TRENDS IN OBSTETRICS:
CLAIMS AND RISK MANAGEMENT
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Learning Objectives
This presentation will enable participants to:
• Apply knowledge of recurring issues in
  obstetric hospital and physician claims to
  develop risk management strategies
• Utilize at least two risk management
  interventions to reduce and/or prevent OB
  patient injuries

Conflict of Interest Disclosure
Paul Greve and Michael Geraghty do not have
any real or apparent conflict(s) of interests or
vested interest(s) that may have a direct bearing
on the subject matter of the continuing
education activity.

National Trends
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OBSTETRICS CLAIM TRENDS:
PHYSICIANS

Obstetrics Claim Trends: Physicians

Source: PIAA 2015
Most Expensive Procedures by 5-Year Intervals

THE DOCTORS COMPANY
CLOSED CLAIMS IN OBSTETRICS 2007-2014
Study Overview

- This study includes claims and lawsuits filed against physicians and hospitals
- These claims and lawsuits closed 2007-2014 (2nd Qtr.)
- Numbers of claims
  - Total number of claims for all specialties = 18,113
  - Total number of OB claims = 828
    - Claims for neonatal injuries = 322
    - Claims for maternal injuries = 506

Study Overview (Continued)

- This study includes all claims and suits regardless of whether payments were made to an injured party
  - 39% of neonatal injury claims resulted in a payment (indemnity)
  - 33% of maternal injury claims resulted in a payment (indemnity)

NEONATAL INJURIES

- Hypoxic-ischemic encephalopathy or asphyxia 36%
- Brachial plexus injury 24%
- Subdural/cerebral hemorrhage 5%
- Stillbirth – unspecified condition 2%
- Other specific complications of the procedure 2%
- Other specified birth trauma 2%

NEONATAL CLAIM ALLEGATIONS

1. Delay in treatment of fetal distress (fetal heart rate tracings usually category II or III as predictive of metabolic acidemia) 28%
   - 2007-2010 study 31%
   - 2011-2014 study 23%
   Body part injured = Brain
   - 2007-2010 study 60%
   - 2011-2014 study 47%

WHY WAS THERE A DELAY?

1. Nurses failed to identify fetal heart rate (FHR) tracings (usually Category II or III) as predictive of metabolic acidemia 11%
2. Nurses recognized FHR tracings as predictive of metabolic acidemia but failed to timely notify the attending physician 20%
   - Unable to determine the cause of the delay (busyness, interruptions, concerns about physicians’ reactions to the call, etc.?)
3. Physicians did not go to the hospital after receiving calls about FHR tracings predictive of metabolic acidemia 14%

MATERNAL CLAIM ALLEGATIONS

- Improper management of pregnancy 15%
- Diagnosis-related (failure, delay, wrong) 13%
- Improper performance of vaginal delivery 10%
- Improper performance of operative delivery 7%
- Retained foreign body 6%
- Improper performance of surgery 6%
OBSTETRICS CLAIM TRENDS: HOSPITALS

HOSPITAL CLAIMS FOR HIGH-RISK SERVICES GENERATE OVER HALF OF TOTAL LIABILITY DOLLARS

Based on closed claims data from BerkleyMed's proprietary hospital malpractice claims database.

Approximately 45% of claims costs come from two services - Obstetrics and Surgery.

OBSTETRICS CLAIMS-METRICS HOSPITALS

About one out of every 3,711 births results in a medical malpractice claim with indemnity.

The average value of these cases, including defense, is about $1.1M.

The cost per delivery to cover liability is, on average, $296.

Source: BerkleyMed, 2015

SETTLEMENT YEAR CLAIM FREQUENCY

The frequency of obstetric related claim settlements has stabilized in recent years.

