

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

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Andrew Kotaska MD FRCSC

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

(Hannah M, et al. Lancet 2000; 356:1375-83)

	Low PNM countries: N=1027	
	Perinatal Mortality	“Serious Neonatal morbidity” <30d
Planned C/S	0	0.4%
Planned VBB	0.4%	5.1%

~1/20 chance of having a dead or ‘damaged’ baby with TOL

TBT Problems

- Unsafe protocol:
 - Inclusion of IUGR fetuses → ↑ mortality
 - Slow labour progress → poor outcome
- Surrogate short-term outcome → poor predictor of long-term function

TBT: 2-year infant F/U results

(Whyte H. AJOG 2004;191:864-71)

	Subset of all countries N=923		
	Death or Abn. Neurol. Devel.	“Medical problems”	Combined S/T Outcome
Planned C/S	3.1%*	21% †	0.4%
Planned VBB	2.8%*	15% †	5.7%

* 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?

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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 → 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)

A photograph of three hippos in a lush green field. The hippos are dark brown and are partially submerged in the vegetation. The word "GET" is written in large, bold, yellow capital letters in the upper left corner. The word "HIPPOS" is written in large, bold, yellow capital letters in the lower right corner.

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- Mauriceau 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 maneuver:
 - firm fundal pressure **AFTER CROWNING**
 - needs assistant
- 3.
- 4.

