Heads-up not hands-up: the Unexpected Breech Birth

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Case 1

- You are a FP finishing a delivery on LDR
- A new patient of yours arrives: 26 Y/O G₁ @ 39 weeks normal gestation
- Cephalic last week in the office
- Nurse says “I think I feel a bum”
  “I think she’s fully”
- Options in your center?
Objective

Prevent panic, misadventure, and incontinence when you are presented with a woman in advanced labour with a breech presenting fetus at 2 AM.
We have < 1 hour

- Reduce Fear: A brief look at evidence:
  - The Term Breech Trial: ‘how not to do a breech’
  - PREMODA study: ‘how to do a breech’
- Faith in Physiology – not quite so scary
- One thing not to do: Don’t pull!
- Four things to do
- Emergency Toolkit
Early TBT Results

Low PNM countries: N=1027

<table>
<thead>
<tr>
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<th>Perinatal Mortality</th>
<th>“Serious Neonatal morbidity” &lt;30d</th>
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<tbody>
<tr>
<td>Planned C/S</td>
<td>0</td>
<td>0.4%</td>
</tr>
<tr>
<td>Planned VBB</td>
<td>0.4%</td>
<td>5.1%</td>
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~1/20 chance of having a dead or ‘damaged’ baby with TOL
TBT Problems

- Unsafe protocol:
  - Inclusion of IUGR fetuses $\rightarrow$ ↑ mortality
  - Slow labour progress $\rightarrow$ poor outcome

- Surrogate short-term outcome $\rightarrow$
  poor predictor of long-term function
**TBT: 2-year infant F/U results**  
(Whyte H. AJOG 2004;191:864-71)

<table>
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<th>Subset of all countries N=923</th>
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<tr>
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<td>Death or Abn. Neurol. Devel.</td>
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<tr>
<td>Planned C/S</td>
<td>3.1%*</td>
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<tr>
<td>Planned VBB</td>
<td>2.8%*</td>
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* NS; 97% chance of normal 2 year-old, either way
† p = 0.02
Serious Neonatal Morbidity ≠ Long-term outcome = Poor surrogate marker

- 17/18 infants with “serious neonatal morbidity” were neurologically normal at 2 years of age
Why short-term but not long-term morbidity?
Why short-term but not long-term morbidity?

Cord compression during breech birth often results in an acute, predominantly respiratory acidosis from which a healthy term newborn recovers.

(Caveat?)
Why short-term but not long-term morbidity?

Cord compression during breech birth often results in an acute, predominantly respiratory acidosis from which a healthy term newborn recovers.

(Caveat: Not IUGR!)
TBT Conclusion

- Greater short-term infant morbidity with TOL $\rightarrow$ 90% resolved by 2 years of age
- Same chance of a normal 2 year old (97%)
- Difficult breech births can lead to bad outcomes:
  - Avoid IUGR & Slow labours
PREMODA Study
(Goffinet F, et al. AJOG 2006;194:1002-11)

- 174 French and Belgian maternity units
- 8105 women with singleton term breech fetus
- Safer protocol than TBT
- 1800 had a successful vaginal delivery (71% of those choosing to labour)
- No difference between C/S and planned SVD
- PNM 1/1000 with C/S or planned SVD
What is the most feared complication of vaginal breech birth?
What is the commonest cause of expulsive delay during breech birth? (with the head in & umbilical cord out)
What have physicians historically done to treat expulsive delay?
Power From Above; Not From Below

DON'T PULL!!

Twist if you have to (Løvset’s maneuver)
GET HIPPOS
GET HIPPOS

• **G**rowth adequate?
• **E**lectronic Fetal Monitoring
• **T**ype of breech: frank or complete
• **H**elp: OB/ Anaesthesia/ Paeds/ OR/ Telephone
• **I**V access
• **P**rogress in labour adequate
• **P**ower from above for expulsive delay
• **O**xytocin ready to ensure strong contractions
• **S**mellie-Veit- Muriceau for the head prn.
Power From Above

1.
2.
3.
4.
Power From Above

1. Maximal Maternal Pushing
2. 
3. 
4. 
Power From Above

1. Maximal Maternal Pushing
2. Bracht manuever:
   - firm fundal pressure **AFTER CROWNING**
   - needs assistant
3. 
4. 
Power From Above

1. Maximal Maternal Pushing
2. Bracht maneuver:
   - firm fundal pressure AFTER CROWNING
   - needs assistant
3. Rapid Oxytocin augment AFTER CROWNING
4.
Power From Above

1. Maximal Maternal Pushing
2. Bracht manuever:
   - firm fundal pressure AFTER CROWNING
   - needs assistant
3. Rapid Oxytocin augment AFTER CROWNING
4. Gravity: mother upright or all-fours
Footling Breech
Key Points

• Don’t panic; call for help: phone? Facetime?
• Good progress & normal growth predict easy birth → C/S if IUGR or slow progress
• Expulsive delay is common: use power from above and Løvset’s maneuver prn
• Mauriceau Smellie Veit prn for head
• Ventilate with cord intact if at all possible
Key Point

• Vaginal delivery can be safer than C/S when fetus is at an advanced station
• C/S if at all possible if:
  • IUGR,
  • Slow progress, or
  • Abnormal FHR before bum showing between contractions.
Key Point

- Delay after crowning is common → DON'T PULL!!!

  → use powers from above & Løvset’s for nuchal arms prn.
Key Points

- Five powers from above:
  - Mother pushes
  - Gravity pushes (upright or all fours)
  - Uterus pushes (oxytocin after crowning)
  - Hand pushes (Bracht maneuver)
  - God pushes – (Pray)
- Mauriceau-Smellie-Veit to flex and deliver head, if needed.
- Intact-cord auto-resuscitation & ventilation**
Key Point

• A breech baby may look dead – don’t panic!
• Usually, this is a profound respiratory acidosis
• Keeping cord intact delivers bolus of oxygenated blood to fetal brain and heart
• Ventilation rapidly mobilizes CO2
• Within several minutes, arterial pH normalizes

Ventilate with cord intact if possible!!!
Klinikum Nürnberg

wir sind für Sie da.
Breech is Visible
Episiotomy?
Breech Crowning
Holding Back the Breech
Spontaneous Delivery
Spontaneous Delivery
Supporting the Breech
Spontaneous Delivery of the Arms
Spontaneous Delivery of the Head
Spontaneous Delivery of the Head
Emergency Tool Kit

- Nuchal arms:
  - Løvset’s maneuver
  - Bickenbach/Classic maneuver

- Mauriceau-Smellie-Veit for head
Løvset’s Maneuver

Inferior pubic ramus
Lovset’s Maneuver
Labour & Delivery Issues

- What is adequate progress in labour?
- Induction or augmentation allowed?
- Membranes: ARM or not?
- Epidural analgesia or not?
- Assessing full dilation
- Time off of CEFM allowed?
- What if? The emergency tool kit: 3 + 1