

CASE REPORT

PEER REVIEWED | OPEN ACCESS

Uterine rupture after gunshot wound with protrusion of intact amniotic sac and fetal long bones

Savannah Zettler, Michelle Larzelere

ABSTRACT

Introduction: Intrapartum gunshot wounds (GSWs) to the abdomen or pelvis can cause significant injury and mortality to pregnant persons and their fetuses. Rapid imaging and emergency laparotomy are often necessary for diagnosis and treatment.

Case Report: A 14-year-old GoPo patient at 18 weeks gestation presented status post GSW with imaging concerning for a ballistic-induced uterine rupture with fetal demise and hemoperitoneum. At the time of exploratory laparotomy, 500 cc of hemoperitoneum was noted with fetal long bones penetrating through a 5 cm rupture in the uterine wall. The amniotic sac remained intact. An en caul delivery of the fetus was performed as well as uterine curettage. Ballistic injury was noted to the left Fallopian tube and omentum. No other intra-abdominal injuries were noted. Postoperatively, the patient experienced no surgical complications and was discharged on postoperative day 10.

Conclusion: This case highlights a unique complication of an intrapartum GSW leading to uterine rupture and fetal demise at 18 weeks.

Keywords: Hemoperitoneum, Intrapartum gunshot wound, Pregnancy, Uterine trauma

Article ID: 100239Zo8SZ2026

doi: 10.5348/100239Zo8SZ2026CR

INTRODUCTION

Trauma is the leading cause of nonobstetric related maternal death [1]. Uterine rupture secondary to trauma affects 0.6% of obstetric traumas with a fetal mortality rate that approaches 100% [2]. Rapid imaging and emergency laparotomy are often necessary for diagnosis and treatment. Here we present a case of uterine rupture and fetal demise secondary to a gunshot wound (GSW).

CASE REPORT

A 14-year-old GoPo patient at 18 weeks gestation presented to the emergency department with gunshot injuries of unknown caliber and range to the right chest, back, arm, ribs 4–6, and left pelvis. At the hospital, the patient exhibited unstable vital signs [pulse: 89 BPM, blood pressure (BP) 150/107 mmHg, SpO₂: 68%] and was therefore sedated and intubated. She had a chest tube placed with 1 L of bloody output and subsequently received 2 units of fresh frozen plasma and 2 units of packed red blood cells. A bedside pelvic ultrasound confirmed an intrauterine fetal demise with fetal long bones that appeared to protrude through the uterine wall (Figures 1 and 2). The amniotic sac was noted to be intact. Additionally, a hypoechoic area adjacent to this rupture and hypotension suggested a collection of blood within the abdomen. These findings were confirmed on computed tomography (CT) scan (Figures 3 and 4). There were no foreign bodies within the abdomen or pelvis seen on the CT to suggest retained bullets. Given these findings, an emergency exploratory laparotomy was performed jointly with both obstetric and trauma surgery teams present.

Upon entry via a midline vertical incision, a 5 cm uterine rupture from the uterine fundus to the left cornua was noted. The amniotic sac was intact and protruding through the defect (Figure 1). Roughly 500 mL of hemoperitoneum was removed with no active bleeding

How to cite this article

Zettler S, Larzelere M. Uterine rupture after gunshot wound with protrusion of intact amniotic sac and fetal long bones. J Case Rep Images Obstet Gynecol 2026;12(2):25–28.

Savannah Zettler¹, Michelle Larzelere², MD

Affiliations: ¹Medical Student, University of Florida College of Medicine, Gainesville, FL, USA; ²MD, Clinical Assistant Professor, Department of Obstetrics and Gynecology, University of Florida College of Medicine, Gainesville, FL, USA.

Corresponding Author: Michelle Larzelere, MD, 1600 SW Archer Road, Gainesville, FL 32608, USA; Email: m.larzelere@ufl.edu

Received: 14 May 2026

Accepted: 02 September 2026

Published: 25 September 2026

noted. Surgeons found two penetrating wounds overlying the left psoas muscle with intact iliac vessels and ureters. There was no solid organ, intestinal, mesenteric, or diaphragmatic injury observed, hemodynamics remained stable, and psoas bleeding was controlled with direct pressure. An en caul delivery of the fetus and placenta was performed (Figure 5). Banjo curettage was used to remove any remaining pregnancy tissue. The uterus was then closed in three layers, an initial layer of 0-Vicryl followed by an imbricating layer of 0-Vicryl and finally a baseball stitch of 3-0 Vicryl. Following the closure of the uterus, a left salpingectomy was performed as it was transected at the level of the cornua. She had no immediate postoperative complications, was transferred to the pediatric intensive care unit (PICU) in stable condition, and was discharged home in stable condition on postoperative day 10.