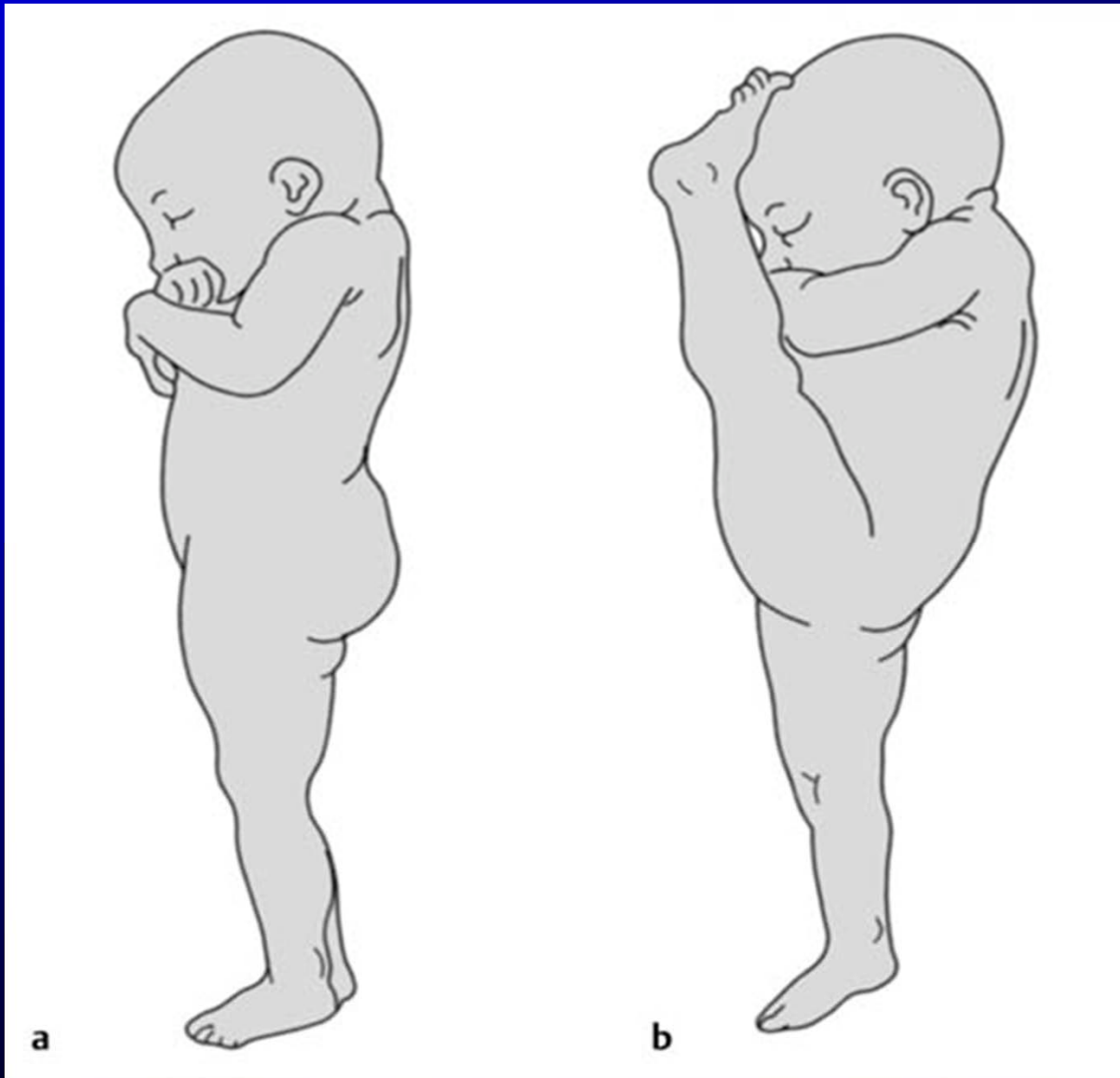
Power From Above

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 maneuver:
 - firm fundal pressure **AFTER CROWNING**
 - needs assistant
3. Rapid Oxytocin augment **AFTER CROWNING**
4. Gravity: mother upright or all-fours

