Beyond the Basics: The Art and Science of Tracing Interpretation

Session 3:
August 16, 2017
Wisconsin Association for Perinatal Care (WAPC)

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No conflicts to disclose.
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Notice of disclosures

• Notice of requirements for successful completion
  – Registrants must attend full session and complete evaluation to receive contact hours

• Conflicts of Interest
  – None to report

• Financial Disclosures
  – None

• Sponsorship or commercial support
  – None

• Non-endorsement of products
  – The speaker does not endorse the use of any particular medications or products as part of this educational session

• Off-label use
  – The speaker may discuss the off-label use of misoprostol and terbutaline as they relate to labor and delivery.
Before we begin...

• Listen-only mode

• Questions – please ask, please answer!
  – Raise your hand
  – Type into the Question Pane
  – Out of time? Email wapc@perinatalweb.org

• Technical problems: Email Barb Wienholtz at wienholtz@perinatalweb.org or call at 608-285-5858, ext. 201
Before we begin...

The content presented today is a case study. Components of this case were chosen based on their applicability to achieve learning objectives for this presentation. Do not assume the patient featured in the case was cared for by the instructor or at the facility at which the instructor is employed.

The discussion will focus on interpretation of the electronic fetal monitoring (EFM) tracings for the purpose of education. At times, the discussion may lead to the care decisions made based on EFM interpretation.

IF the instructor shares details regarding actual or potential care decisions, please note those decisions do not necessarily reflect the opinions of the instructor, a particular provider, the standard of care for any particular institution or facility, or of WAPC.
Objectives

At the conclusion of the session, participants will be able to:

1. Systematically review the fetal monitoring data to identify the fetal heart rate pattern classification (category).
2. Discuss interventions/management of the fetal heart rate patterns based on their pathophysiology.
• Identify required actions correctly to manage women with abnormal fetal heart rate patterns.
The 2008 National Institute of Child Health and Human Development (NICHD) Report of Fetal Heart Rate Monitoring

- Defined standard fetal heart rate nomenclature
- Identified three categories for fetal heart rate interpretation
- Proposed future research
2008 NICHD Report

- Report endorsed by:
  - AWHONN-endorsed and incorporated in fetal monitoring curriculum
  - American College of Nurse Midwives
  - American Academy of Family Practice

"Management of Intrapartum Fetal Heart Rate Tracings"

- Reviewed:
  - Nomenclature
  - Fetal Heart Rate Interpretation (categories)

- Provided framework for evaluation and management of intrapartum patterns based on categories

- Assessment algorithm for fetal heart rate patterns

- Intrapartum resuscitative measures

- Management of uterine tachysystole

The following questions are used to evaluate every tracing, followed by specific questions:

1. What is the contraction pattern? (interval, duration, resting tone if appropriate)
2. What is the baseline fetal heart rate?
3. What is the baseline variability?
4. Are there any periodic changes present?
5. Are there any episodic changes present?
6. What are the probable causes of the changes present?
7. When was the last time there was either moderate variability or an acceleration?
• Interpretation
• Interventions/Communication
• Documentation in chart
• **SBAR**
  - *Situation*
  - *Background*
  - *Assessment*
  - *Recommendation*
Case Scenario #1

• 41 weeks
• SROM w/clear fluid
• 29 years old
Poll Question #1

In addition to fetal tachycardia, which of the following are included in the presumptive diagnosis of chorioamnionitis?

a. Maternal temp of 100.1 on 2 occasions, 30 minutes apart without another clear source of infection

b. One temp greater than 102.2 and purulent amniotic fluid

c. Maternal white cell count > 15,000/mm in the absence of corticosteroids

d. + gram stain of the amniotic fluid or placenta
Poll Question #2

Babies that have an umbilical cord pH of less than 6.85 will have some degree of brain injury.

a. True
b. False
Non-viable due to anencephaly.
Case Scenario #2

- 39 weeks
- G5 P4
- Plans natural childbirth
- Induced due to history of precipitous labors
- No other risk factors
- Uncomplicated pregnancy
Poll Question #3

Which of the following interventions are evidence-based in the management of Category II fetal heart rate tracings?

a. Observe the mother
b. Cesarean Section
c. Operative vaginal delivery
d. All of the above
e. None of the above
Confirm fetal heart rate and uterine activity

Fetal heart rate Category? - II or III

Low Risk?

Yes

Routine Surveillance
- At least every 30 min in the first stage
- At least every 15 min in the second stage

No

Heightened Surveillance
- At least every 15 min in the first stage
- At least every 5 min in the second stage

“ABCD”
- Assess oxygen pathway and consider other causes
- Begin conservative corrective measures as needed

Fetal heart rate Category? - III

Moderate variability and/or accelerations? and
No clinically significant decelerations

Not sure

“ABCD”
- Clear obstacles to rapid delivery
- Determine decision to delivery time

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

Yes

No

Expedite Delivery

The main risk factors for cerebral palsy include:

a. Fetal hypoxia in labor, intrauterine infection, and low birth weight

b. Maternal drug use, low birth weight, and multiple gestation

c. Low birth weight, intrauterine infections, and multiple gestation

d. Intrauterine infection, maternal drug use, and fetal hypoxia in labor
• STAT C/S
• Apgars 1,3,7
• Baby went to NICU and ultimately did well
Case Scenario #3

- 39 weeks
- G1 P0
- Risk factors: hydramnios, LGA, abnormal glucose tolerance test.
- Admitted night before for ECV and cervical ripening
- Night shift nurse reports Category I w/ accels.
Poll Question #5

Which condition listed below is not associated with hydramnios?

a. Rh-sensitized pregnancies
b. Polycystic kidneys
c. Gestational and Type diabetes
d. Fetal gastrointestinal obstruction
The primary response in variable decelerations is chemoreceptor mediated.

True or False
Indications for cord gas at delivery include all but:

a. C/S for fetal compromise
b. Severe growth restriction
c. Low 1 minute Apgar
d. Multiple gestation
Guess the Apgars

a. 1,2,5
b. 2,4,8
c. 1,1,4
d. 2,7,8
Outcome Case #3

- Baby required resuscitation with > 21 % O2
- Several hours in the observation nursery
- Discharged home with the mother
References


Discussion

Questions?

Comments?
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  • email: wapc@perinatalweb.org

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• Archived version

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• Don’t miss the next session: September 27, 2017
Thank-you