OB CASE STUDIES
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Case #1
- 27 yo G4P3 @ 18 weeks for routine prenatal care
- PMHx: None
- PSHx: prior cesarean x 3
- Anatomy US: normal
  - Noted complete placenta previa

Case #1
- Continues routine prenatal care
- Repeat US for placenta evaluation at 31 weeks
  - Complete placenta previa
Case #1
- Referred to UAB for US evaluation
  - Confirmed placenta previa
  - ? Placental invasion of bladder
  - High concern for morbidly adherent placenta

Case #1
- Discussed delivery at UAB as a referral center
- Planned delivery at 35 weeks
- Planned steroids immediately prior to delivery
- Referral/consultation with GYN ONC

Case #1
- Patient presented to OSH
  - Severe abdominal pain
  - Significant vaginal bleeding
  - Given instability taken to OR
Case #1

- Intraoperative hemorrhage
  - Placenta manually removed
  - Hysterotomy closed
  - Bladder injury repaired by general surgeon
  - Transfusion of blood products begun with continued bleeding
  - EBL 3500cc
  - Transferred emergently

Case #1

- Arrival to UAB
  - Patient hemodynamically stable
  - Transfusion protocol initiated
  - CT scan obtained
    - Noted vascular extravasation

Case #1

- Taken immediately to interventional radiology
  - Uterine artery embolization attempted
  - Hypogastric artery embolized
  - Continued decrease in hemodynamic parameters consistent with intraabdominal bleeding
Case #1
- Continued decrease in hemodynamic parameters consistent with intraabdominal bleeding
  - Taken to OR with Gyn Oncology
    - Hysterectomy performed
    - Recognized defect in left uterus
- Postoperatively extubated
- Minimum additional blood product requirement
- Complete recovery

Morbidly Adherent Placenta
- Placenta invades or is inseparable from uterine wall
  - Average blood loss if 3000-5000cc
  - Other complications:
    - Blood transfusion requirement (90%)
      - >10 units PRBCs (40%)
    - Maternal mortality (7%)
Morbidly Adherent Placenta

- Risk factors
  - Previous myometrial surgery
  - History of cesarean ± placenta previa

Management

- Suspected morbidly adherent placenta based on risk
  - Targeted placental imaging by US
- Suspected on US or high probability
  - Transfer to appropriate level of care for delivery

Management

- Antenatal Planning
  - Multidisciplinary approach (MFM, Gyn Oncology, Anesthesia, Blood Bank)
  - Timing: 34-35\textsuperscript{6/7} weeks
  - Location and resources
  - Technique:
    - Vertical skin incision with classical/fundal uterine incision
    - No manipulation of placenta
    - Immediate hysterectomy
### Management

- **Unexpected at Laparotomy**
  - If prior to hysterotomy and patient stable
    - Delay uterine incision, close, transfer
  - If noted after hysterotomy
    - Call for help
    - Maintain hemodynamic stability
    - Consider conversion to General Anesthesia
    - Proceed with hysterectomy

### Case #2

- 24 yo G1P0 @ 32\(4/7\) weeks by early US
  - PMHx: none
  - PSHx: none
  - Uncomplicated prenatal course to date

- Presents with decreased fetal movement
- BP: 180/110
- Ultrasound: Intrauterine fetal demise
- Exam: Cervix closed, no bleeding
Case #2

- Admitted to L&D
  - Magnesium started
  - Labs:
    - HCT: 24        PLT: 100
    - INR: 1.2        Fibrinogen: 100

Case #2

- Transferred to UAB
  - BP: 80/60   HR: 120  T: 92°
  - Exam: Minimal vaginal bleeding
  - Labs:  HCT: 16     PLT: 75
    - INR: 2.2     Fibrinogen: undetectable

Case #2

- Transfusion protocol initiated
- IV fluids administered
- Rapid rewarming
Case #2
- Underwent spontaneous and extremely rapid labor during resuscitation
  - Significant hemorrhage intrapartum and postpartum
  - Transfusions continued

Case #2
- Massive transfusion protocol initiated
- Uterotonics attempted
- Bakri placed and successful
- Complete recovery

Stillbirth
- 25000 stillbirths annually
- Causes:
  - Genetic
  - Infectious
  - Placental abruption (#1)
Stillbirth

- Evaluation
  - Maternal and pregnancy history
  - Maternal status as time of demise
    - CBC, K-B, APLS, HgA1c, TSH, toxicology
  - Fetal autopsy and genetic studies
  - Placental evaluation

Placental Abruption

- Management
  - Treat underlying cause
  - Vaginal delivery
  - Anesthesia evaluation for likelihood of coagulopathy
  - Rapid intervention for coagulopathy even prior to delivery
Case #3
- 33yo G3P2 presents at 27 weeks with fevers, chills, cough, rhinorrhea x 3 days
- VS: T 100  RR 18  HR 105  BP 110/86
- O2 sat: 96%
- Fetal status: reassuring
- Discharged home with symptomatic tx

Case #3
- Re-presents with worsening symptoms, SOB, N/V
- VS: T 102  RR 30  HR 135  BP 90/76
- O2 sat: 92%
- Fetal status: reassuring

Case #3
- Patient admitted
- O2 placed
- IV Fluids started
- UA: negative
- SSE: unremarkable
- Rapid flu: positive
- CXR: ground-glass opacities with infiltrates
Case #3
- Oseltamivir started
- Additional coverage for pneumonia (abx)
- Continued supportive measures
  - IV fluids
  - O2
  - Full recovery

Influenza
- Pregnant women are high-risk
  - Increased risk of hospitalizations
    - Especially in 3rd trimester (3-4x)
    - Even higher if comorbid conditions
  - Increased ICU admission
  - Increased risk of death

Influenza
- Increased risk of adverse pregnancy outcomes
  - Preterm labor
  - Small for gestational age
  - Fetal loss
Influenza

Management

- Vaccination is key!
- Recognizing and treating with antiviral
  - Initiate treatment within 48 hrs of sx
  - Still beneficial up to 4 days of sx
  - Oseltamivir 75mg BID x 5 days

Influenza

Management

- Recognizing patients requiring admission:
  - Respiratory distress
  - Clinical instability
  - Severe N/V
  - Chest pain
  - Non-reassuring fetal status