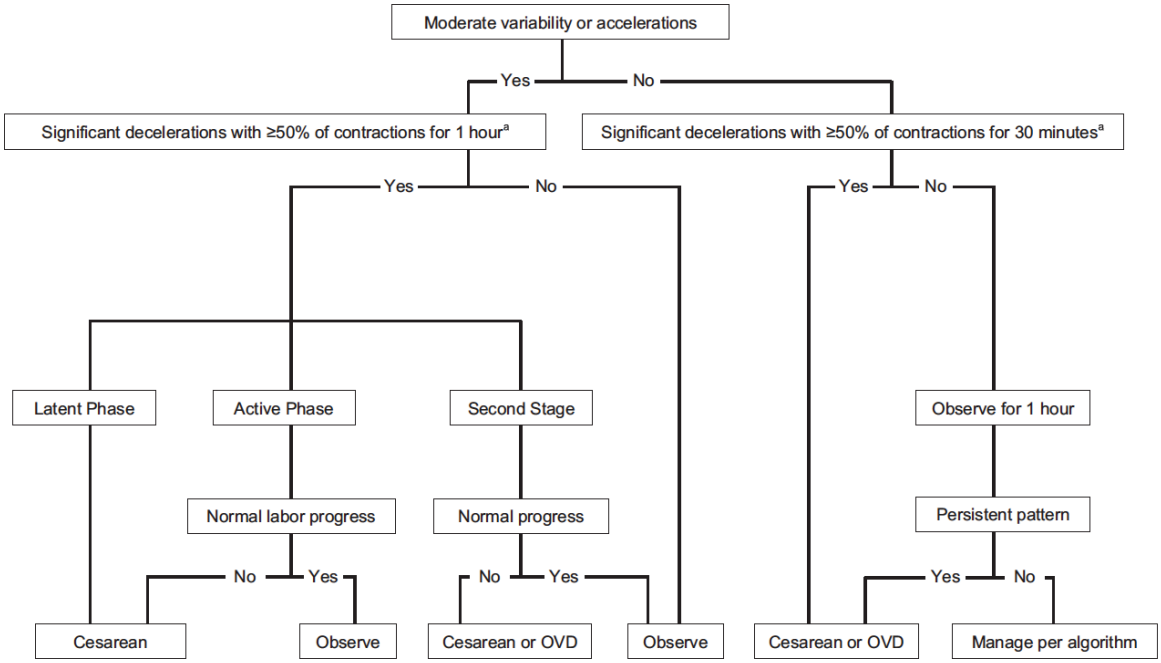
Appendix P
Algorithm for Management of Category II Fetal Heart Rate Tracings

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



OVD, operative vaginal delivery.

[a]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.

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 reinstituted if category I pattern again reverts to category II.
9. In fetus with extreme prematurity, neither significance of certain FHR patterns of concern in more mature fetus (eg, minimal variability) or ability 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.

FHR, fetal heart rate; *NICHD*, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development.

