

## Fundamental Concepts of Electronic Fetal Monitoring

### Objectives

- Describe general principles of acid base physiology in electronic fetal monitoring
- Review oxygenation in normal labor
- Summarize basic features and patterns of electronic fetal monitoring tracings
- Compare and contrast the different category classifications for interpretations of electronic fetal monitoring tracings
- Distinguish when structured intermittent auscultation and continuous fetal monitoring should be used
- Discuss specific tracing findings and resultant management strategies

### Content Outline

1. Physiology of Fetal Heart Rate Monitoring
  - A. Acid base physiology
  - B. Oxygenation in normal labor
  - C. Basic fetal adaptive responses
2. Intrapartum Fetal Monitoring
  - A. Electronic fetal monitoring features and patterns
    1. Baseline
    2. Variability
    3. Contraction patterns
  - B. Periodic Changes
    1. Early
    2. Late
    3. Variable
    4. Prolonged
    5. Sinusoidal
3. Type of monitoring
  - A. Intermittent auscultation
  - B. Continuous electronic fetal monitoring
4. Category Classification and Management
  - A. Category I
  - B. Category II
  - C. Category III
5. Specific Tracing Findings and Management
  - A. Fetal bradycardia and tachycardia
  - B. Management of minimal and marked variability
  - C. Management of early, variable, late and prolonged decelerations
  - D. Significance of sinusoidal patterns

### Reading Material Resources- Page 2

## Reading Material Resources

**Module WB2310: Fundamental Concepts of Electronic Fetal Monitoring** is based on the resources listed below. A copy of each resource is included with the module.

Physiology of Fetal Heart Rate Monitoring, Heuser, Cara, Clinical Obstetrics and Gynecology, Volume 63, Number 3, 607-615

Intrapartum Fetal Monitoring, Arnold, et al., American Family Physician, Volume 102, Number 3, August 1, 2020, 158-167