

Anesthetic Management of a Parturient with Pathologic Uterine Ring

M. Sheikh, K. Thompson

Columbia University Irving Medical Center, New York, NY

Background:

- Bandl's ring (BR), aka pathologic uterine ring, is a constriction at the junction between a woman's thick upper uterine segment and thinned lower uterine segment during parturition
- Muscular band can entrap the fetal head and/or shoulders, leading to an inability to deliver the infant

Case:

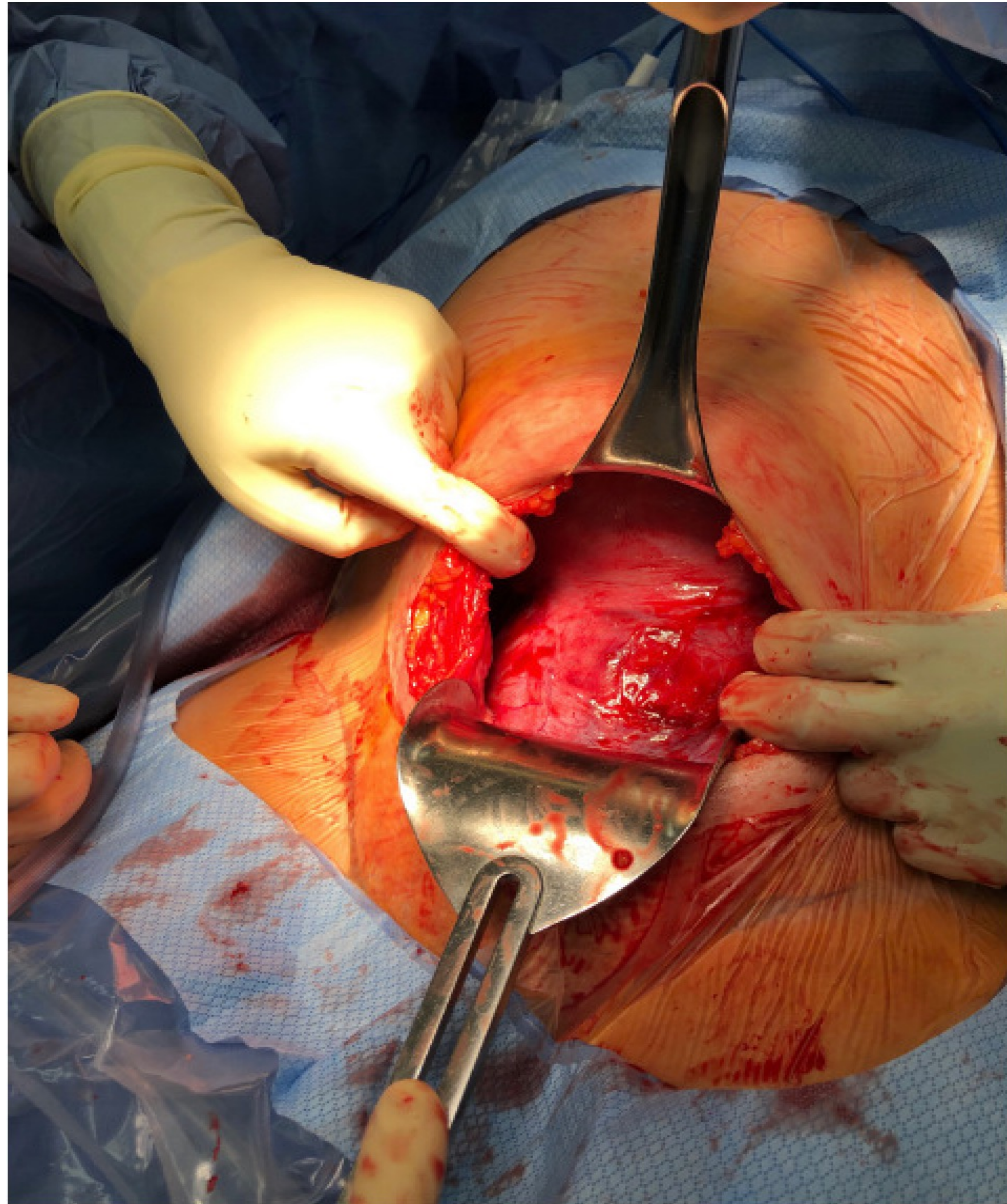
- 36-year-old G5P2 at 39w2d with no PMHx presented in labor and received uncomplicated combined-spinal-epidural (CSE)
- Taken for cesarean section due to arrest of descent and recurrent variable decelerations
- Epidural loaded with 20 ml 2% lidocaine with 1:200,000 epinephrine and 100 mcg fentanyl with adequate T4 sensory level
- On intraoperative inspection, tight BR noted to be separating thin lower uterine segment from body of uterus (image)
- Low vertical incision made across uterine ring and extended superiorly to deliver infant → APGAR 9 and 9
- After delivery of infant, brisk bleeding and severe uterine atony → horizontal extension of incision with "T" shaped hysterotomy noted

SOAP 2022 ANNUAL MEETING

Anesthetic Management of a Parturient with Pathologic Uterine Ring

M. Sheikh, K. Thompson

Columbia University Irving Medical Center, New York, NY



Bandl's Ring noted prior to uterine incision.

QBL = 2730 ml

Management of Postpartum Hemorrhage (PPH)

Additional lines placed: 18-gauge IV, arterial line

Uterotonics: 200 mcg IM methergine, 250 mcg IM carboprost x 2

Additional medications: 1 gram IV tranexamic acid

Blood products: 3 units packed red blood cells, 2 units fresh frozen plasma

Other interventions: Jada System (intrauterine device)

Case (cont'd):

- Epidural kept in place for 2 days postoperatively for pain control
- Soon after birth infant transferred to NICU due to seizure activity → left middle cerebral artery stroke
- Patient discharged home on postoperative day 3 and baby discharged 2 weeks later with oxcarbazepine therapy

Anesthetic Management of a Parturient with Pathologic Uterine Ring

M. Sheikh, K. Thompson

Columbia University Irving Medical Center, New York, NY

Discussion:

- Incidence of Bandl's Ring is approximately 1 in 5000 deliveries with poorly defined etiology
- Duration of labor, fetal head position, rupture of membranes, oxytocin use have not been found to be predisposing factors
- Bandl's ring is known to inhibit successful vaginal delivery and can be associated with neurologic consequences for the fetus

Key Points:

- ✓ Obstetric anesthesiologists should be vigilant of a possible increased risk of PPH due to a larger incision and subsequent impaired uterine contraction
- ✓ Consider keeping the epidural in place for at least 24 - 48 hours for postoperative pain control