Footling Breech



Footling



Complete



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



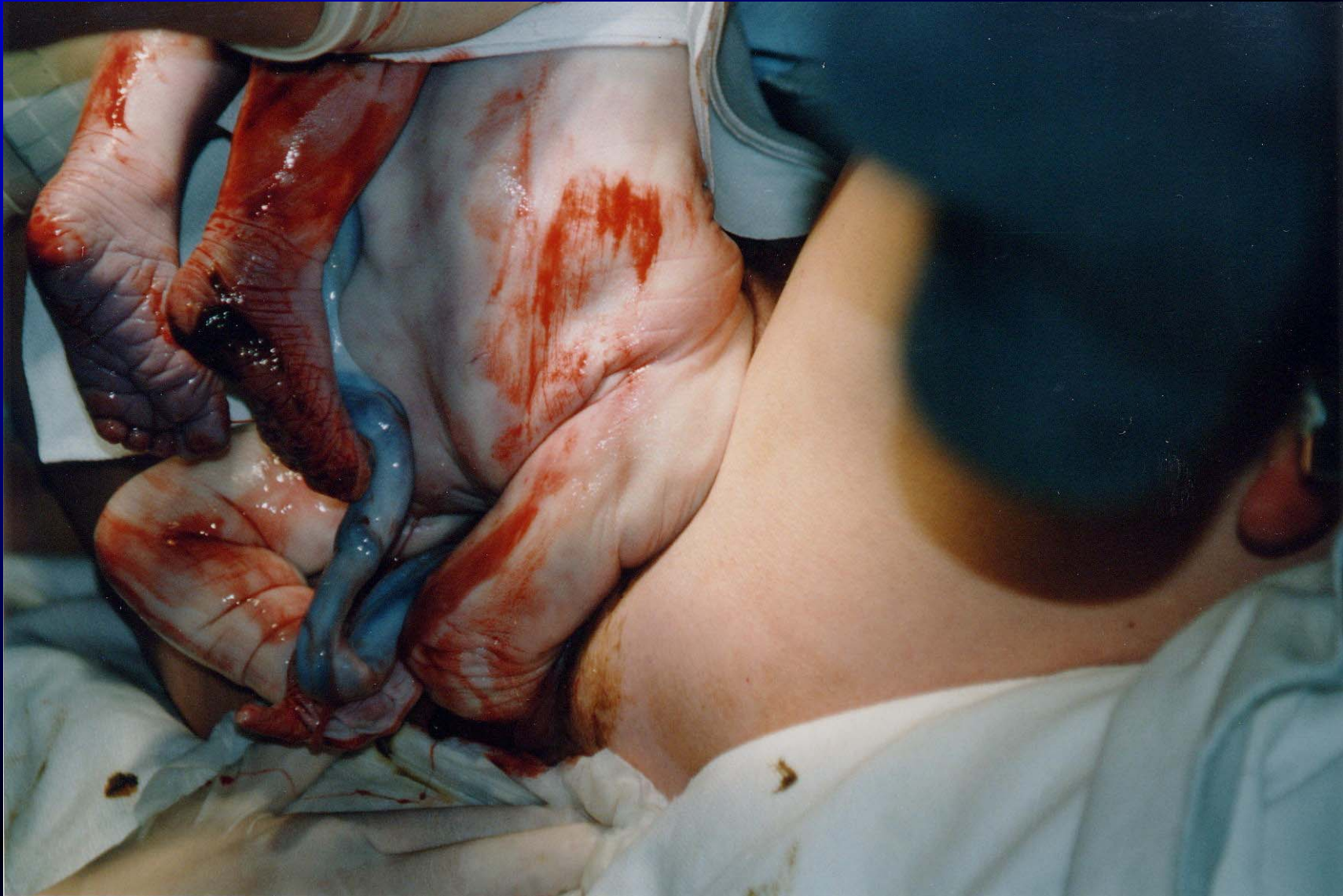
