Interpretation of Fetal Heart Rate Monitoring

1. Indications
    a. Assessment of fetal well being
    b. Maternal disease: e.g. diabetes, preeclampsia, lupus
    c. Fetal compromise: e.g. IUGR, oligohydramnios, multiple gestation
    d. Placental dysfunction: e.g. abruption, previa
2. Types of testing
    a. Nonstress test
    b. Contraction stress test
    c. Continuous electronic intrapartum fetal heart monitoring
3. Fetal Heart Rate Baseline
    a. Normal 110-160
    b. Approximate mean FHR rounded to 5 bpm during a 10 min segment
    c. Baseline duration must be at least 2 minutes
    d. Bradycardia <110 bpm
    e. Tachycardia >160 bpm
4. Long term variability
    a. Irregular fluctuations in baseline of FHR with peak to trough as listed below
    b. Absent: no amplitude change
    c. Minimal: amplitude change $\leq$ 5 bpm
    d. Moderate: amplitude change 6-25 bpm
    e. Marked: amplitude change > 25 bpm
5. Accelerations
    a. Increase in baseline >15 bpm lasting >15 seconds but < 2 minutes
    b. Prior to 32 wks gestation use >10 bpm for >10 seconds
    c. Presence of 2 accels in 20 min defines “reactive NST”
6. Decelerations
    a. Early
        i. Decrease in fetal heart rate associated with contraction
        ii. Nadir of deceleration occurs at same time as peak of contraction
        iii. Associated with head compression
    b. Late
        i. Decrease in FHR in which nadir occurs after peak of contraction
        ii. Associated with uteroplacental insufficiency
    c. Variable
        i. Decrease in heart rate that may or may not correlate with contraction
        ii. Prolonged deceleration if lasts >2 min but < 10 min
        iii. Associated with cord compression