurring in approximately 0.05–0.13% of pregnancies. Its diagnosis is often delayed due to overlapping symptoms with pregnancy and anatomical displacement of the appendix, especially in the third trimester. Delayed diagnosis may lead to perforation, peritonitis, and increased maternal-fetal morbidity.

Managing appendicitis in a twin pregnancy, particularly one conceived via in vitro fertilization (IVF), presents additional clinical challenges due to higher maternal risk and heightened concern for fetal wellbeing.

II. Case Report

A 38-year-old primigravida, at 31 weeks of gestation with a dichorionic diamniotic twin pregnancy conceived via IVF, presented with a 24-hour history of worsening lower abdominal pain, nausea, vomiting, and fever. She had no significant past medical or surgical history.

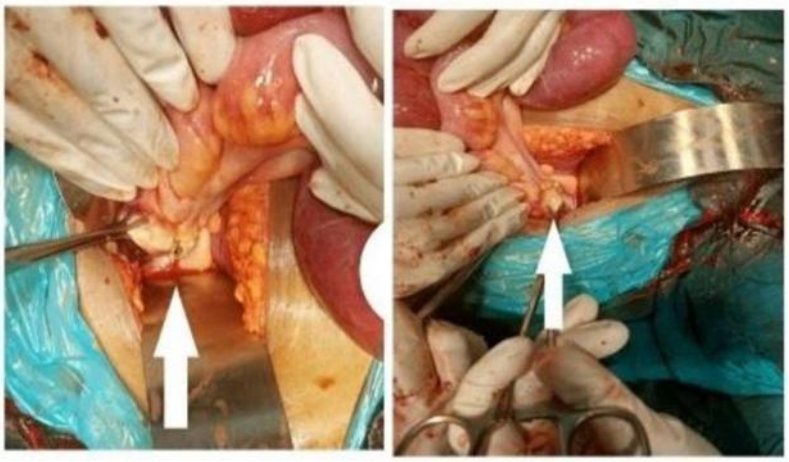
On examination, she was febrile (38.5°C), tachycardic (HR 110 bpm), and exhibited right lower quadrant tenderness with guarding. Fetal heart sounds were reassuring, and uterine activity was absent. Laboratory tests showed leukocytosis (15,000/ mm^3), neutrophilia, and elevated CRP.

Due to difficulty visualizing the appendix on ultrasound and unavailability of MRI, and considering worsening clinical status, an exploratory laparotomy was performed.

Intraoperative Findings:

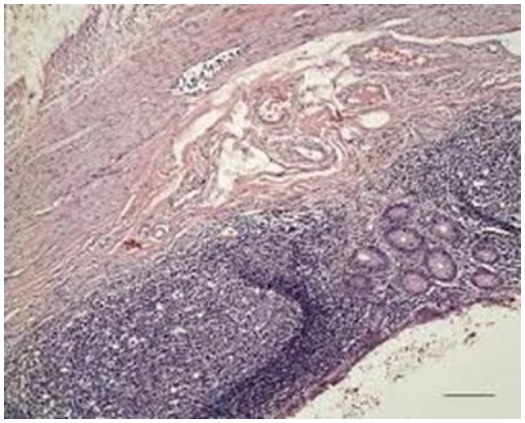
A perforated, gangrenous appendix with pus and inflamed bowel loops was noted. The gravid uterus limited access to the surgical field, necessitating a cesarean section. A lower segment cesarean section was performed, delivering two viable preterm neonates (1.5 kg and 1.4 kg) with Apgar scores of 8 and 9 at 1 and 5 minutes.

Following delivery, an appendectomy was performed along with thorough peritoneal lavage. The patient was managed with broad-spectrum antibiotics and supportive care in the surgical ICU.



Postoperative Course:

The patient had an uneventful recovery. Both neonates were admitted to the NICU for prematurity and discharged after stabilization. Histopathological examination confirmed necrotic, perforated appendicitis.



III. Discussion

Appendicitis in pregnancy presents diagnostic difficulty due to nonspecific symptoms and anatomical changes. The appendix may be displaced upward, and signs such as rebound tenderness or guarding may be absent. In twin gestations, the distension and altered anatomy are more pronounced.

Delayed diagnosis, as seen in this case, leads to a higher rate of perforation, which is associated with a significant increase in fetal morbidity (up to 36%). In IVF pregnancies, there may be an added psychological and medical drive to optimize outcomes.

Surgical management remains the standard of care. Laparoscopy is preferred in early pregnancy, but in late gestation, laparotomy may be necessary. In our case, cesarean section was warranted both for access and fetal considerations. The coordination between obstetricians, surgeons, and neonatologists was pivotal.

IV. Conclusion

Perforated appendicitis in pregnancy is a rare but serious condition. This case highlights the need for high clinical suspicion, prompt surgical intervention, and multidisciplinary management. Special considerations must be given in IVF pregnancies and multiple gestations where risks are compounded.

References

[1] Mourad J, Elliott JP, Erickson L, Lisboa L. Appendicitis In Pregnancy: New Information That Contradicts Long-Held Clinical Beliefs. Am J Obstet Gynecol. 2000;182(5):1027–1029.
[2] Andersen B, Nielsen TF. Appendicitis In Pregnancy: Diagnosis, Management And Complications. Acta Obstet Gynecol Scand. 1999;78(9):758–762.
[3] Tracey M, Fletcher HS. Appendicitis In Pregnancy. Am Surg. 2000;66(6):555–559.
[4] Abbasi N, Patenaude Y, Abenhaim HA. Evaluation Of Pregnancy Outcomes Following Appendectomy In Pregnancy. J Matern Fetal Neonatal Med. 2014;27(7):683–688.
[5] Cappell MS, Friedel D. Abdominal Pain During Pregnancy. Gastroenterol Clin North Am. 2003;32(1):1–58.