The Complicated Obstetrical Patient: Preeclampsia, PRES and Post-Traumatic Stress Syndrome

Shelly Lopez-Gray, MSN, RNC, IBCLC
No Disclosures to Report
Objectives

• List 3 defining characteristics of preeclampsia with severe features.

• List two characteristics of PRES Syndrome.

• Describe three possible contributing factors that lead to post-traumatic stress syndrome.
What do we know about hypertension in pregnancy?

• We know it’s about blood pressure.
• We know there are different types.
• Providers diagnose and manage hypertension disorders of pregnancy differently.
• Methods to obtain blood pressure are variable.
Classification of Hypertensive Disorders of Pregnancy

Report of the ACOG Task Force on Hypertension in Pregnancy

- Four categories:

  1. Preeclampsia-eclampsia (BP elevation after 20 weeks of gestation with proteinuria or any of the severe features of preeclampsia listed below)

  2. Chronic hypertension (of any cause that predates pregnancy)
Classification of Hypertensive Disorders of Pregnancy

Report of the ACOG Task Force on Hypertension in Pregnancy

- Four categories:

3. Chronic hypertension with superimposed preeclampsia (chronic hypertension in association with preeclampsia)

4. Gestational hypertension (BP elevation after 20 weeks of gestation in the absence of proteinuria or any of the severe features of preeclampsia listed below)
Characteristics of preeclampsia with severe features

• Hypertension: systolic >160 or diastolic >110 on two occasions at least 4 hours apart while the patient is on bed rest (unless antihypertensive therapy is initiated before this time)
Characteristics of preeclampsia with severe features

- Thrombocytopenia (platelet count < 100,000)
- Impaired liver function (elevated blood levels of liver transaminases to twice the normal concentration), severe persistent RUQ or epigastric pain unresponsive to medication and not accounted for by alternative diagnoses, or both
Characteristics of preeclampsia with severe features

• New development of renal insufficiency (elevated serum creatinine greater than 1.1 mg/dL, or doubling of serum creatinine in the absence of other renal disease)

• Pulmonary edema

• New-onset cerebral or visual disturbances
How are we charting blood pressures?

• How is your patient positioned?

• How do you know that you’re using the appropriate size cuff?
  – Do you measure?
  – Do you teach them how to take their own blood pressure?
The diagnosis of preeclampsia with severe features is no longer dependent on the presence of proteinuria. Do not delay management of preeclampsia in the absence of proteinuria.
Are we educating perinatal patients about potential complications later in life?

- Cardiovascular risk increases
- Cardiovascular complications are diagnosed earlier in life
- More severe
A G2P1 at 35.4 weeks gestation presents for scheduled prenatal appointment.

- Hospitalized 7 days during first trimester with severe hyperemesis.
- Hospitalized 8 days during second trimester with viral meningitis.
- Subsequent fetal diagnosis of a massive cerebellum hemorrhage. Fetal prognosis unclear.
- Review of vital signs indicate blood pressures at the beginning of pregnancy ranging from 105-115 systolic and 58-74 diastolic, obtained with normal-sized adult blood pressure cuff.
• Currently gestational diabetic, taking Glyburide 5mg PO BID.

• Diagnosis of low AFI at 35 weeks – AFI 5.2

• Complains of dull headache, but states it’s “due to increase in Glyburide.”
• Severe blurry vision present. States she tried getting new contacts “a couple of weeks ago because it’s been difficult to see for the past 5 weeks.”

• Past history of possible (?) preeclampsia with prior pregnancy – “I had headaches the last month I was pregnant 7 years ago. They gave me medicine through my IV for my blood pressure when I went to the hospital after my water broke.”

• Patient delivered first child vaginally, states that she stayed hospitalized for four days after that delivery.
• Review of vital signs indicate blood pressures for past 4 weeks ranging from 135-148 systolic and 78-92 diastolic, obtained with large-sized adult blood pressure cuff.
• Patient was in process of doing a 24 hour urine prior to appointment, but states “my husband threw it away.”

• Patient states she does not want to be induced “unless it’s definitely preeclampsia.”

• Admitted immediately to antepartum unit for surveillance.
Day 1 of Surveillance

<table>
<thead>
<tr>
<th>Labs – Day 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platelets</td>
</tr>
<tr>
<td>AST</td>
</tr>
<tr>
<td>ALT</td>
</tr>
</tbody>
</table>

- 24-hour urine started.
Day 2 of Surveillance

• In the morning, patient begins to spontaneously vomit, but states “it’s because of the increased Glyburide.”

• By lunch, patient begins to tell staff that “something doesn’t feel right.”
Day 2 of Surveillance

- Patient transferred to labor and delivery.
- Magnesium Sulfate 6gm loading, 2gm maintenance dose initiated.
• Cervidil used to initiate induction of labor. Multiple doses of Labetalol administered.

<table>
<thead>
<tr>
<th>Labs – Day 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platelets</td>
</tr>
<tr>
<td>AST</td>
</tr>
<tr>
<td>ALT</td>
</tr>
</tbody>
</table>

• 24 hour urine – 3 gms.
• Decision for cesarean delivery

• Patient delivers vaginally unexpectedly.

