Baseline Variability

- Determined in a 10 minute window excluding accels and decels. Fluctuations in the baseline FHR that are irregular in amplitude and frequency. The fluctuations are visually quantitated as the amplitude of the peak-to-trough in bpm:

Absent Variability = amplitude undetectable range
Minimal Variability = amplitude greater than undetectable but less than or equal to 5 bpm
Moderate Variability = amplitude 6 – 25 bpm
Marked Variability = greater than 25 bpm

Acceleration

- Abrupt increase in FHR above the baseline – onset to highest point less than 30 seconds.
- The increase is calculated from the most recently determined portion of the baseline.
- The highest point is greater than or equal to 15 bpm above the baseline with duration of greater than or equal to 15 seconds but less than 2 minutes from onset to return to baseline.
- Prior to 32 weeks gestation use greater than or equal to 10 bpm for highest point and greater than or equal to 10 seconds for duration.
- Finally, an acceleration lasting greater than or equal to 10 minutes is defined as a baseline change.

Early Decelerations

- Gradual decrease in FHR (onset to lowest point at greater than or equal to 30 seconds) and return to baseline associated with a contraction.
- The decrease is calculated from the most recently determined portion of the baseline.
- The onset, lowest point (nadir) and recovery of the deceleration occur at the same time as the onset, highest point, and recovery of the contraction. (e.g. Mirror Image)

Late Decelerations

- Gradual decrease in FHR (onset to lowest point at greater than or equal to 30 seconds) and return to baseline associated with a contraction.
- Decrease is calculated from the most recently determined portion of the baseline.
- The onset, lowest point (nadir), and recovery of the deceleration occurs after the onset, highest point and recovery of the contraction.
- Late decelerations are defined as recurrent if they occur with greater than or equal to 50% of uterine contractions in any 20 minute segment.
- Late decelerations are defined as intermittent if they occur with less than 50% of uterine contractions in any 20 minute segment.

Variable Decelerations

- Abrupt decrease (is defined as) onset to the beginning of the lowest point in less than 30 seconds.
- The decrease is calculated from the most recently determined portion of the baseline.
- (The decrease) in FHR of greater than or equal to 15 bpm lasting greater than or equal to 15 seconds but less than 2 minutes from onset to return to baseline.
- When associated with contractions, variable may vary in onset, depth, and duration from contraction to contraction.
- Variable decelerations are defined as recurrent if they occur with greater than or equal to 50% of contractions in any 20 minute segment.
- Variable decelerations are defined as intermittent if they occur with less than 50% of contractions in any 20 minute segment.

Prolonged Deceleration

- Gradual (onset to lowest point at greater than or equal to 30 seconds) or abrupt (onset to lowest point less than 30 seconds) decrease of greater than or equal to 15 bpm lasting greater than or equal to 2 minutes but less than 10 minutes from onset to return to baseline.
- After 10 minutes, a prolonged deceleration may be referred to as a bradycardia.

Sinusoidal

- A regular oscillation of the baseline resembling a sine wave.
- A visually apparent, smooth, sine wave – like undulating pattern in FHR baseline with a cycle frequency of 3-5/min that persists for greater than or equal to 20 minutes.
- Baseline variability is absent.

Uterine Contractions

- Normal - Less than or equal to 5 contractions in 10 minutes, averaged over a 30 minute window.

Tachysystole (changed from hyperstimulation)

- Greater than 5 contractions in 10 minutes averaged over a 30 minute window.
- Tachysystole (Hyperstimulation) is defined by the contraction pattern only and is independent of FHR changes.
- The terms hyperstimulation and hypercontractility are not defined and should be abandoned.

WIS Clinical Education
January 2013

Banner Health®

NICHD Fetal Monitoring Definitions

Reviewed January 2013

In November of 2010 a Banner wide group of physicians and nurses agreed toadopt NICHD standard definitions with a few modifications. Our goal was to improve the culture of safety. This includes having a highly reliable perinatal organization, provide standardized definitions and protocols, use evidenced based practice to guide our care and improve communication. All of this will improve patient outcomes, which is our primary goal.

Baseline Fetal Heart Rate

- Normal baseline FHR = 110 – 160 bpm defined in increments of 5 bpm.
- Approximate mean bpm during a 10 minute window, excluding accels and decels and periods of marked FHR variability.
- There must be at least 2 minutes of identifiable baseline segments (not necessarily contiguous) in any 10 minute window, or the baseline for that period is indeterminate.
- Document the baseline rate in increments of 5 bpm.

Bradycardia

- A drop in FHR to less than110 bpm from an originally normal (110 – 160 bpm) baseline FHR for greater than 10 minutes.

Tachycardia

- A sustained baseline FHR greater than 160 bpm for greater than 10 minutes.