

Objectives

- Summarize the risks, benefits and limitations of electronic fetal monitoring
- Discuss the physiology and pathophysiology of fetal oxygenation
- Explain the physiologic basis of fetal heart rate control
- List instrumentation used with electronic fetal monitoring and its functions
- Review the significance of fetal baseline rate, variability, arrhythmias and artifact
- Compare and contrast fetal heart patterns and periodic changes
- Describe the methods of antepartum and intrapartum fetal surveillance

Content Outline

1. Fetal Electronic Monitoring
 - 1.1 Instrumentation and function
 - 1.1.1 External
 - 1.1.2 Internal
 - 1.2 Benefits, risks and limitations
 - 1.3 Physiology and pathophysiology of fetal oxygenation
 - 1.4 Physiology of fetal heart rate control
2. Fetal heart rate evaluation
 - 2.1 Baseline rate
 - 2.2 Variability
 - 2.3 Arrhythmias
 - 2.4 Artifact
3. Fetal Heart Pattern Interpretation
 - 3.1 Accelerations
 - 3.2 Variable decelerations
 - 3.3 Prolonged decelerations
 - 3.4 Late decelerations
 - 3.5 Sinusoidal pattern
4. Antepartum and Intrapartum Surveillance
 - 4.1 Nonstress test
 - 4.2 Contraction stress test
 - 4.3 Vibroacoustic stimulation
 - 4.4 Biophysical profile
 - 4.5 Doppler flow studies

Reading Material Resources

This self assessment module is based on the resources listed below.

The reading materials are in the form of a PDF file and can be accessed from the online testing center once the module is purchased.

Chapter 3, Assessment of Fetal Well Being, Manual of High Risk Pregnancy & Delivery, Gilbert, Elizabeth, Mosby Elsevier, St. Louis, 2007, pages 43-86.