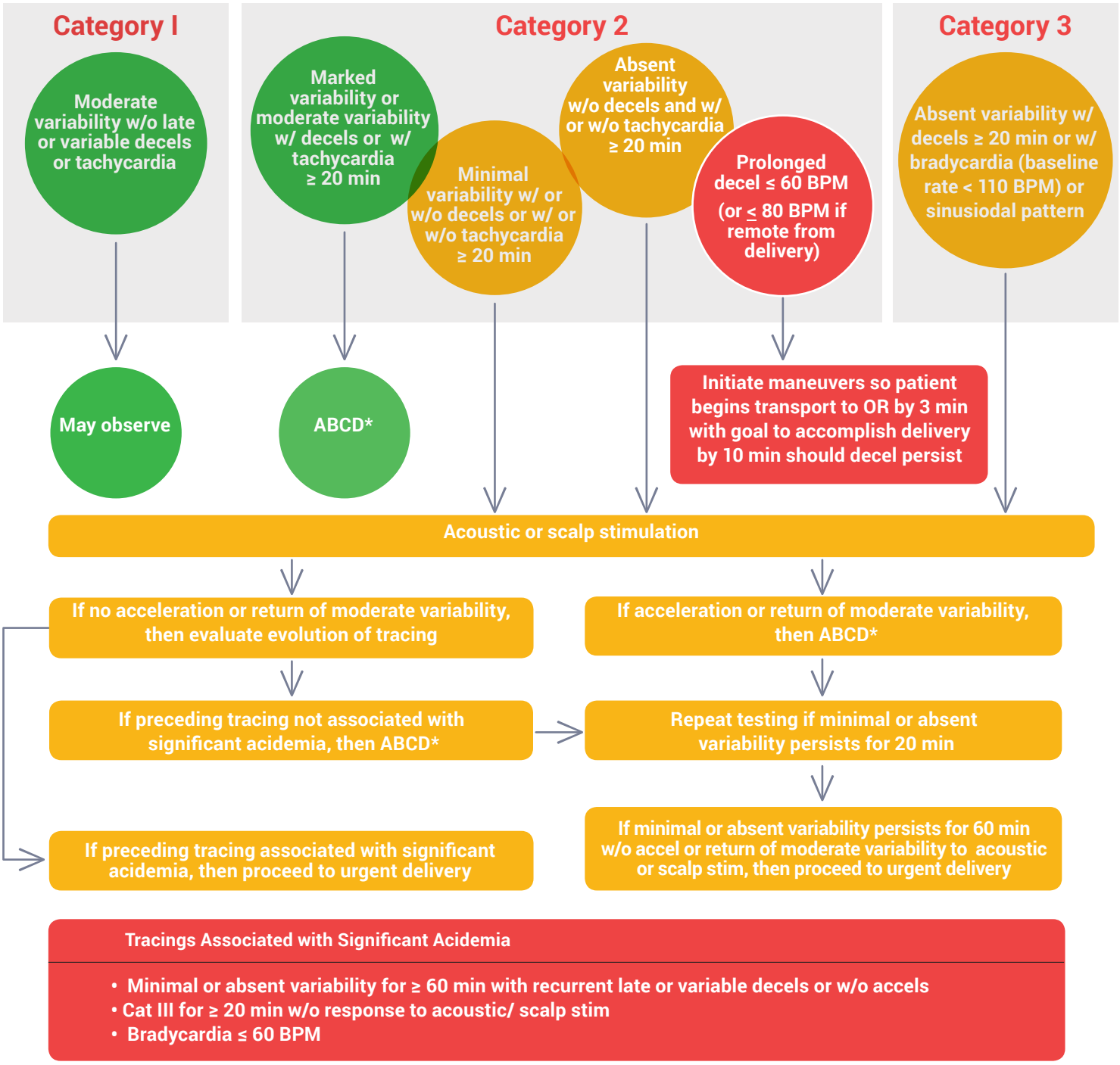
Clark. Category II FHRT. Am J Obstet Gynecol 2013.

Graphic reprinted with permission

Appendix Q

Algorithm for the Management of Intrapartum Fetal Heart Rate Tracings

CMQCC
California Maternal Quality Care Collaborative

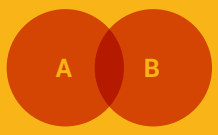


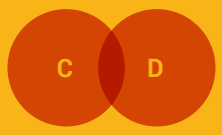
Page 1 of 2 * Refer to next page for details of ABCD

Adapted with Permission from the Women and Children's Department of Kaiser Permanente Roseville Medical Center

Appendix Q

Algorithm for the Management of Intrapartum Fetal Heart Rate Tracings





A Assess Causes of Variant Pattern

- Check maternal O2 Sat
- Check maternal vitals
- Check for tachysystole or tetanic contraction
- Vaginal exam to r/o imminent delivery or cord prolaspe
- Consider abruption or uterine rupture

B Begin Conservative Measures

- Administer O2, change maternal position, discontinue pitocin
- Consider amnioinfusion for variable decels
- Consider IV fluids or pressors for hypotension
- Consider Nitroglycerin or Terbutaline for tachysystole or tetanic contraction
- Consider antibiotics for maternal infection

If minimal or absent variability for > 20 min

C Consider Obstacles to Rapid Delivery

- Get OR or LDR ready and assemble team
- Get informed consent
- Check maternal readiness (IV access, blood products, labs, foley, adequacy of epidural)
- Check fetal variables (EGA, EFW, presentation)

D Determine Decision to Delivery Time

- Consider fetal variables that affect fetal status (EGA, EFW, presentation)
- Consider maternal variables that affect fetal status (diabetes, hypertension, substance abuse, etc...)
- Consider maternal variables that affect delivery (obesity, prior surgery, parity)
- Consider efficiency of team

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.