Current Claims Issues in Labor, Delivery, and Discharge

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Current Claims Issues in Labor and Delivery and Discharge

• OB Emergencies – Response Time
• VBAC
• Shoulder Dystocia
• Changing Concepts in Labor Management
• Fetal Well-Being in Labor
• Discharge Instructions

OB Emergencies – Response Time

• Cord Prolapse  }
• Uterine Rupture  }  Irreversible
• Placental Abruption  }
• Shoulder Dystocia  }  Potentially
• Tetanic Contraction  }  Reversible
• Prolonged Bradycardia }  Unknown
Optimal Management

- Prevent
- Predict
- Respond

Time to Injury or Death

- Experimental Studies – Monkeys
  - Myers – 10-13 min – brain damage
    13 min – cardiac output ends
    25 min – all die
  - Windle – 0-8 min – no damage
    8-13 min – permanent brain damage with apparent recovery
    13-17 min – more damage with slow incomplete recovery

Confounding Factors

- Degree of compromise varies
- Diagnosis imprecise – false positives
- Resuscitation may improve oxygenation
- Pre-existing stress varies
- Time of diagnosis indeterminate
- Bradycardia–delivery interval is a better indicator than decision–incision time
Time to injury

- Kamoshita 25 minutes (19)
- Leung A 18 minutes (106)
- Holmgren 18 minutes (36)
- Bujold 14 minutes (23)
- Multiple Studies No relation between time to delivery and injury

The 30 Minute Rule?

- Multiple studies - inability to meet 30 min
- Multiple studies – outcome not related to response time
- Leung, Hilleman – most < 20 min
  - In house anesthesia, OB, and OR team
  - OR on L&D and ready
  - Improved Communication
  - Streamlined (sub-sterile) response

Vaginal Birth After C-Section

VBAC
TOLAC
VBAC is Safe

- Risk of rupture – 0.3 – 1%
- Risk of birth injury/death – 0.1-0.2%
- Encouraged by ACOG

Requirements

- 1 or 2 previous C-sections 2010
- No classical incisions
- Twins OK 2010
- Non-recurring indication
- Continuous EFM
- OB, Anesthesia, OR team immediately available - unless patient assumes the increased risk 2010

Factors increasing Risk

- Misoprostil
- Oxytocin
- Elective Induction
- Macrosomia
- Contracted Pelvis
- Abnormal Progress of Labor
- Major Uterine Surgery (Myomectomy, etc)
Prevention of Medicolegal Loss

- Proper Patient Selection
- Proper Labor Management
- Consent
  - Written, individualized
  - Obtain earlier in pregnancy
  - Document risk discussion
- ? Simulation drills

Response

- Notify neonatal team on admission
- Anesthesia consult on admission
- OR ready
- Low index for intervention
  - Abnormal FHR earliest sign
  - IUPC not helpful, pain uncommon
- Protocol to initiate emergency C-section
- Streamlined response
  - Evaluate bradycardia in OR
  - Eliminate non-essential steps – Foley, shave, scrub,
    - Midline incision
- Cord Gases

Shoulder Dystocia

- More than expected maneuvers to deliver
- 2 to 30 per 1000 deliveries
- Injuries to baby:
  - Damage to brachial plexus
  - Fracture of clavicle or humerus
  - Asphyxia
  - Death
- Cause – Failure of the shoulders to negotiate the pelvis
**Plaintiff Allegations**

- Not Anticipated – Should have had C/S
- Excessive lateral traction on neck
- Improper maneuvers

**Predictable?**

- No, but there are risk factors
  - Previous shoulder dystocia – 1 to 16%
  - Macrosomia – but 50% < 4000 grams
  - Diabetes
  - Obesity
  - Precipitous delivery
  - Mid-pelvic vacuum extraction

**Preventable?**

- Yes – Elective C-section
- Reasonable with previous shoulder dystocia
- Macrosomia - >5000 gm
  - >4500 gm with diabetes
- Generally not cost-effective – unable to accurately estimate fetal weight
Management

- Stop pushing and pulling
- Call for help
- No fundal pressure
- McRoberts maneuver, supra-pubic pressure
- Woods screw maneuver / Rubins maneuver
- Delivery of posterior arm
- ? Episiotomy
- Gaskin maneuver
- Fracture of clavicle?
- Zavanelli maneuver
- Cord gases

Excessive Force

- Traction by OB
- Possibly from maternal forces
  - Maternal forces can be quite strong
  - Pelvis, spine, neck and head are piston in cylinder formed by shoulder girdle
  - Injury can occur without traction
  - Injury can occur at C-section
  - Injury occurs in posterior shoulder

How long do you have?

- Hope – England and Wales – 56 deaths in shoulder dystocia, 47% < 5 minutes
  - Ouzounian – 7 minutes
  - Lerner - 4 minutes
  - Leung – 5 minutes
- Stallings, Heazell – time not related
- Overall 4-5 minutes a safe interval?
**Documentation is Key to Defense**

- EFW and risk factors on chart
- Detailed and timely delivery note
  - Personnel present
  - Anesthesia
  - Duration of second stage
  - Time of delivery of head and body
  - Position of head
  - Anterior shoulder
  - Maneuvers and response
  - Episiotomy
  - Maternal and fetal injuries
  - Cord gases

**Changing Concepts of Labor Management**

- 60% of C-sections attributable to abnormal labor
- Plaintiff’s contention
  - Earlier C/S required for abnormal labor
  - Adverse outcome avoided