Spontaneous Delivery



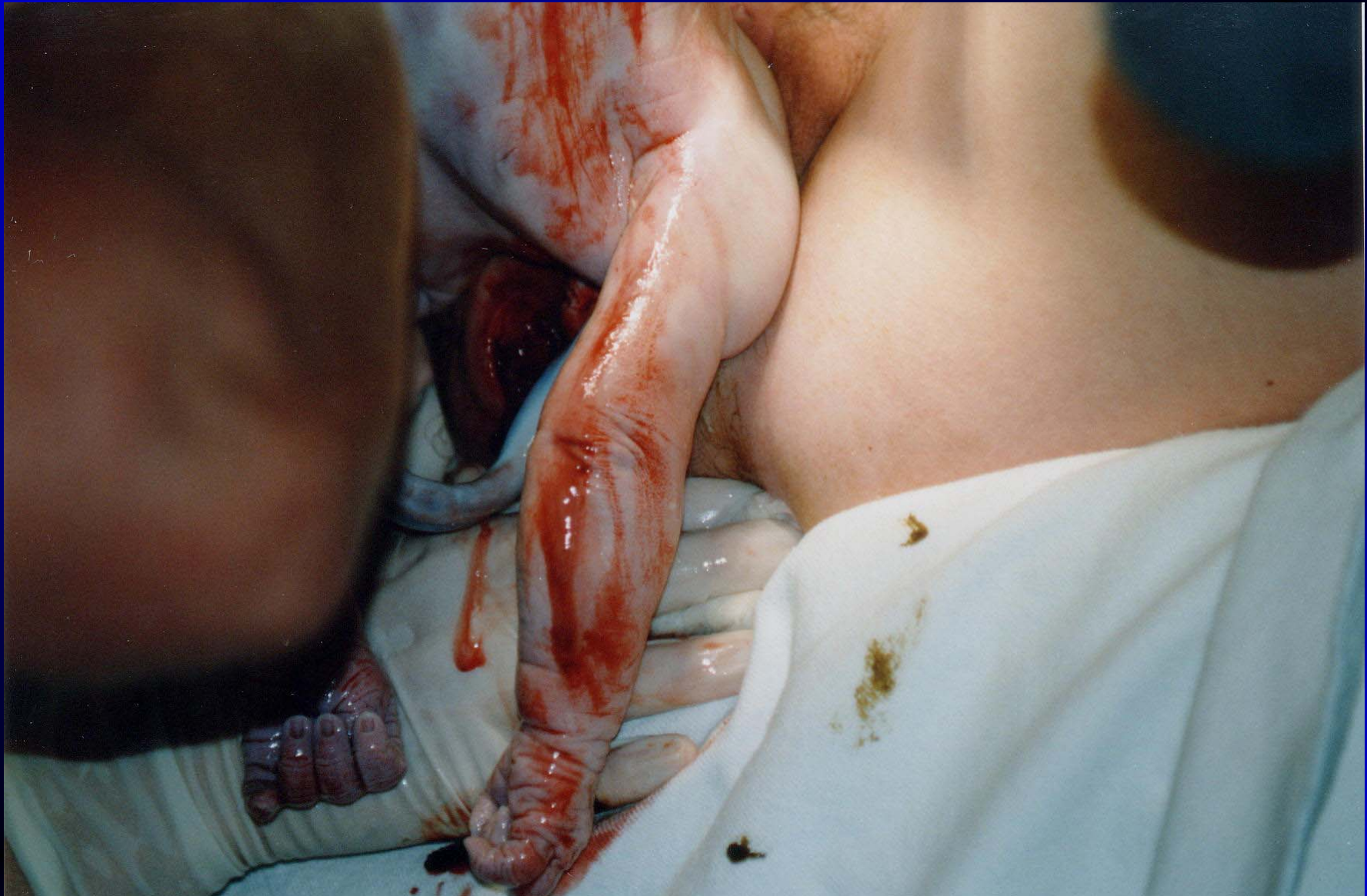
Supporting the Breech



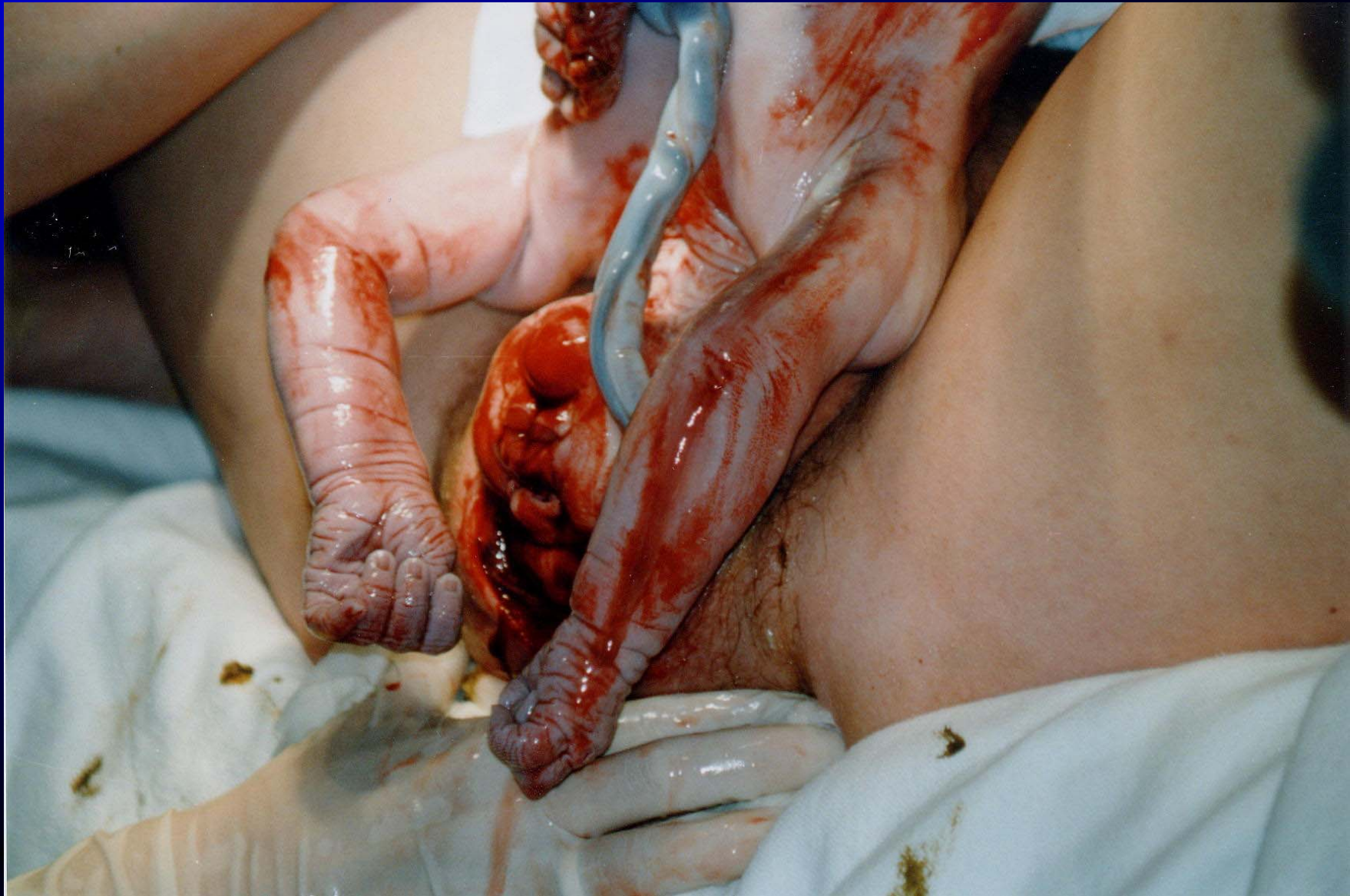
