Intrapartum FHR Monitoring Management Decision Model©

Confirm FHR and uterine activity

FHR Category?

I

Is the patient “low-risk”?

Yes

Routine Surveillance

- Every 30 min in the active phase of the 1st stage
- Every 15 min in the second stage

No

II or III

“ABCD”

“A” - Assess oxygen pathway and other causes*
“B” - Begin corrective measures if indicated

FHR Category?

I

II

III

Presence of moderate variability or accelerations
and
Absence of clinically significant decelerations

Yes

No or unsure

“C” - Clear obstacles to rapid delivery
“D”- Determine decision to delivery time

Is vaginal delivery likely before the onset of metabolic acidemia and potential injury?

Yes

No or unsure

Heightened Surveillance

- Every 15 min in the active phase of the 1st stage
- Every 5 min in the second stage

Expedite Delivery

Fetal Heart Rate Categories

I

Category I includes all of the following:
- Baseline rate 110-160 bpm
- Moderate variability
- No late decelerations
- No variable decelerations
- No prolonged decelerations

II

Category II includes all tracings not assigned to Category I or Category III

III

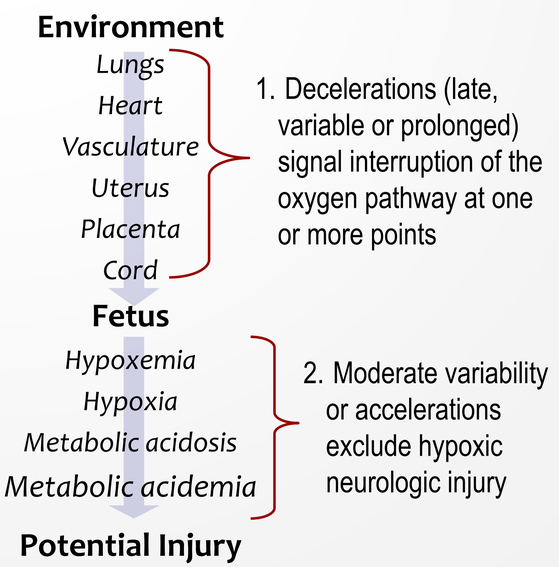
Category III includes at least one of the following:
- Absent variability with recurrent late decelerations
- Absent variability with recurrent variable decelerations
- Absent variability with bradycardia for at least 10 min
- Sinusoidal pattern for at least 20 min

A Practical "ABCD" Checklist Approach to FHR Management

	"A" Assess Oxygen Pathway	"B" Begin Corrective Measures
Lungs	❑ Airway and breathing	❑ Supplemental oxygen
Heart	❑ Heart rate and rhythm	❑ Position changes ❑ Fluid bolus
Vasculature	❑ Blood pressure ❑ Volume status	❑ Correct hypotension
Uterus	❑ Contraction strength ❑ Contraction frequency ❑ Baseline uterine tone ❑ Exclude uterine rupture	❑ Stop or reduce stimulant ❑ Consider uterine relaxant
Placenta	❑ Check for bleeding ❑ Exclude abruption	
Cord	❑ Vaginal exam ❑ Exclude cord prolapse	❑ Consider amnioinfusion

	"C" Clear Obstacles to Rapid Delivery	"D" Determine Decision to Delivery Time
Facility	Confirm: ❑ OR availability ❑ Equipment availability	Consider ❑ Facility response time ❑ Location of OR
Staff	Consider notifying ❑ Obstetrician ❑ Surgical assistant ❑ Anesthesiologist ❑ Neonatologist ❑ Pediatrician ❑ Nursing staff	Consider: ❑ Staff availability ❑ Training ❑ Experience
Mother	Consider ❑ Informed consent ❑ Anesthesia options ❑ Laboratory tests ❑ Blood products ❑ Intravenous access ❑ Urinary catheter ❑ Abdominal prep ❑ Transfer to OR	❑ Surgical considerations *(prior abdominal or uterine surgery)* ❑ Medical considerations *(obesity, hypertension, diabetes)* ❑ Obstetric considerations *(parity, pelvimetry, placentation)*
Fetus	Consider: ❑ Estimated weight ❑ Gestational age ❑ Presentation ❑ Position	Consider: ❑ Numer of fetuses ❑ Estimated fetal weight ❑ Gestational age ❑ Presentation ❑ Position ❑ Anomalie
Labor	❑ Consider IUPC	Consider: ❑ Arrest or protraction disorder ❑ Remote from delivery ❑ Poor expulsive efforts

Two Principles of Fetal Heart Rate interpretation



*Other Causes of Fetal Heart Rate Changes

Fetal	Maternal
❑ Fever	❑ Fever
❑ Infection	❑ Infection
❑ Medications	❑ Medications
❑ Anemia	❑ Hyperthyroidism
❑ Arrhythmia	
❑ Heart block	
❑ Congenital anomaly	
❑ Extreme prematurity	
❑ Preexisting neurologic injury	
❑ Sleep cycle	