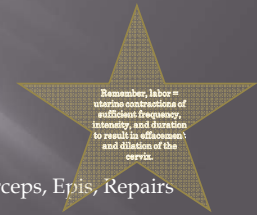


L&D BASICS

Andrea Zins, R1

Schedule

- Normal labor patterns
- L&D Skills
 - Vaginal Delivery
 - AROM
 - FSE
 - IUPC
 - Other stations: Vacuum, Forceps, Epis, Repairs



Normal Labor

- 1st stage:
 - Latent phase of labor: onset of labor to ~4 cm dilation. <20 hrs primips, <14 hrs multips
 - Active phase: 4-10 cm
 - Affected by P's (passenger, power, pelvis, and parity)
 - Usually 1.2 cm/hr for nulliparous women, 1.5 cm/hr for multips
- 2nd stage: from complete until fetal expulsion
 - Primips: 2 hrs (3 if epidural). Multips: 1 hr (2 if epidural)
- 3rd stage: from delivery of fetus to delivery of placenta
 - Usually <10 min but prolonged if >30 minutes

Vaginal Exam

- Dilation (closed, fingertip, 1-10 cm)
 - Use cervical charts and memorize! Helpful hint - 1 minute on FHM strip = 3 cm, 2 boxes = 6 cm, 3 boxes = 9 cm
- Effacement - the length of the cervix
 - Expressed in % or cm
 - Normal length is 3-4 cm
 - Palpate with finger and estimate distance from external to internal os
- Station - 2 systems
 - 1) ischial spine = 0 station. Area above and below are divided into thirds. +3 is the level of the introitus. The level is based on the BPD.
 - 2) Areas above and below the ischial spines are divided by centimeters, up to 5 cm above and 5 cm below.

Vaginal Exam

- ▣ Position
 - The cervix will be posterior, midposition, or anterior
- ▣ Consistency
 - Firm, medium, soft
- ▣ Fetal presentation
 - Find the fontanelles. Anterior fontanel = bigger diamond shape. Posterior fontanel = smaller triangle shape.
 - Anterior, transverse, or posterior

Cardinal Movements of Labor



- ▣ Engagement
- ▣ Descent
- ▣ Flexion
- ▣ Internal rotation (fetal occiput gradually rotates toward the pubic symphysis)
- ▣ Extension (moves the occiput toward the fetal back. The base of the occiput come into contact w/ the inferior margin of the symphysis pubis)
- ▣ External rotation (restitution, where fetus resumes the face-forward position with the occiput and the spine lying on the same side)
- ▣ Expulsion

Delivering the baby

- ▣ Principles:
 - Head support
 - Perineum support
 - Checking for tight nuchal cords
 - Delivery of anterior shoulder
 - Control of arms and legs
 - Bulb suction (remember M before N – mouth before nares)
 - Clamp and cut cord. Collect cord gases. Collect Mother-Baby study tubes. Collect cord blood donation?

Delivery the placenta

- ▣ 3 signs of placental separation: gush of blood from vagina, umbilical cord lengthening, fundus of the uterus rises up and becomes firm
- ▣ Put a hemostat clamp near the introitus and apply gentle downward traction while supporting the uterus lying cephalad with the abdominal hand to prevent inversion.
- ▣ If you need to do a manual evacuation think: pain control, ?antibiotics

AROM

- ▣ Why? Speed up labor, access for IUPC placement.
- ▣ Considerations: Head must be well engaged – otherwise risk for cord prolapse which is a surgical emergency
- ▣ How? Done with amniohook or sometimes your fingers. Can try with contraction if patient can tolerate to have the bag kind of bulge out at you

IUPC

- ▣ Why?
 - Labor Arrest (>2 hours without cervical change in active first stage)
 - Can help titrate pitocin and check adequacy of contractions
 - Adequate contractions: >200 Montevideo units per 10 minutes
 - Can also be used later for amnioinfusion (for severe variable decelerations in fetal heart rate. No longer for thick mec.)
- ▣ Considerations: where is the placenta? Infectious risk?
- ▣ How?

FSE

- ▣ What? Bipolar spiral electrode attaches to fetal scalp detecting the R-wave voltage of the fetal EKG
- ▣ Why? A MUST when there is trouble distinguishing fetal vs maternal HR – either during decels, or due to maternal body habitus
- ▣ Considerations: don't use if AROM is not desired (HIV, Hep B).
- ▣ How?

Thank you! Good luck!

UW Intern Class, June 2009



Leopold's

- 1st maneuver: what part is at the fundus?
- 2nd maneuver: on what side is the fetal back?
- 3rd maneuver: what fetal part lies over the pelvic inlet?
- 4th maneuver: on which side is the cephalic prominence?

BPP

- 0 or 2 points per category.
- 8-10 is fab less is worrisome!

Biophysical Profile	Normal (score = 2)	Abnormal (score = 0)
Fetal breathing movements	1 or more episodes of ≥ 20 s within 30 min	Absent or no episode of ≥ 20 s within 30 min
Gross body movements	2 or more discrete body/limb movements within 30 min (episodes of active continuous movement considered as a single movement)	<2 episodes of body/limb movements within 30 min
Fetal tone	1 or more episodes of active extension with return to flexion of fetal limb(s) or trunk (opening and closing of hand considered normal tone)	Slow extension with return to partial flexion, movement of limb in full extension, absent fetal movement, or partially open fetal hand
Reactive FHR	2 or more episodes of acceleration of ≥ 15 bpm and of >15 s associated with fetal movement within 20 min	1 or more episodes of acceleration of fetal heart rate or acceleration of <15 bpm within 20 min
Qualitative AFI	1 or more pockets of fluid measuring ≥ 2 cm in vertical axis	Either no pockets or largest pocket <2 cm in vertical axis

Bishop Score

Factor	0 points	1 point	2 points	3 points
Dilation (cm)	Closed	1-2	3-4	5-6
Effacement (%)	0-30	40-50	60-70	80
Station	-3	-2	-1 to 0	+1 to +3
Consistency	Firm	Medium	Soft	-
Position	Posterior	Midposition	Anterior	-

A score ≥ 8 indicates that the probability of a vaginal delivery after labor induction is similar to that after spontaneous labor.

Malpresentation

- 96% vertex = good. The head should be flexed so that the chin is in contact with the chest. Posterior fontanelle should be the presenting part.
- Face presentation (0.3%). Mentum must be anterior to deliver.
- Sinciput: between vertex and face – anterior fontanelle presents first.
- Brow presentation
- Breech presentation

Breech

- ❑ Complete
- ❑ Frank
- ❑ Incomplete/footling