Spontaneous Delivery of the Arms

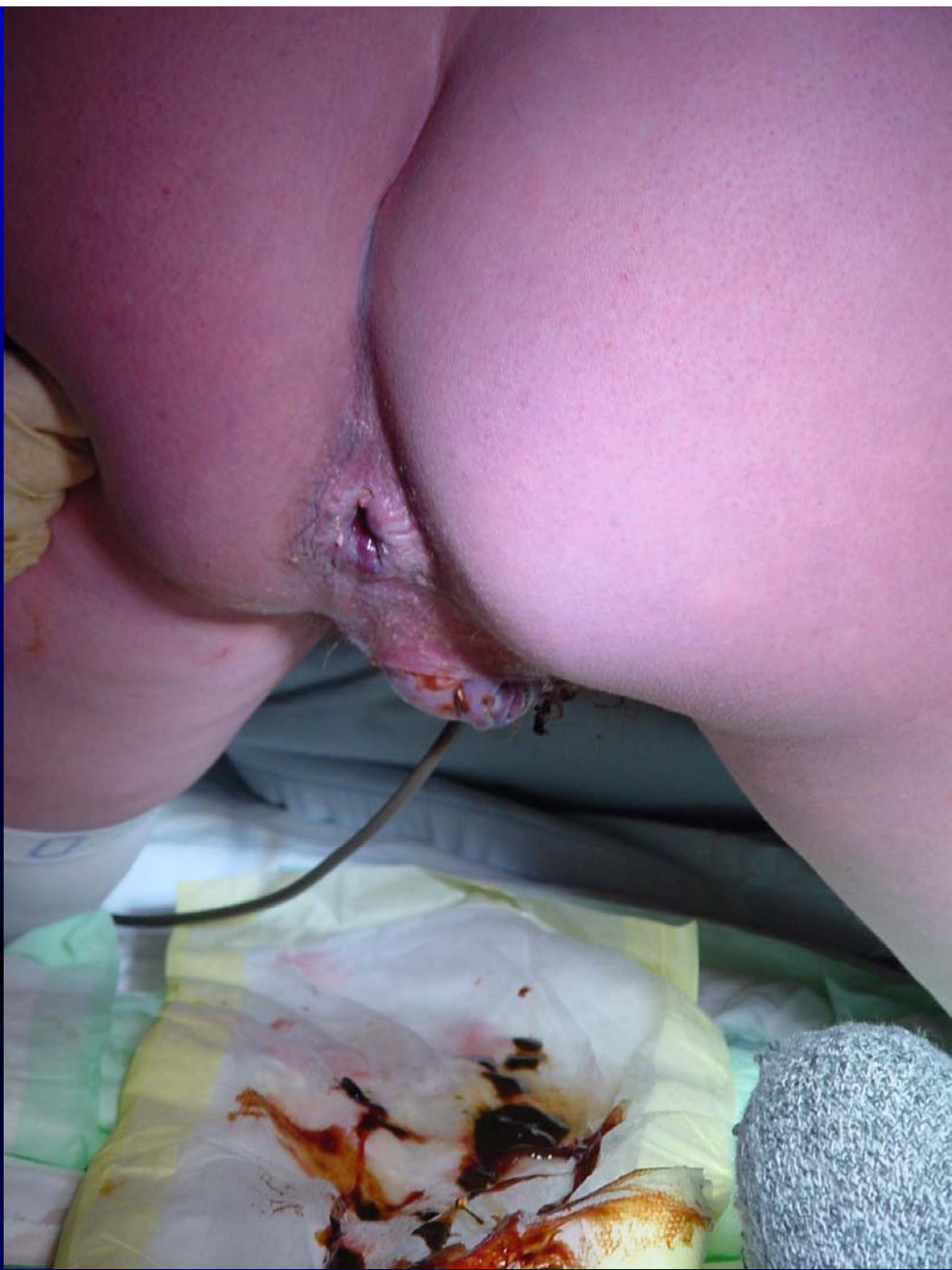


Spontaneous Delivery of the Head



