### Algorithm for Management of Category II Fetal Heart Rate Tracings

#### FIGURE 1
Algorithm for management of category II fetal heart rate tracings

- **Moderate variability or accelerations**
  - Yes
  - **Significant decelerations with ≥50% of contractions for 1 hour**
    - Yes
    - **Significant decelerations with ≥50% of contractions for 30 minutes**
      - Yes
      - **Persistent pattern**
        - Yes
        - **Observe for 1 hour**
      - No
        - **Observe**
        - **Cesarean or OVD**
  - No
    - **Normal labor progress**
    - **Normal progress**
      - Yes
      - **Observe**
      - **Cesarean or OVD**
    - No
      - **Cesarean**
      - **Manage per algorithm**

*Note: OVD, operative vaginal delivery.

*That have not resolved with appropriate conservative corrective measures, which may include supplemental oxygen, maternal position changes, intravenous fluid administration, correction of hypotension, reduction or discontinuation of uterine stimulation, administration of uterine relaxant, amnioinfusion, and/or changes in second stage breathing and pushing techniques.

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### TABLE
Management of category II fetal heart rate patterns: clarifications for use in algorithm

1. Variability refers to predominant baseline FHR pattern (marked, moderate, minimal, absent) during a 30-minute evaluation period, as defined by NICHD.
2. Marked variability is considered same as moderate variability for purposes of this algorithm.
3. Significant decelerations are defined as any of the following:
   - Variable decelerations lasting longer than 60 seconds and reaching a nadir more than 60 bpm below baseline.
   - Variable decelerations lasting longer than 60 seconds and reaching a nadir less than 60 bpm regardless of the baseline.
   - Any late decelerations of any depth.
   - Any prolonged deceleration, as defined by the NICHD. Due to the broad heterogeneity inherent in this definition, identification of a prolonged deceleration should prompt discontinuation of the algorithm until the deceleration is resolved.
4. Application of algorithm may be initially delayed for up to 30 minutes while attempts are made to alleviate category II pattern with conservative therapeutic interventions (eg, correction of hypotension, position change, amnioinfusion, tocolysis, reduction or discontinuation of oxytocin).
5. Once a category II FHR pattern is identified, FHR is evaluated and algorithm applied every 30 minutes.
6. Any significant change in FHR parameters should result in reapplication of algorithm.
7. For category II FHR patterns in which algorithm suggests delivery is indicated, such delivery should ideally be initiated within 30 minutes of decision for cesarean.
8. If at any time tracing reverts to category I status, or deteriorates for even a short time to category III status, the algorithm no longer applies. However, algorithm should be reinstated if category I pattern again reverts to category II.
9. If fetus has a category II FHR pattern for a period of time, delivery may be considered in cases of extreme prematurity, irrespective of certain FHR patterns of concern in more mature fetus (eg, minimal variability) or absence of such fetuses to tolerate intrapartum events leading to certain types of category II patterns are well defined. This algorithm is not intended as guide to management of fetus with extreme prematurity.
10. Algorithm may be overridden at any time if, after evaluation of patient, physician believes it is in best interest of the fetus to intervene sooner.

*Clark, Category II FHR, Am J Obstet Gynecol 2013.*
Appendix Q
Algorithm for the Management of Intrapartum Fetal Heart Rate Tracings

<table>
<thead>
<tr>
<th>Category I</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate variability w/o late or variable decels or tachycardia</td>
<td>Marked variability or moderate variability w/ decels or w/ tachycardia ≥ 20 min</td>
<td>Absent variability w/o decels and w/ or w/o tachycardia ≥ 20 min</td>
</tr>
<tr>
<td>May observe</td>
<td>Minimal variability w/ or w/o decels or w/ or w/o tachycardia ≥ 20 min</td>
<td>Prolonged decel ≤ 60 BPM (or ≤ 80 BPM if remote from delivery)</td>
</tr>
<tr>
<td>ABCD*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Acoustic or scalp stimulation

If no acceleration or return of moderate variability, then evaluate evolution of tracing

If preceding tracing not associated with significant acidemia, then ABCD*

If preceding tracing associated with significant acidemia, then proceed to urgent delivery

If acceleration or return of moderate variability, then ABCD*

Repeat testing if minimal or absent variability persists for 20 min

If minimal or absent variability persists for 60 min w/o accel or return of moderate variability to acoustic or scalp stim, then proceed to urgent delivery

Tracings Associated with Significant Acidemia

- Minimal or absent variability for ≥ 60 min with recurrent late or variable decels or w/o accels
- Category III for ≥ 20 min w/o response to acoustic/ scalp stim
- Bradycardia ≤ 60 BPM

Page 1 of 2 * Refer to next page for details of ABCD

Adapted with Permission from the Women and Children’s Department of Kaiser Permanente Roseville Medical Center
This document is intended to assist the provider in the management of variant intrapartum fetal heart rate tracings. It is not intended to cover all possible clinical situations. It should not be strictly adhered to when sound clinical judgment dictates otherwise.