IR Embolization for Delayed Hysterectomy after Classical Cesarean

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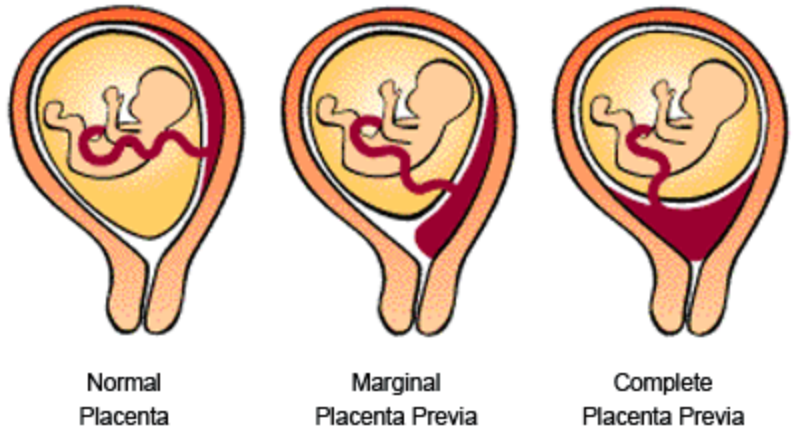
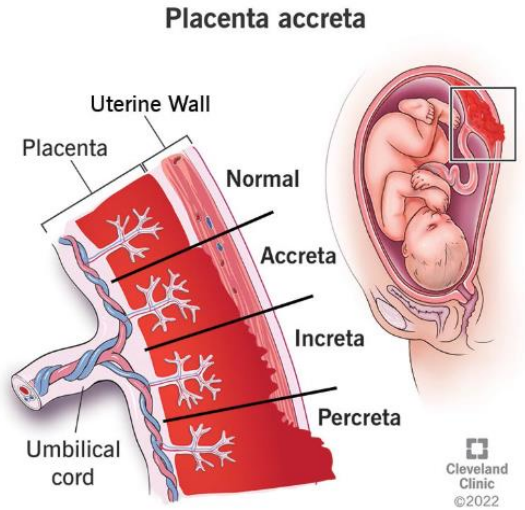
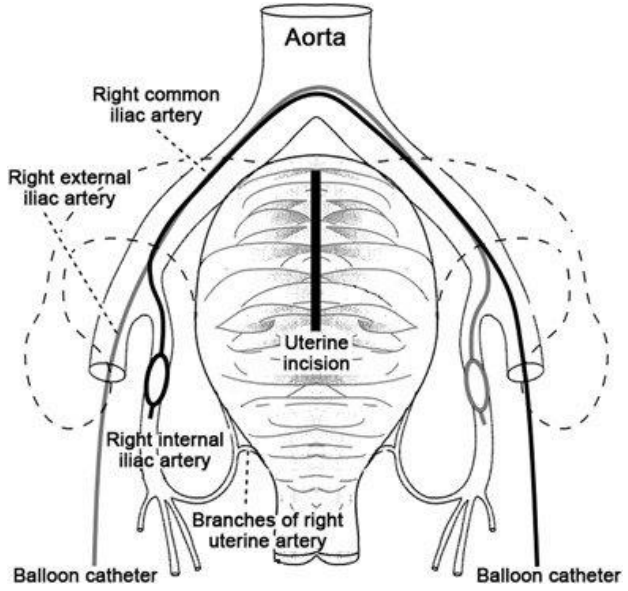
Background:

- Placenta previa is the complete or partial covering of the internal os that affects 0.3-2% of pregnancies in 3rd trimester increasing risk for placenta accreta spectrum (PAS)
- In cases of morbidly adherent placenta, classical cesarean is recommended for surgical exposure with hysterectomy also advised to mitigate bleeding risk
- Though hemorrhage and transfusion represent 90% of PAS morbidity, uterine artery embolization (UAE) has been shown to improve outcomes
- We describe our institution's first coordinated UAE and delayed hysterectomy for PAS.







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Case Summary

- 35 year old G5P0131 with history of cesarean section x 1 and D&C x 2 at 26w1d admitted for vaginal bleeding with known placenta previa and accreta anteriorly, anterior wall thinning to 4mm, and recruited vessels in the cervix. At 27w5d she had increased bleeding.
- Multidisciplinary discussion between OB, MFM, GYN-ONC, Urology, Anesthesia, ICU, and IR. The decision was made to proceed with delivery via classical cesarean section, ureteral stent placement, and uterine artery embolization.
- Delivery plan: Blood bank notified for MTP preparation. A CSE, arterial line, and RIJ CVC were performed. Oxytocin 30u IV administered x2 and TXA 1000 mg IV was administered and repeated 30 min later at hysterotomy. Placenta retained and patient transferred to IR for bilateral UAE.
- She was admitted to the ICU for observation and discharged on POD #5 with plans for weekly coagulation studies and hysterectomy in 4 weeks.
- POD #11 patient experienced worsening vaginal bleeding. MRI performed showed percreta involving the anterior wall of the uterus and abutting the posterior wall of the bladder. She was transfused 2u RBC and discharged next day.
- POD #23 patient re-presented for continued bleeding. On POD #25 she underwent open TAH with salpingectomy. Intraoperatively the patient was transfused 4U PRBC, 2 FFP, 1U platelets, and 2L IVF and discharged POD 3 with normal coagulation studies.
- POD #11 from hysterectomy she re-presented with bleeding. Vaginal EUA revealed bleeding around R cuff which was reinforced. Interventional radiology repeated pelvic angiography with normal findings. She was discharged POD #14.
- Remains stable as outpatient with no further bleeding episodes

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Discussion

- PAS requires multidisciplinary planning to act quickly and prevent excessive bleeding.
- Anesthesiologists are vital in the administration of uterotonics, antifibrinolytic agents, blood products and are instrumental in coordinating care.
- Interventional radiology was consulted and available for direct transfer and embolization.
- UAE and delayed hysterectomy is a feasible option to reduce bleeding by at least 50% in cases of PAS and was particularly valuable in our patient with cervical vessels recruited.

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