

## **Fetal Injury from Maternal Penetrating Abdominal Trauma in Pregnancy**

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**Relevant Background Information:** Pregnant women are particularly vulnerable to abuse, and trauma during pregnancy is the leading cause of non-obstetric maternal mortality. Penetrating abdominal trauma, which is less common than blunt trauma, is associated with higher rates of fetal injury and mortality.

**Case Description:** We report a rare case of penetrating abdominal trauma that resulted in fetal injury following child-to-parent violence. A male infant was born at 36+4 weeks gestation via emergent cesarean section following multiple maternal abdominal stab wounds, one of which penetrated the uterus. Upon arrival at the emergency department, fetal heart tracing displayed decelerations. The infant was delivered with Apgar scores of 7 and 8 at 1 and 5 minutes, respectively. Exam revealed a 1.5 cm laceration over his left buttock, 2 cm from the anus, penetrating 1-2 cm into his subcutaneous tissue. He was transferred to a nearby children's hospital for surgical evaluation where his wound was inspected, irrigated with normal saline, and reapproximated with sutures. Barium enema study demonstrated no evidence of rectal perforation, and brain MRI was normal without evidence of head trauma. He was discharged at 4 days old and has remained well; no significant issues were noted by his pediatrician at 19 months of age.

**Conclusions:** This case demonstrates the importance of immediate cesarean delivery in a penetrating injury to a gravid woman experiencing fetal distress. Following delivery, a thorough evaluation of the infant is imperative to identify and treat any non-obvious traumatic injuries.

**Clinical Significance:** In addition to harming the mother, physical injury can potentially jeopardize the pregnancy and fetus' health and may lead to separation during a critical period for mother-baby bonding. Healthcare providers should work to identify women during the antenatal period who are at risk of interpersonal violence and facilitate access to resources and interventions.

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