Figure 1: Amniotic sac protruding through uterine wall on ultrasonography.

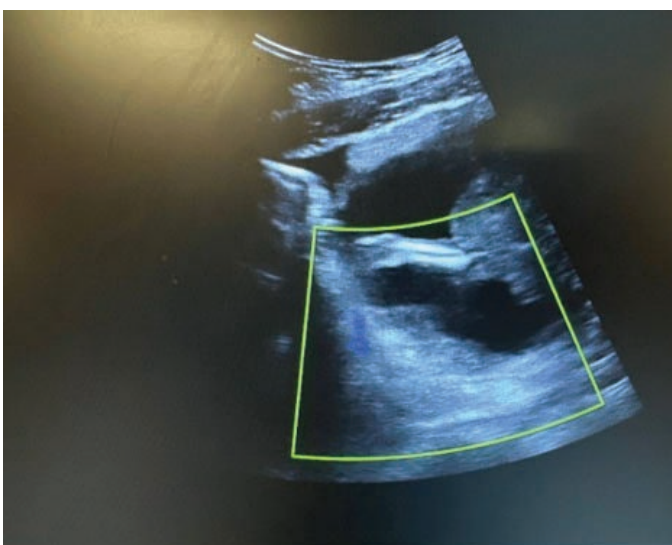


Figure 2: Fetal femur protruding through the uterine wall on ultrasonography.

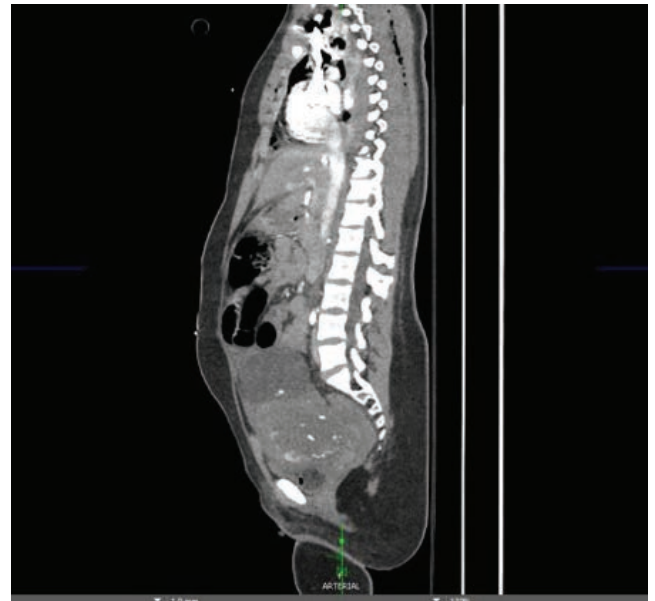


Figure 3: Amniotic sac protruding through the uterine wall on CT imaging.

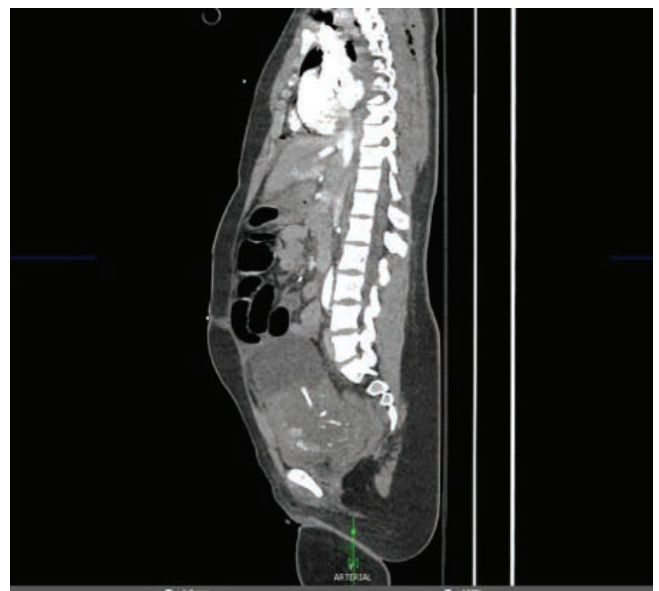


Figure 4: Fetal femur protruding through the uterine wall on CT imaging.