<table>
<thead>
<tr>
<th>Settlement Year</th>
<th>Frequency per 10,000 Deliveries</th>
<th>Ground-Up</th>
<th>Excess of $1M</th>
<th>Excess of $3M</th>
<th>Excess of $5M</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3.3</td>
<td>0.79</td>
<td>0.35</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3.4</td>
<td>0.76</td>
<td>0.41</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>3.3</td>
<td>0.76</td>
<td>0.32</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>3.6</td>
<td>0.82</td>
<td>0.43</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>3.4</td>
<td>0.68</td>
<td>0.33</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>

Growth Rate 1.0% -2.4% -0.7% 1.7%

CNA HOSPITAL CLAIM TRENDS

CNA 2015 Claims Analysis: Key Findings

- Study time frame: 2005-2014
- Claim frequency: "remaining constant"
- Severity trended up from 2005 to 2014
- Perinatal claims had the highest average indemnity

FREQUENCY OF CLOSED CLAIMS BY CATEGORY OF PERINTANAL ALLEGATIONS*

(Percentage of 48 closed claims)

- Category 4: Other 6.3%
- Category 3: Quality of Care 8.3%
- Category 2: Failure to Identify or Diagnose Condition 14.6%
- Category 1: Failure to Intervene 70.8%

Source: CNA 2015
### Average Total Paid for Closed Claims by Category of Perinatal Allegations

<table>
<thead>
<tr>
<th>Allegation category</th>
<th>Average paid expense</th>
<th>Average paid indemnity</th>
<th>Average total paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2: Failure to Identify or Diagnose Condition</td>
<td>$70,925</td>
<td>$555,714</td>
<td>$626,640</td>
</tr>
<tr>
<td>Category 1: Failure to Intervene</td>
<td>$117,022</td>
<td>$329,158</td>
<td>$445,160</td>
</tr>
<tr>
<td>Category 3: Quality of Care</td>
<td>$25,562</td>
<td>$53,750</td>
<td>$79,312</td>
</tr>
<tr>
<td>Category 4: Other</td>
<td>$266</td>
<td>$34,103</td>
<td>$34,368</td>
</tr>
</tbody>
</table>

**Overall** $95,382 $320,097 $415,479

*Source: CNA 2015*

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### Patient Safety Risk Management Solutions

- National Quality Performance Measures - Decrease Early Elective Deliveries
- Modified Early Obstetric Warning System (MEOWS)
- Quantification of Blood Loss (QBL) vs. Estimated Blood Loss (EBL)
- Simulation
- Teamwork
- Technology

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### Early Elective Delivery

- *Elective* vaginal deliveries or *elective* cesarean births >= 37 and < 39 weeks
- For the mother, early elective inductions result in:
  - Stronger, more painful contractions
  - Prolonged labor
  - More cesarean births (double)
    - 12% rate spontaneous
    - 24% rate induced
  - Longer maternal length of stay

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### Early Elective Delivery (Continued)

- For the newborn, births before 39 weeks gestation result in higher rates of:
  - Adverse respiratory outcomes
  - Mechanical ventilation
  - Sepsis
  - Hypoglycemia
  - Difficulties with feeding
  - Difficulty with temperature regulation
  - NICU admissions

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### Results from Hard Stop

- Hard stop requires 39 weeks and one day if for a nonmedical reason
- Initial push-back from patients and providers
  - Desire early delivery for non-medical reasons
    - Uncomfortable, family in town, physician on call, fortune teller babies
  - Moms need education on newborn brain, lung and liver development
  - Providers need education on evidence-based medicine
- Improved outcomes
  - Reduction in maternal morbidity
  - Lower rate of NICU admissions
- Financial ramifications
MEOWS ESCALATION POLICY

- Modified Early Obstetric Warning System (MEOWS)
  - Identifies and treats women developing obstetrical illness, such as:
    - Hemorrhage
    - Preeclampsia
    - Cerebrovascular disease
    - Venous thromboembolism
    - Amniotic fluid embolism
    - Infection
  - Provides vital sign parameters requiring immediate bedside evaluation and escalation of care when necessary

