

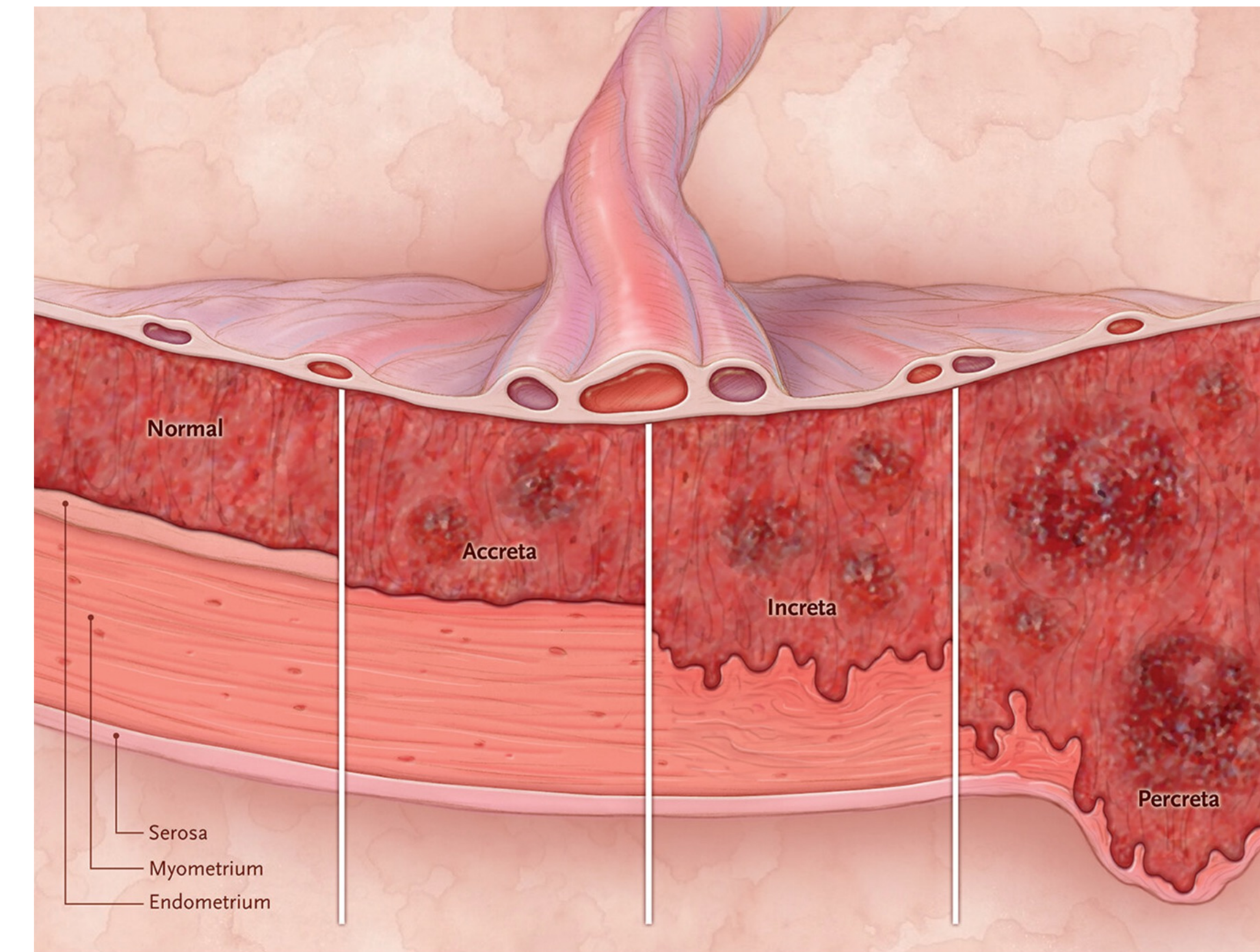
EXPECTING THE UNEXPECTED: AN ANESTHESIOLOGIST'S ROLE IN UNEXPECTED PLACENTA ACCRETA

Bianca E. Rich MD¹, Matt Givens MD², Brett Einerson MD, MPH^{2,3}, Christine Warrick MD¹

[1] University of Utah Health, Department of Anesthesiology, [2] University of Utah Health, Department of Obstetrics and Gynecology, [3] Intermountain Health, Obstetrics & Gynecology

