Assessment of the OB Patient Presenting to the ED

MEWS, PBWS, Transfers,
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Disclosures

• I have no financial disclosure to make
• I steal slides shamelessly but give credit
Housekeeping

• CME’s – working with the CME office at the University Of Iowa –
  • Both CME’s and EMS credits will be available starting in October 2021
• Still waiting on the date that our team can start visiting facilities
  • I personally feel this is getting close
• Chat your name, facility attendees in the chat box
• Who is new on this call today – give us a thumbs up
Objectives

• At the conclusion of this presentation participants will be able to:
  • Identify words and their definitions specific to the field of obstetrics
  • Create a binder specific to the OB patient
  • Be able to create a transfer plan from the ED to a facility with OB services
“Plans are nothing; planning is everything.” - Dwight D Eisenhower
Today’s Topics

• Maternal Early Warning Signs (MEWS) - Jill
• How important is a BP? Kristal
• Post Birth Warning Signs (PBWS) Kristal
• Building your toolkit – Jill
  • Vocabulary
  • Transfers
• Wrap up Jill
  • Evaluations
Assessment
Maternal and Fetal
Continue Creating Your Toolkit

- Information at your fingertips
- Transfer Information
- Checklists
- Protocols
- Guidelines
• Vocabulary
• MEWS – Maternal Early Warning Signs
• MEOWS - Maternal Early Obstetric Warning Signs
• PBWS – Post Birth Warning Signs
• Pre-Eclampsia
• Supine hypotension syndrome
  • Decrease in SBP of at least 15 – 30 mmHG – caused by compression of the inferior vena cava and aorta by the gravid uterus which leads to decreased venous return and thus hypoperfusion
• Amniotic Fluid – fluid surrounding infant inutero
• Amniotic Fluid Embolism – aka – anaphylactoid syndrome of pregnancy
  • When amniotic fluid or fetal cells hair, or other debris make their way into the blood – most likely to occur during delivery or in the immediate postpartum period
• Trimester
  • 1\textsuperscript{st} trimester
  • 2\textsuperscript{nd} trimester
  • 3\textsuperscript{rd} trimester

• Term – gestational age $> 37$ weeks
Toolkit Resources
Tool Kit Resources

• MEWS
• PBWS
Transfers

- Lateral Position when transferring a pregnant birth person 15 to 30 degrees
Transfer Communication

Triage → Assessment → Communication with birth person’s provider → Consult or communication with tertiary care center
Assessment 101
Establish Pregnancy Status

- Pregnant?
- Recently Pregnant? (< 6 weeks)
- Not Pregnant
- Unknown if Pregnant
MEWS

• Background
  • The United States Joint Commission requires hospitals to have written criteria to observe change or deterioration in a patient’s condition and how to recruit staff to manage patient care. Joint Commission Sentinel Event Alert, Issue 44: Preventing Maternal Death (2010)
  • Early warning signs are “... a set of predetermined ‘calling criteria’ (based on periodic charting of vital signs) as indicators of the need to escalate monitoring or call for assistance”

Maternal Assessment

Maternal Early Warning Criteria

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic Blood Pressure (mm Hg)</td>
<td>&lt;90 or &gt;160</td>
</tr>
<tr>
<td>Diastolic Blood Pressure (mm Hg)</td>
<td>&gt;100</td>
</tr>
<tr>
<td>Heart rate (beats per minute)</td>
<td>&lt;50 or &gt;120</td>
</tr>
<tr>
<td>Respiratory rate (breaths per min)</td>
<td>&lt;10 or &gt;30</td>
</tr>
<tr>
<td>Oxygen saturation on room air, at sea level %</td>
<td>&lt;95</td>
</tr>
<tr>
<td>Oliguria, mL/hr for ≥2 hrs</td>
<td>&lt;35</td>
</tr>
<tr>
<td>Maternal agitation, confusion, or unresponsiveness</td>
<td></td>
</tr>
<tr>
<td>Woman with preeclampsia reporting a non-remitting headache or shortness of breath</td>
<td></td>
</tr>
</tbody>
</table>
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Objectives

Discuss the importance of proper blood pressure monitoring in pregnancy

Identify common laboratory testings

Examine medications used in pregnancy
Blood Pressure Assessment

Proper Fitting:

• Arm supported at heart level
• Cuff bladder should encircle 80% or more of the patient’s arm
  • 22-26cm: Small adult
  • 27-34cm: Adult
  • 35-44cm: Large adult
  • 45-52cm: Adult thigh
• Sitting comfortably with legs uncrossed for 5 minutes
Hypertension in Pregnancy

Types of Hypertension in pregnancy:

• **Chronic Hypertension**: birthing person has prior to pregnancy or develops before 20 weeks of gestation.

• **Gestational Hypertension**: birthing person develops after 20 weeks; had normal blood pressure prior to pregnancy; and has systolic BP > 140mmHG or higher and diastolic >90mmHg.

• **Preeclampsia**: birthing person develops after 20 weeks; had normal blood pressure prior to pregnancy; and has systolic BP > 140mmHG or higher and diastolic >90mmHg. Affects all organs in woman’s body; can lead to HELLP syndrome or Eclampsia.
Blood Pressure Parameters

Criteria for Hypertension VS Severe Hypertension

**Hypertension:** Systolic BP $\geq 140$ mmHg and/or diastolic BP $\geq 90$ mmHg

**Severe Hypertension:** Systolic BP $\geq 160$ mmHg and/or diastolic BP $\geq 110$ mmHg
Common Laboratory Testing in Pregnancy

Labs

• Blood Type
  • If RH- and experiences vaginal bleeding or miscarriage may need RhoGAM

• Urinalysis
  • Protein
  • Bacteria

• Preeclampsia
  • Liver enzymes
  • CBC: Platelet count
  • Creatinine
  • Sometimes uric acid
Medications in Pregnancy

**Preterm labor**

- Terbutaline:
  - SubQ: 0.25mg
  - Slow contractions

- Magnesium Sulfate:
  - IV: Loading dose of 4-6 g diluted over 120 minutes; then continuous infusion of 2 grams
  - High risk of delivery between 24-32 weeks for neuro protection

- Corticosteroids (Betamethasone):
  - IM and will repeat dose in 24 hours: 12mg
  - Lung maturity
Medications in Pregnancy

Preeclampsia/hypertension

• Labetalol:
  • PO or IV; generally start with 20mg IV and can go up from there as needed.
  • Used to lower blood pressure
• Hydralazine:
  • IV or IM: 5mg
  • Used to lower blood pressure
• Nifedipine:
  • PO: 10-20 mg orally repeat in 30 minutes if needed
  • Used to lower blood pressure
• Magnesium sulfate:
  • IV; Loading dose of 4-6 g diluted over 120 minutes; then continuous infusion of 2 grams
  • Used to prevent seizures
Questions?
Differential Diagnosis

• MEWS
• Background:
Next Didactic

June 21, 2021 – Noon – 1:30
Maternal Assessment and Triage
Maternal Early Warning Signs
Post Birth Warning Signs
Please chat in or e-mail questions
Round Table and Interaction

Let’s Talk about today –
This is like “office hours”

Informal Time for
All Teach All Learn-

Share experiences with each other

We will be sending out an evaluation – please answer and provide feedback