QUANTIFICATION OF BLOOD LOSS

- Estimated Blood Loss (EBL) now Quantification of Blood Loss (QBL)
  - A leading cause of maternal morbidity and mortality is failure to recognize excessive blood loss during childbirth (The Joint Commission, 2010)
  - Women die from obstetric hemorrhage because effective interventions are not initiated early enough (Berg et al., 2005; Della Torre et al., 2011)
- Inaccuracy of EBL well established
  - The use of visual EBL can result in underestimation of blood loss by 33–50% (Patel et al., 2006)
- QBL = formal measure of blood loss

QUANTIFICATION OF BLOOD LOSS (Continued)

- For EVERY birth,
  - Begin QBL immediately after infant’s birth
  - Continue ongoing measurement until bleeding is stable
    - Usually about 2 – 4 hours postpartum
- Establish blood loss thresholds to
  - Facilitate early recognition
  - Guide life saving interventions
- Continue QBL for Post Partum Hemorrhage (PPH) Stages 2 & 3

SUMMARY

- Obstetric claims remain among the most volatile
- A number of claims databases report improvement in experience
- The national medical professional liability environment has remained stable
- Underwriters believe patient safety programs have improved experience in obstetrics

Michigan Trends

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NIH 2008

• A 3-tier system for the categorization of fetal heart rate (FHR) patterns recommended
• The 3-tier FHR Interpretation System developed
• 3 categories of FHR:
  • Category I
  • Category II
  • Category III


ACOG PB #116 (Nov. 2010)

• Category I tracings are normal, not associated with fetal acidemia, and may be managed in a routine manner with continuous or intermittent monitoring because they are not associated with fetal acidemia
• Category II tracings require evaluation, continued surveillance, initiation of appropriate corrective measures when indicated, and reevaluation


• Once Category II tracings are identified, they may require more frequent evaluation, documentation and continued surveillance unless they revert to Category I tracings
• Category III tracings are abnormal and have been associated with an increased risk of neonatal encephalopathy, cerebral palsy and neonatal acidosis


Category I FHR Tracings

All of the following must be present:
• Baseline HR 110-160 bpm
• Baseline FHR variability is moderate
• Absence of late or variable decels
• Presence or absence of early decels
• Presence or absence of accelerations


Category II FHR Tracings

Any of the following are present:
Baseline FHR:
• Bradycardia not accompanied by absent baseline
• Tachycardia
Baseline FHR variability:
• Minimal baseline variability
• Absent baseline variability with no recurrent decels
• Marked baseline variability

Category II Tracings cont.

Accelerations:
- Absence of induced accelerations after fetal stimulation

Periodic or episodic decels:
- Recurrent variable decels accompanied by minimal or moderate variability
- Prolonged deceleration more than 2 minutes, but less than 10 minutes
- Recurrent late decels with moderate baseline variability
- Variable decels with other characteristics (slow return to baseline, overshoots, or shoulders)

Tachysystole
- Defined as more than 5 uterine contractions in 10 minutes averaged over 30 minutes
- For women with spontaneous labor, tachysystole coupled with recurrent FHR decels requires evaluation and treatment
- Tachysystole occurring with less frequent FHR decels may or may not require treatment
- In laboring women receiving oxytocin, management of tachysystole generally involves efforts to reduce uterine activity to minimize risk of evolving fetal hypoxemia or acidemia

Category III FHR Tracings

Include either:
- Absent baseline FHR variability and any of the following:
  - Recurrent late decels
  - Recurrent variable decels
  - Bradycardia
  - Sinusoidal pattern

Tachysystole cont.
- In labor induction or augmentation or both, a decrease in the oxytocin dose should be considered if tachysystole occurs in the presence of a Category I tracing
- If there is a Category II or III tracings, oxytocin should be reduced or stopped in addition to intrauterine resuscitation
Excessive uterine activity has been associated with abnormal FHR patterns, presumably because of inadequate uterine relaxation time. Shortened relaxation time can reduce placental blood flow to the fetus. However, few data exist in the literature to confirm an association between tachysystole and abnormal FHR patterns, increased C-section rates, or adverse neonatal outcome.