INTRODUCTION

- Placenta Accreta Spectrum (PAS) can cause significant maternal morbidity & mortality. The American College of Obstetricians and Gynecology (ACOG) recommends PAS management involve a standardized approach with a multidisciplinary care team accustomed to managing PAS¹.
- While antenatal diagnosis of PAS allows for this type of management, unexpected PAS can occur outside of referral centers.
- The Society for Maternal Fetal Medicine's Checklist for Unexpected Morbidly Adherent Placenta recommends transport to a facility with PAS experience if PAS is discovered & the patient can be stabilized². However, case descriptions of this transport are rare.
- We present a case of unexpected PAS with successful transport to a PAS referral center



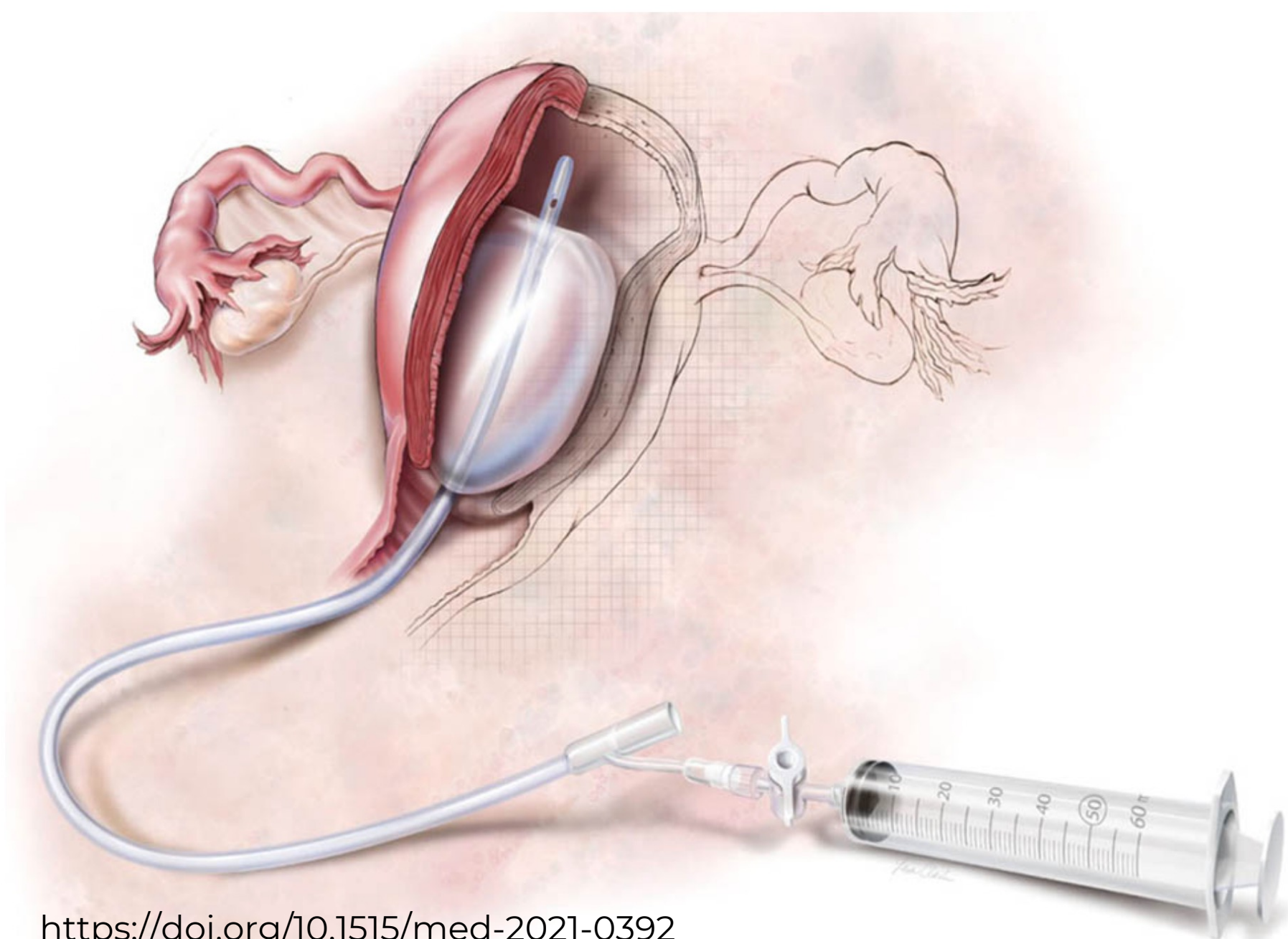
[HTTPS://RESIDENT360.NEJM.ORG/CLINICAL-PEARLS/PLACENTA-ACCRETA-SPECTRUM](https://resident360.nejm.org/clinical-pearls/placenta-accreta-spectrum)

CASE DESCRIPTION

A 23-year-old G4P3003 at 39 weeks' gestation with 3 prior cesarean deliveries (CD) presented to a community hospital in active labor.