Spontaneous Delivery of the Head

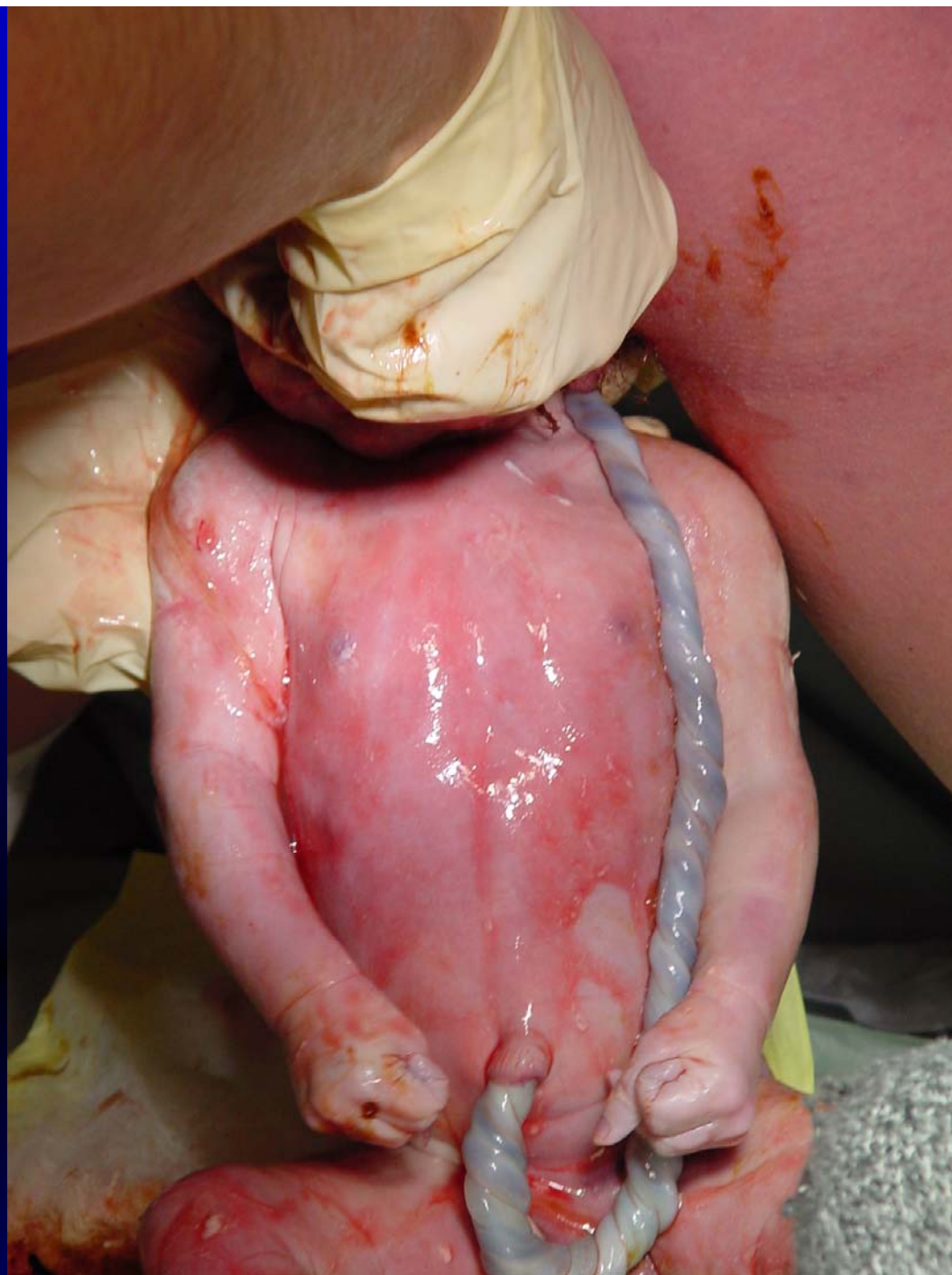






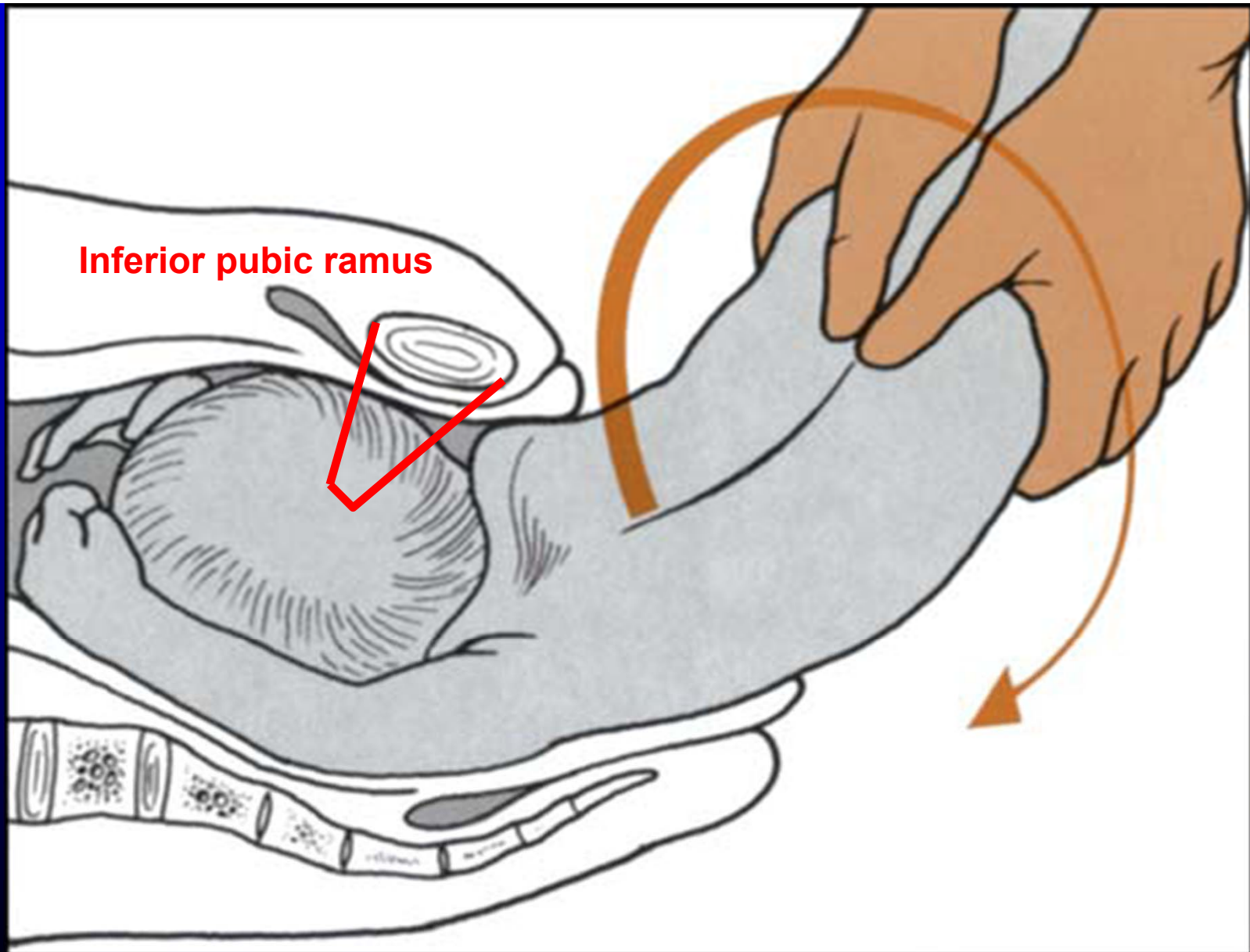