• Baby boy delivered weighing 4 pounds and 5 ounces. Immediate admission to level IV NICU; placed on CPAP.
• Hospital policy states that mother unable to leave unit, due to infusion of magnesium sulfate. Magnesium sulfate discontinued 18 hours postpartum at mother’s request.

• Mother leaves unit and remains in NICU for 16 hours. On return, blood pressure 260/118. Magnesium sulfate reinitiated.

• Mother discharged 6 days postpartum. Newborn downgraded to level III NICU. Mother remains at newborn’s bedside for 22 days, until newborn discharged home.
• Complicated labor, delivery, and postpartum period.
• Unwanted induction.
• Uncertain prognosis of infant.
• Pregnancy didn’t go “as planned.”
Additional Resources online resources that will tell you everything you ever wanted to know about high blood pressure and pregnancy:


- ACOG Committee Opinion Number 623 – Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy and the Postpartum Period – Updated 2/2015

- Maternal Safety Bundle for Severe Hypertension in Pregnancy – This is a slide set for ob-gyns and health care providers developed as part of the Safe Motherhood Initiative, a collaborative project of ACOG, District II, and the New York State Department of Health’s Bureau of Women’s Health. Updated 1/2014

- California Preeclampsia Toolkit – Seriously, is there anything this collaborative doesn’t do?! They consistently produce amazing work. This is no different.
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

- Many providers do not correlate PTSD with traumatic birth experiences.
- Few resources available for providers or patients.
- Inconsistent follow-up.
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

- Research tells us that 15–53% of mothers and 8–33% of fathers with babies in the NICU suffer from Posttraumatic Stress Disorder (PTSD)
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

- Traumatic birth experiences
  - Lacerations
  - Unplanned cesarean deliveries
  - Unmanaged pain
  - Loss of what was expected
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

• NICU
  
  – Unfamiliar sights, sounds, and smells
  
  – Feelings of incompetence
  
  – Unpredictable progress and set-backs
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

• NICU
  – Loss of control.
    • Education
    • Consent
  – Patient’s rely on strangers to care for their newborn,
    • Vulnerable
    • Foreign
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

- For NICU parents
  - We need to help them REDFINE what it means to be a good parent
  - Praise
  - Reassure parents
  - Allow parents to do what they can
  - Include parents in decision making
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

- For NICU parents
  - Continue to assess maternal and paternal well-being
  - Hospital services
  - Community services
  - Support system
What do we know about post-traumatic stress syndrome (PTSD) in the perinatal patient?

• When women screen positive for postpartum depression, clinicians need to explore with new mothers if they are also experiencing any posttraumatic stress symptoms.

• Discuss these issues with patient and with patient’s support system.
  – Social service consult?
• Patient remains in NICU because she states she “can’t leave.”
• Patient requests a new NICU nurse after an incident of perceived hostility.
  • Patient limits eating and drinking to minimize bathroom breaks.
• Patient remains in chair, at infant’s bedside.
• At 1 week, 2 week, and 6 week postpartum visits, patient continues to complain of recurrent headaches and visual disturbances.

• Patient’s vision re-revaluated 6 months postpartum by optometrist. Multiple bilateral retinal tears and retinal hemorrhages noted. Laser treatment necessary.
• Referred to neurologist by optometrist for evaluation of persistent headaches.

• MRI scan revealed posterior reversible encephalopathy syndrome.
What do we know about Posterior Reversible Encephalapathy Syndrome (PRES)?

- Many nurses unfamiliar with diagnosis.
- Diagnosed by neuroimaging findings of vasoenic edema involving the posterior circulation.
What do we know about Posterior Reversible Encephalapathy Syndrome (PRES)?

• Rapidly developing, fluctuating, or intermittent hypertension carries a particular risk for hypertensive encephalopathy.

• Patients with untreated or undertreated chronic hypertension, renal failure, or preeclampsia-eclampsia are particularly vulnerable populations.

• In many patients, the syndrome occurs during the first six weeks after childbirth rather than during pregnancy.
What do we know about Posterior Reversible Encephalopathy Syndrome (PRES)?

The clinical syndrome is characterized by:

• Headaches - typically constant, nonlocalized, moderate to severe, and unresponsive to analgesia.

• Altered consciousness – ranging from mild somnolence to confusion and agitation, progressing to stupor or coma in extreme cases

• Visual disturbances – cortical blindness, blurred vision, photophobia, hemianopia

• Seizures
• How up-to-date is your professional practice regarding the complicated obstetrical patient?

• What do you do in your practice to assist your patient and their families?

• What resources are you consistently giving your new moms and their families?

• Are you talking to your patients?
• Hypertensive disorders are a frequent complication of pregnancy.

• There are many severe consequences that may arise from hypertension.

• Mismanagement of disease process may have lasting impact on patient and newborn.

• Educate patients on possible triggers for PTSD.
• Talk to your patient and her family about long-lasting complications from hypertensive disorders of pregnancy

• Gather hospital, community, and online resources to better aide the patient.

• TALK! TALK! TALK!