INITIAL HOSPITAL COURSE

- Underwent repeat CD, surgical course complicated by unexpected PAS & 2.5 L intraoperative blood loss following partial removal of placenta.
- Bakri balloon placement unsuccessful.
- Transfer to a PAS referral center requested, and per recommendation of remote expert PAS team, patient's abdomen was packed for air med transfer.
- Lost additional 500 cc of blood during transport & received 10-units pRBC, 2-units FFP, 1-unit platelets, and 6L crystalloid during transport.



<https://doi.org/10.1515/med-2021-0392>



AFTER PAS REFERRAL CENTER TRANSFER

- On arrival to PAS referral center, heart rate was 160s with SBP of 130 on norepinephrine. Blood gas revealed lactic acidosis, Hgb 10.6, and base excess of -12.
- Emergent total abdominal hysterectomy under general anesthesia, complicated by an additional 1L of EBL.
- Received additional 4L crystalloid, 4-units pRBC, 7-units FFP, 7-units platelets & 7-units cryoprecipitate. Transferred to ICU for monitoring and discharged on postoperative day 7.

PRODUCT	TOTAL TRANSFUSED
Crystalloid	10 L
pRBC	14 U
FFP	9 U
PLATELETS	8 U
CRYO	7 U

DISCUSSION & CONCLUSIONS

- PAS management by an experienced team is an important determinant of maternal mortality.
- Anesthesiologists play a critical role in management and rapid stabilization of patients with unexpected PAS at centers with less PAS experience.
- As such, Anesthesiologists should be familiar with ACOG and SMFM recommendations and feel empowered to encourage pausing procedural interventions and assist with patient transfer to a higher level of care to optimize outcomes.
- Temporization efforts should follow balanced transfusion protocols, and deployment of expert transport teams with adequate blood products is essential during this vulnerable patient period.

REFERENCES

[1] Society of Gynecologic Oncology; American College of Obstetricians and Gynecologists and the Society for Maternal–Fetal Medicine, Cahill AG, et al. Placenta Accreta Spectrum. Am J Obstet Gynecol. 2018;219(6):B2-B16. doi:10.1016/j.ajog.2018.09.042

[2] Society for Maternal Fetal Medicine Checklists and Safety Bundles. SMFM Checklist for Unexpected Morbidly Adherent Placenta. 2018



SMFM Checklist for Unexpected Morbidly Adherent Placenta

Intended for use when morbidly adherent placenta is first encountered at the time of labor onset or delivery, and was not diagnosed antenatally.

Diagnosis Before Delivery (e.g. bleeding prior to delivery):

If located at facility without accreta experience:

- ☐ Assess stability (vital signs, extent of blood loss, fetal monitoring status)
- ☐ Assess and prepare surgical help, equipment, & transfusion capability (see contact numbers below)
- ☐ Consider transport to facility with accreta experience if patient is stable
- ☐ Contact possible accepting facility

Diagnosis at Laparotomy:

If located at facility without accreta experience and if transport may be option:

- ☐ Assess stability (vital signs, extent of blood loss, hemodynamics, fetal status)
- ☐ Assess placental location visually and by intra-operative ultrasound
- ☐ Assess and prepare resources (surgical help, equipment, & transfusion capability; see contact numbers below)
- ☐ Assess transport capabilities (includes contact to possible accepting facility)
- ☐ Consider delaying uterine incision until resources available at facility (if maternal and fetal status permits), or
- ☐ Consider no uterine incision, close abdomen, & prepare for transport to referral center (if fetal and maternal status permits), or
- ☐ Consider delivery of fetus by fundal incision (or incision that avoids placenta if mapping is possible), closure of uterus and abdomen, & transport if stable and appropriate
- ☐ If transporting, photograph intraoperative findings for receiving facility

If proceeding to cesarean hysterectomy

The above is intended to serve as a guideline and not intended to be a standard of care. Care should be based on the judgment of the physician based on the individual patient's condition.