

## Topical Issues in Fetal Assessment

### Objectives

- Review the normal features of an electronic fetal tracing
- Discuss mechanisms of intrapartum fetal compromise
- Understand the different types of fetal hypoxia manifested on the EFM tracing and their management
- Review the role of additional (adjunctive) tests of fetal well being
- Define the characteristics of the 3 tier EFM tracing classification
- Describe the components of category II (indeterminate) tracings
- Identify management strategies and delivery algorithms for category II and category III tracings

### Content Outline

1. EFM Tracing Features
  - A. Baseline fetal heart rate
  - B. Fetal heart rate variability
  - C. Accelerations and decelerations
2. Mechanisms of Intrapartum Fetal Compromise
  - A. Hypoxic stress
    1. Compression of the umbilical cord
    2. Uteroplacental insufficiency
    3. Different types of fetal hypoxia
  - B. Inflammatory damage
  - C. Acute fetal hypovolemia and hypotension
3. Adjunct Testing of Fetal Well Being
  - A. Pulse oximetry
  - B. STAN
  - C. Fetal scalp blood sampling
  - D. Fetal scalp stimulation
4. Interpretation of Category II and III Tracings
  - A. Prevalence
  - B. Significance
  - C. Management and algorithms

### Reading Material Resources

**Module WB2450: Topical Issues in Fetal Assessment** is based on the resources listed below. A copy of each resource is included with the module.

Intrapartum fetal surveillance: a physiological approach, Griffiths, et al., *Obstetrics, Gynaecology and Reproductive Medicine*, 32:8, 2022 179-187

Fetal Heart Rate Tracing Category II: A Broad Category in Need of Stratification, Shilkrut, et al., *NeoReviews*, Vol.22, No. 2, February 2021, e88-e93