

Twisted ovarian cyst vs Fibroid red degeneration in Pregnancy: A Diagnostic Challenge

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Acute right iliac fossa (RIF) pain during pregnancy presents a significant diagnostic challenge for obstetricians and gynecologists, requiring careful differentiation among obstetric, gynecological, and gastrointestinal etiologies. Ovarian torsion, while uncommon, is a severe complication associated with notable maternal morbidity and fetal mortality. This case report highlights the diagnostic complexities and crucial management of a torted dermoid ovarian cyst in a pregnant patient.

Case Presentation

A 30-year-old gravida 3 para 1 woman at 16 weeks gestation presented with sudden-onset, excruciating RIF pain (10/10), accompanied by nausea, vomiting, and subjective fever. The pain radiated to the back and was only partially relieved by intravenous morphine. Clinical examination revealed localized RIF tenderness and mild leukocytosis. Given the high clinical suspicion of ovarian torsion, an emergency laparotomy was performed. This confirmed a necrotic dermoid cyst with right ovarian torsion, necessitating a right salpingo-oophorectomy. Post-operatively, the patient recovered without maternal or fetal complications, underscoring the importance of timely intervention.

Conclusion

This case emphasizes the importance of early recognition and timely intervention in ovarian torsion during pregnancy to prevent life-threatening complications. Multidisciplinary collaboration is crucial in managing such emergencies, optimizing maternal and foetal outcomes. The case also highlights the necessity of balancing surgical intervention with foetal safety, ensuring effective management of gynaecological emergencies in pregnancy.

Diagnostic Imaging

Transvaginal ultrasound (TVUS) was critical, revealing a significantly enlarged right dermoid cyst (87x67x46 mm), a notable increase from a prior measurement of 57x44x39 mm. A 71x51 mm simple cyst was found on the left ovary, and a 49x41 mm uterine fibroid was also noted. Fetal assessment remained normal, reinforcing the focus on gynecological pathology.

Discussion: Ovarian Torsion in Pregnancy

Ovarian torsion incidence increases fivefold during pregnancy, affecting approximately 5 in 10,000 cases, primarily in the first and early second trimesters. The right ovary is more frequently involved due to the sigmoid colon's reduced mobility on the left side. Dermoid cysts, due to their size and density, are particularly susceptible to torsion and often necessitate surgical intervention when exceeding 10 cm or presenting with complex features. High-resolution ultrasound and MRI are invaluable diagnostic tools, especially given the potential for clinical mimicry with appendicitis. Definitive treatment involves surgical intervention, either via laparotomy or laparoscopy, for detorsion or removal of necrotic tissue. This case emphasizes that multidisciplinary collaboration is crucial for optimizing maternal and fetal outcomes in such emergencies, balancing surgical intervention with fetal safety.