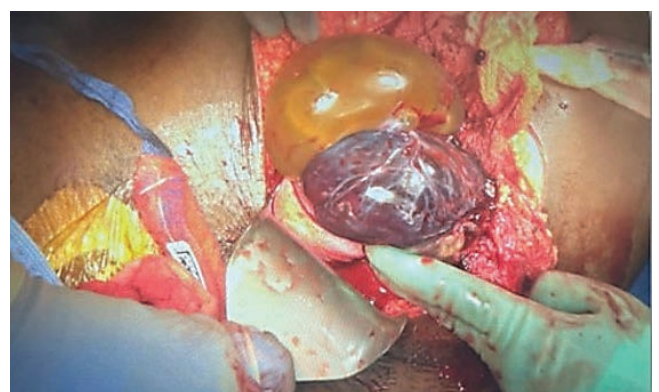


Figure 5: Amniotic sac and placenta protruding through the uterus open abdominal entry.

DISCUSSION

Gunshot wounds during pregnancy are not uncommon in the United States—roughly 7% of pregnancies will be complicated by a traumatic injury, 4% of which come from GSWs [1]. Gunshot wounds to the abdomen of a pregnant individual are especially dangerous, causing 70% of fetuses to sustain an injury and up to 65% of pregnancies leading to fetal demise [3]. This case highlights an unusual presentation of fetal demise from a GSW, as uterine rupture occurred with preservation of an uninjured amniotic sac and fetus. The trauma and uterine rupture led to demise of the fetus.

CONCLUSION

This is a rare case of uterine trauma from a GSW resulting in the protrusion of fetal long bones from the uterus within the amniotic sac and fetal demise. In this case, it is likely that the ballistic led to the uterine rupture without injuring the amniotic sac or fetus.

REFERENCES

1. Shipchandler FT, Huntley ES, Holder TF, Ali T, Behnia F, Chauhan SP, et al. Maternal and neonatal outcomes of gunshot wounds in pregnancy: A systematic review of case reports. *Am Surg* 2024;90(2):279–91.
2. Pearlman MD, Tintinalli JE, Lorenz RP. Blunt trauma during pregnancy. *N Engl J Med* 1990;323(23):1609–13.
3. Asaad M, Acuff C, Shoukralla M, Takala H, Arynova B, Chang G. A rare case of traumatic gunshot wound to fetal cranium at 25 weeks gestation: A case report. *Trauma Case Rep* 2024;53:101092.

Author Contributions

Savannah Zettler – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically

for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Michelle Larzelere – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Guarantor of Submission

The corresponding author is the guarantor of submission.

Source of Support

None.

Consent Statement

Written consent was unable to be obtained from the patient but identifying information was not included in this report.

Conflict of Interest

Authors declare no conflict of interest.

Data Availability

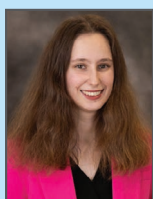
All relevant data are within the paper and its Supporting Information files.

Copyright

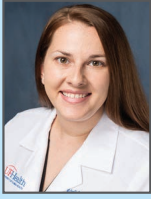
© 2026 Savannah Zettler et al. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.

ABOUT THE AUTHORS

Article citation: Zettler S, Larzelere M. Uterine rupture after gunshot wound with protrusion of intact amniotic sac and fetal long bones. *J Case Rep Images Obstet Gynecol* 2026;12(2):25–28.



Savannah Zettler is a medical student at the University of Florida College of Medicine. She earned undergraduate degrees from Washington University in St. Louis in Biology and Psychological & Brain Sciences. Her research interests include rare, misdiagnosed, and undiagnosed diseases, reproductive health justice, and infectious diseases.



Michelle Larzelere is a clinical assistant professor in the Department of Obstetrics and Gynecology at the University of Florida in Gainesville, Florida. She earned her undergraduate degree from the University of Pittsburgh in Pittsburgh, Pennsylvania and completed her medical degree at the University of Virginia in Charlottesville, Virginia. Her research interests include simulation in healthcare and resident education.

Access full text article on
other devices



Access PDF of article on
other devices





Submit your manuscripts at
www.edoriumjournals.com

