

Trauma-Induced Uterine Rupture: A Rare but Fatal Obstetric Emergency

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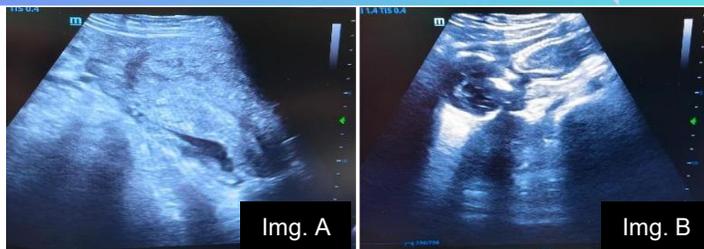
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Introduction

Uterine rupture is a rare but potentially life-threatening obstetric emergency. It commonly occurs in 3rd trimester with 80% of cases occur between weeks 28 and 36 of pregnancy. Here, we report a case of uterine rupture in 18 weeks of pregnancy with history of miscarriage following a motor vehicle accident. This case highlights a rare but serious complication of severe abdominal trauma during pregnancy.

Case Description

Miss NH, 20-year-old lady, G2P0+1 at 18 weeks with a prior miscarriage in 2023, was brought to the Emergency Department after a motor vehicle accident. The motorcycle skidded, and as the pillion rider, she was thrown off and struck a tree by the roadside. A primary survey was conducted. Circulation component was impaired with cold peripheries, prolonged CRT, BP 80/60 mmHg and HR of 160 bpm. Abdomen was guarded and distended. No evidence of external exsanguinating bleeding or long bone deformities. eFAST revealed massive free fluid intraperitoneally, empty uterus with a fetus found floating adjacent to the liver (Img. A and Img. B). A diagnosis of uterine rupture in Class IV hypovolemic shock was made. Unfortunately, she succumbed to her injuries at day 3 post exploratory laparotomy and uterine repair.



Discussion

The occurrence of uterine rupture during the first and second trimesters is extremely rare. However, it may occur in the presence of certain risk factors, such as a scarred uterus. In this case, the patient had a history of miscarriage, which may have resulted in a uterine scar, thereby increasing the risk of uterine rupture.

Conclusion

Early recognition of pregnancy status using a urine pregnancy test and bedside ultrasound including assessment of the uterus is essential when evaluating trauma patients of reproductive age. An important consideration in the management of trauma in this population is whether the uterus should be routinely included in the extended Focused Assessment with Sonography for Trauma (eFAST) protocol.

Reference

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2. April, M. D., & Long, B. (2024). Trauma in pregnancy: A narrative review of the current literature. *The American Journal of Emergency Medicine*, 81, 53–61. <https://doi.org/10.1016/j.ajem.2024.04.029>