**Labor Progress**

- Normal
  - ?
  - ?
  - ?
  - ?
- Clearly Abnormal – C/S required
Normal Labor Progress

- Friedman 1955 – Friedman Curve
- Graphed cervical dilation against time
- Has been the gold standard
- Recent studies have redefined the curve

Stages of Labor

- First Stage – onset of contractions to complete dilation (10 cm)
  - Latent Phase
  - Active Phase
- Second Stage – Complete to delivery

Latent Phase

- Preparatory phase
- Duration – Friedman 6.4 hr
  - Blackwell 10.8 hr
- End point – Friedman 3-4 cm
  - Zhang 6 cm
- Arrest means labor has not begun
- C/S generally not recommended
**Induced Labor**

- Medically indicated – any time
- Elective – after 39 weeks
- Can be difficult to get through latent phase
- Diagnosis of failed induction:
  - 12 hr oxytocin after ROM – Rouse 2000
  - 5% last longer than 33 hr

**Active Phase**

- Time of maximum rate of cervical dilation
- Median duration – Friedman 2.5 hr
  - Zhang 5.5 hr
- Protraction disorder
  - < 1.0 cm/hr – WHO 1994
- Arrest disorder
  - Traditional – no change in 2 hr
  - Rouse 2001 – no change in 4 hr with 200 MVU contraction strength

**Second Stage**

- Traditional limits
  - Nulliparas - 2 hr /3 hr with epidural
  - Multiparas – 1 hr / 2hr with epidural
Recent Studies

  – No adverse fetal outcome up to 5 hours
  – Increased maternal morbidity after 3 hr
  – All had continuous EFM
• Cheng 2007
  – Increased maternal and fetal morbidity after 2 hr in multiparas only

Current Opinion

• No arbitrary second stage limit if fetus OK
• Increased maternal morbidity after 3 hr
• No effect on neonatal morbidity with EFM
• Rate of vaginal delivery decreases with length of second stage

Recommendations for Prolonged Labor

• Document progress hourly in second stage; every 2 hours in active phase
• Document contraction adequacy
• Consider IUPC if progress slow
• Document fetal well-being; proceed to C/S if EFM tracing deteriorates
• EFW on chart
• Cord gases
Fetal Well-Being in Labor

• Challenging
• FHR primary assessment tool
• Interpretation / management problematic
  – Lack of agreement – even among experts
  – Inconsistent terminology and definitions
  – Litigation explosion
  – No evidence intervention based on FHR pattern prevents CP or neurological injury

NICHD Workshop 1997

• Fetal monitoring experts agree on only 2 FHR patterns:
  – Normal baseline, no decels, moderate variability, accels = normally oxygenated fetus
  – Recurrent decels or bradycardia and absent variability predict actual or impending asphyxia

Plaintiff Contention

• Failure to appreciate and act on FHR
• Delay in delivery caused / increased harm
Traditional Classification

- Reassuring
- Non-Reassuring

Parer 2007

- Based on FHR baseline, decels, variability
- 134 possible patterns
- Each graded for risk of asphyxia
- 5 tier classification system
  - Green – no intervention
  - Blue
  - Yellow
  - Orange
  - Red – expedite delivery

NICHD 2008/ACOG 2009

- Category I – no decels, mod. Variability
- Category III – Recurrent decels, absent variability
- Category II – Everything else
ACOG Guidelines 2010

- Cat I – Observe
- Cat III – Resuscitate, deliver if no resolution
- Cat II – Evaluate, corrective measures, follow
  - Variability is reassuring
  - Decels are worrisome

Clark et al 2013

- Proposed Algorithm – 18 Experts
- Straight-forward
- Logical
- Based on Established Principles
  - Moderate variability or accelerations
  - Recurrent late or severe variable decels
  - Labor status

Algorithm

- Moderate variability or accelerations present
  - No recurrent decels – observe
  - Recurrent decels
    + Labor progress – observe
    No labor progress or latent phase - deliver
- Moderate variability or accelerations absent
  - Recurrent decels – deliver
  - No recurrent decels
    - Observe 1 hour
    Pattern persists – deliver
    Pattern resolves - observe
Algorithm

- Tachycardia not included
- Sentinel events excluded
- Prolonged decels not addressed
- Minimal and absent variability combined
  - A continuum
  - Artifact may confuse
  - Experts frequently disagree
  - Deliver before damage occurs

Discharge Instructions

- General
  - Normal recovery
  - Diet and activity
  - Bowel and bladder function
  - Wound care
  - Follow-up instructions
  - Contact information
- Specific to diagnosis

Labor and Delivery - Undelivered

- General – return for:
  - Increased contractions
  - Decreased fetal movement
  - Bleeding
  - Rupture of membranes (ROM)
  - Severe headache, visual changes
  - Abdominal pain
Specific Diagnosis

- Rule out pre-term labor
  - Change in contraction pattern
  - Increased discharge
  - Increased pelvic pressure
- Bleeding
  - Contractions
  - Pain
  - Tight uterus that doesn’t relax
  - Bleeding

Specific

- Rule out pre-ecclampsia
  - Headache
  - Decreased urination
  - Dark or concentrated urine
  - Increased swelling
  - Upper abdominal pain
  - Visual changes – loss of vision, spots, blurring

Post Partum - Delivered

- Concern re early discharge
- Emphasize signs of infection
- Pre-ecclampsia symptoms
- Urinary retention
- Constipation
- Depression
- Reminder to check bilirubin on baby