

UNIT 2: OBSTETRICS SECTION C: PROCEDURES

Educational Topic 32: Obstetric Procedures

Rationale: Abnormalities of fetal growth carry increased risks for morbidity and mortality. Monitoring fetal growth is an important aspect of prenatal care.

Intended Learning Outcomes:

A student should be able to:

- Describe the key components of pre-operative evaluation and planning, including history, physical examination, and informed consent (including risks, benefits, and alternatives)
- Describe common measures for the prevention of infection, deep venous thrombosis and other peri-operative complications
- Describe key components of postoperative care
- Discuss common post-operative complications
- Describe the communication of operative findings and complications to patient and family.
- Describe common outpatient and inpatient obstetrical procedures with their indications and possible complications:
 1. Ultrasound
 2. Amniocentesis and Chorionic villous sampling
 3. Intrapartum fetal surveillance
 4. Induction and augmentation of labor
 5. Spontaneous vaginal delivery
 6. Vaginal birth after Cesarean delivery
 7. Operative vaginal delivery
 8. Breech delivery
 9. Cesarean delivery
 10. Postpartum tubal ligation
 11. Cerclage
 12. Newborn circumcision

TEACHING CASE

CASE: A 26 year old, G3P2002 woman presents to Labor and Delivery with a complaint of frequent, painful uterine contractions and leaking of fluid. She has been getting prenatal care through your clinic and review of her records shows her to be 36 6/7 weeks with a spontaneous dichorionic/diamniotic twin pregnancy. She has had an uncomplicated pregnancy to date, with the exception of obesity. She is 5' 4" tall and weighs 220 pounds, giving her a BMI of 37.8 kg/m². Your evaluation reveals the patient to be 8 cm dilated, fully effaced, and +1 station. Although, the membranes are ruptured, you are unsure of the presenting part. The fetal heart rate tracings for both twins are reported to be Category 1. During your evaluation, the patient repeatedly tells you that she really wants to deliver these twins vaginally because she delivered both of her prior babies vaginally, and doesn't want to be slowed down by the recovery from a Cesarean.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:

Competencies addressed:

- Patient Care
- Medical Knowledge
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

1. Is this patient a candidate for a vaginal delivery of her twins? What additional information do you need to make that decision?
2. You confirm that the patient is indeed a good candidate for vaginal delivery. What are the complications that this patient may encounter during her delivery?
3. What pre-delivery preparations can you make to minimize these risks for the patient?

4. The patient achieves the 2nd stage of labor and progresses well to deliver the first infant without complication. You perform an assessment for the presentation of the 2nd twin and find it to be breech. What are your options for delivering the 2nd twin?

5. You proceed with attempting vaginal delivery of the 2nd twin. While waiting for the 2nd fetus to progress in labor, you notice the onset of heavy vaginal bleeding. The fetal heart rate tracing becomes a persistent Category 2 and you perform a Cesarean delivery. What measures can you take intra-operatively to prevent complications from the Cesarean?

6. You complete the cesarean successfully, but note that the patient had an estimated blood loss of 1500 mL, probably due to an abruption. What measures can you take post-operatively to assess for and diagnose complications?

REFERENCES

Beckman CRB, et al. Obstetrics and Gynecology. 7th ed. Philadelphia: Lippincott, Williams & Wilkins, 2013.

Hacker NF, Moore JG, et al. Essentials of Obstetrics and Gynecology. 5th ed. Philadelphia: Saunders, 2010.

ACOG Practice Bulletin 17, Operative Vaginal Delivery, June 2000 (reaffirmed 2012).

ACOG Practice Bulletin 144, Multiple Gestation: Complicated Twin, Triplet, and High-order Multifetal Pregnancy, May 2014.