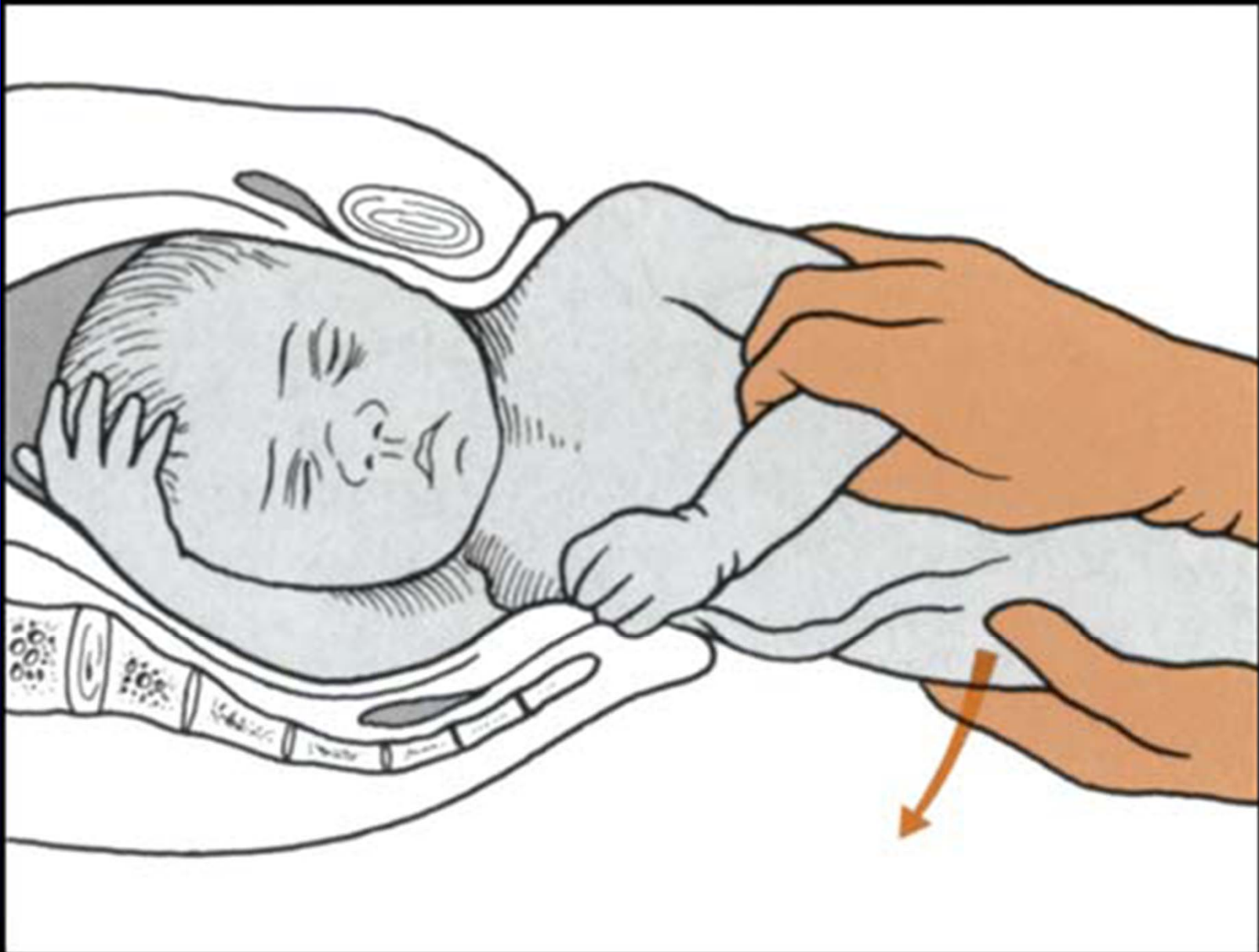


Emergency Tool Kit

- Nuchal arms:
 - Løvset's maneuver
 - Bickenbach/Classic maneuver
- Mauriceau-Smellie-Veit for head



Løvset's Maneuver



Løvset'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