So, even though few data exist causally linking adverse neonatal outcome and subsequent permanent neurologic damage to tachysystole, why is tachysystole so potentially an important issue/claim?

Here is an example . . .

$144 Million jury verdict in Michigan
Plaintiff's counsel alleged and plaintiff's experts testified that tachysystole during labor and delivery caused fetal head compression, which caused permanent brain damage in the minor plaintiff.

**Fetal Head Compression**

Deposition testimony of plaintiff’s expert (cross exam by defense counsel):

Q. I think you testified before we went off the record that in your opinion the child's brain damage was caused by contributing factors of mechanical forces and hypoxia?
A. Yes.
Q. What do you mean by “mechanical forces”?
A. Those forces related to frequency of contractions, pushing, progress in labor, and molding.

Q. During the length of the contraction and the length of the labor, what is happening to the fetal brain with these mechanical forces?
A. The brain is being subjected to increases in pressure which are in fact impairing blood flow to the brain for which the baby is required to make accommodations. It is somewhat limited in that ability, but that is what it is trying to do.
Q. What do you mean by “trauma”, Doctor? Are you saying in this case there was mechanical trauma as a result of the excessive uterine contractile activity?
A. I am going to say that mechanical physical forces are those which essentially are related to the injury.

Direct examination by plaintiff’s counsel:

Q. Now, intracerebral oxygen saturation means the amount of oxygen in the brain itself; correct?
A. Yes.
Q. When intracranial oxygen saturation goes too low because of excessive uterine activity and head compression, is that a mechanism, in your opinion, that did cause some brain injury in this case?
A. I think it is a significant contributor . . . .

**Arguments by Plaintiff’s Experts and Plaintiff’s Counsel**

- Tachysystole causes damage
- Tachysystole causes damage regardless of FHR response
- Uterine contractions cause extreme compression of fetal head and reduced blood flow to fetal brain
- Reduced blood flow causes permanent brain damage including injury to basal ganglia, bilateral thalami, hypothalamus and brain stem

**Head Compression Allegations in Plaintiff’s Complaint**

Defendants violated the standard of care by:
1. Failing to recognize tachysystole
2. Failing to treat tachysystole
3. Failing to stop tachysystole
4. Failing to decrease and/or stop Pitocin infusion
5. Failing to advocate for timely C-section
6. Failing to perform timely C-section
7. Failing to utilize chain of command

Defendants’ failure to comply with standard of care proximately caused permanent neurologic injuries, including, but not limited to cerebral palsy, seizure disorder, and developmental delays.
Response by Defendants and Defense Counsel

• Attack with peer-reviewed literature addressing issue whether uterine contractions cause brain damage to fetus without changes in the FHR
• Vigorous cross examinations of plaintiff’s expert witnesses with aforementioned literature
• Motions for Summary Disposition
• Daubert motions challenging scientific basis of plaintiff’s experts causation opinions

Risk Management

• Does your hospital have Induction of Labor policies/procedures/protocols?
• Does your hospital have Pitocin policies/procedures/protocols?
• Does your hospital have FHR policies/procedures/protocols, which include guidelines on tachysystole?
• How current are your policies/procedures/protocols?
• Are your policies/procedures/protocols in line with ACOG’s Practice Bulletins?
• How familiar are your L&D nurses, ob/gyns, and MFM’s with your hospital’s policies/procedures/protocols?
• How often are your L&D nurses, ob/gyns, and MFM’s updated on your hospital’s policies/procedures/protocols and changes regarding same?
• Best way to defend these cases is educating your staff

Questions?

Thank You!

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